# THE POLITICAL ECONOMY OF GLOBAL FINANCIAL CRISES:

# EVOLVING MULTILATERAL RESPONSE SYSTEMS

By

Candace C. Archer

A dissertation submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Political Science

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# DEDICATION

For my parents William D. Archer (1923-2001) and Edith Hempel Archer (1927-1988)

Neither lived to see this accomplishment and it is my greatest sadness not to have them here to share this moment. I know they would have been so proud—especially my father. He helplessly witnessed all of my stress and frustration, but missed the joy of my finishing. Besides providing me with the funding, love and support to attain this goal, they accomplished something far more amazing—they sacrificed and spent their hard-earned money to send a bright blue-collar kid to college, and helped me envision an academic path there and beyond, even though that road was completely foreign to them. My gratitude is beyond words. This work is dedicated to Mom and Dad, and their vision.

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# ABSTRACT

This dissertation examines responses to financial crisis over the last two hundred years. It identifies the actors that have provided responses and chronicles how those actors have changed over time. To examine these issues this research considers response actors in historical cases of financial crisis from 1800 to 1997. The study constructs a model of financial crisis response derived from these cases, and suggests that there is a general three-stage pattern of crisis response. The first stage is called response, where various actors attempt to alleviate the crisis through providing liquidity. At this stage many institutions attempt to address the crisis conditions, including private banks, governments, central banks and international institutions. The second stage is called reliance. In this stage actors and institutions are reformed, given greater responsibility to respond to subsequent crises, or replaced. Certain actors are privileged and relied on to respond to future crises. The final stage is called expansion. Due to the change in size, scope and density of financial interactions existing arrangements are overwhelmed and crises become larger over time. The Global Integrative Dynamic (GID) causes response to change since response actors lose their ability to mitigate crises as financial interactions expand.

This dissertation concludes that crisis response is an ever evolving process punctuated by specific key crises where lack of adequate response becomes clear.

Furthermore, this dissertation concludes that responses have become more multilateral and public over time. Early responses in the nineteenth century privilege domestic central banks which slowly become domestic public actors. Responses in the interwar period privilege international central bank cooperation through the Bank for International Settlements. From 1982 onward, global multilateral institutions are privileged. These findings add to our understanding of the construction and refinement of global financial architectures and suggest that financial architectures change over time to privilege different sets of actors.

Chapter 1

# EXPLANATIONS OF CRISIS

International finance and international financial interactions have grown in importance over the last three decades. Financial interactions, once constrained by capital controls imposed under the Bretton Woods system, have dramatically expanded since the abolition of these controls. The amount of capital crossing borders has grown as has the number of countries involved in international investment networks. All of these conditions have brought international financial transactions to the forefront of the global economy. International finance has also quickly become a major issue in international relations and financial relationships now condition the interactions among states. Broadly defined, international finance encompasses cross-border portfolio transactions (lending, borrowing, equity purchases currency trading, provision of commercial banking and financial services) and foreign direct investment.[1] The importance of international finance has led to a growing body of scholarly research in the

[1] This distinction is not perfect because leveraged foreign direct investment can be considered a kind of portfolio investment. However, long-term investment (FDI) into the factors of production within a country and shorter term investment (portfolio) into endeavors such as security markets make up the general categories of international financial interactions.

last few decades.[2] One of the more important topics that unfortunately only receives sporadic attention is financial crisis.

Financial crises are an important and persistent phenomena in the global economy. They are moments when a state's market experiences a sudden economic revulsion, leading to problems such as recession, currency devaluation and unfavorable balances of payments. Crises are neither new nor unique happenings in the global economy: they have existed for centuries. Famous crises such as the Florentine "great crash" of 1340,[3] the celebrated "tulip mania" in seventeenth century Holland and the fall of the Vienna Bourse in 1873 exemplify the long existence of serious financial crises. But they are not merely an historic problem; financial crises continue to impact the international economy. In the twentieth century, the Great Depression, the Third World debt crisis and the 1997 Asian economic meltdown all provide significant examples of the existence and continued importance of financial crises.

Many financial crises have in common an international dimension. Since states are integrated through international trade and investment, a financial crisis in one state can quickly be felt in another. Crises have little regard for borders. They can divert investment, halt trade and depreciate stock markets far from their epicenter. Growing global integration increases the danger that a crisis in one country will have negative effects in another. As markets become more interlinked and states become more

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[2] For a review of recent work in international finance see Benjamin J. Cohen, "Phoenix Risen: The Resurrection of Global Finance," *World Politics* 48, no. 2 (1996).

[3] For a discussion of early financial crises see Giovanni Arrighi, *The Long Twentieth Century: Money, Power and the Origins of Our Times* (London: Verso, 1994), 101.

vulnerable to market forces, financial crises have a greater potential to spread and cause more far reaching disturbances.[4]

Due to their negative consequences, crises elicit responses both domestically and internationally. Domestically, governments, central banks and other actors can use fiscal and monetary tools to alleviate crisis conditions or minimize their effects. Internationally, actors may intervene to prevent the crisis from spreading. Often international actors perform stabilization functions through granting loans when domestic resources are either unavailable or ineffective, or international actors may manipulate markets to calm the panicked conditions. Over time, international actors have become an increasingly important part of the crisis response system. Whether responding as individual states, or more likely, collectively through organizations such as the International Monetary Fund (IMF), international responses to address financial crises have become commonplace in the global system.

Scholarship in the field of International Relations has generated many insights into understanding political crises and the role and development of multilateralism in resolving and preventing such crises. But financial crises have only begun to be considered as destabilizing political economic events and our knowledge of the role of multilateral efforts to respond to these crises is lacking. As global finance continues to

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[4] This theme is echoed by dozens of scholars. For example see Miles Kahler, "Introduction: Capital Flows and Financial Crises in the 1990s," in *Capital Flows and Financial Crises*, ed. Miles Kahler (Ithaca, NY: Cornell University Press, 1998). Barry Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda* (Washington, DC: Institute for International Economics, 1999), 41. Steven Radlet and Jeffrey D. Sachs, "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects," *Brookings Papers on Economic Activity* 1998, no. 1 (1998).

draw states into closer relationships, the importance of understanding financial crisis and response increases. This dissertation seeks to address this issue.

## Overview of the Project

This dissertation furthers our understanding of how and why responses to financial crises have changed over the last two centuries. It is primarily concerned with identifying the actors that have provided responses and how the primary response actor has changed over time. The project constructs a model of financial crisis response derived from examining response actors in financial crisis from 1800 until 1997. By examining incidents of crisis in this time period, the model suggests that there is a general pattern in crisis response and further suggests that this pattern seems to be driven by the expansion of the global economy. Crises grow as time goes on, and because of this growth crisis responses are forced change and evolve.

The model suggests that after a crisis occurs responses emerge from a variety of actors. Those actors that prove successful at managing and alleviating crises become more important in subsequent responses and the response system grows to rely on them. However, the nature of the global economy is expansionary and financial interactions tend to grow over time. This strains the actors that have become privileged in the response system because crises become larger events and responses require greater measures to continue to be effective. Eventually, the tried and true response actors will be unable to respond effectively. These institutions will become overwhelmed, lose their primacy in the response system and be supplanted by new actors and institutions.

Institutional innovation and change in response actor seem to be driven by the growing size of crises, which can be attributed to the expansionary nature of the global economy. As crises become larger events, responses must keep pace with their growth or they will find themselves overwhelmed. I will identify the global integrative dynamic, which is defined as a process by which there are deepening ties between markets in the global economy and suggests that this dynamic drives response actor change.

This dissertation will show that there has been directionality in the evolution of response actors. Over the period in question, the actor responding to financial crises has become more public and multilateral in nature. Early crises elicited responses from a mix of actors including private market based actors such as banks and banking consortiums. As the nineteenth century unfolded crisis response changed from being the responsibility of market actors to being the responsibility of public, state chartered financial actors, most commonly central banks. Due to their success other countries established their own central banks with powers to respond to crisis.

The success of central banks acting unilaterally diminished as financial interactions grew throughout the twentieth century, but multilateral central bank cooperation grew in importance. Eventually, central banking cooperation was codified through the Bank for International Settlements (BIS). Though unsuccessful at resolving crises in the interwar period, the BIS system of regional multilateralism successfully addressed crises throughout the 1960s and 1970s. In 1982 the debt crisis rocked the global economy. The debt crisis changed the response actor again and in the wake of this crisis the International Monetary Fund (IMF) became the primary response actor. This reliance on the IMF continues today.

This study will show that response actors have evolved from being established at a domestic level, to a regional level, and finally at a global level. Response actors have also changed in their locus of control from being private actors, to quasi-public actors, to public actors. Moreover, I will demonstrate how financial crises have elicited innovations in international financial and domestic institutions and how these institutions have and promoted management in this sector of the global economy by reducing the ferocity of crises. This dissertation thus adds to the scholarly understanding of international management of global finance and the creation of a new international financial architecture (NIFA) by explaining institutional innovation in the financial sector.

This chapter will serve as a basis from which to begin a discussion of crisis response. It will review the literature on financial crises and discuss the contributions that scholars writing from both an economics tradition and international political economic tradition have made in understanding financial crises.

The second chapter will continue establishing the theoretical foundation of the dissertation. It will discuss the definition of crisis and present the research questions. It will then elaborate on a theoretical tradition that influences my model of crisis response. The model will then be discussed in detail. This model was derived from a close examination of the cases of financial crisis since 1800. Finally, this chapter will discuss the cases and time period that will be examined

The following three chapters examine crisis response over three time periods: the long nineteenth century (1800-1914), the interwar era (1919-1939), and the Bretton Woods period (1945-1982). These chapters present the evidence to support how responses have changed and the global dynamics that contribute to those changes. The final chapter will discuss crises in the most current period (1982-1997), draw conclusions, elaborate on the implications of this study and finally suggest areas for future research. The next section begins by situating the phenomenon of financial crisis through reviewing the scholarly literature.

## The Literature on Financial Crises

Although they are recurrent and have significant consequences, financial crises only occasionally capture the attention of the scholarly community – usually in the aftermath of a significant episode. Since crises have been prevalent in recent years, the literature on crises has expanded significantly. The literature comes from several fields including economics, comparative political economy, international political economy, psychology and sociology.

An exhaustive literature review is not possible so this review will attempt to examine the relevant debates on crises in the literature of economics and international political economy. While it is analytically beneficial to separate the literature into these two fields, there is some overlap between authors who are considered economists and who are considered political economists. The first section will consider the literature that is usually thought of as part of the economics cannon and the following section will consider the authors usually considered to be part of the international political economy literature.

Contributions from Economics

The economic literature is focused on four questions: (a) Why do crises exist? (b) What are their causes? (c) How do they spread? and (d) How are they resolved? The literature answers these questions from several different theoretical perspectives, using both quantitative and qualitative models deriving from the examination of a specific crisis or groups of crises. Two main schools of thought can be identified. These are the monetarists, who argue that crises are caused by changes in the money supply, and what can be labeled the "business cycle" approach. The business cycle approach is influenced by Keynesian economic theory since these authors argue that crises are a reaction to some real economic indicator such as a fall in commodity prices, but more importantly these authors are concerned with understanding crisis as endemic to the system and part of the business cycle.[5]

The monetarist approach is best exemplified by the work of Milton Friedman and Anna Schwartz; especially their 1963 classic *A Monetary History of the United States, 1867-1960.* This work examines 100 years of American financial history and identifies contractions in the money supply as the major factor in four of six serious American

[5] Michael Bordo, "Explorations in Monetary History: A Survey of the Literature," *Explorations in Economic History* 23 (1986): 365, Andrew Crockett, *The Theory and Practice of Financial Stability, Essays in International Finance, No. 203* (Princeton, NJ: International Finance Section, Department of Economics Princeton University, 1997).

crises.[6] Deriving from the quantity theory of money, which explains movements in the price level as contingent on the supply of money, the monetarist school argues that a small shock can cause a change in the public's desire for cash and a reduction in the amount of money in the economy. Unless this change is addressed by an expansionary monetary policy, that increases liquidity and meets the demand, a crisis will ensue. Crises are spread by a mass rush for liquidity as the money supply shrinks, and this places pressures on the banking system. When the public senses banking instability or loses faith in the ability of banks to cover their deposits with cash, they go to banks demanding their assets be liquidated. This adds to and spreads the problem widely and it becomes a crisis.

Crisis response from a monetarist perspective is a function of central banking monetary policy. Central banks are the main institutional response actor and the manipulation of the interest rate their main tool for alleviating crisis conditions. If monetary authorities are sensitive to the changes in the money supply, crises can be decreased or avoided. This work has been added to by many authors who have sought to expand the analysis beyond the United States,[7] who have tried to address the role of

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[6] Milton Friedman and Anna J. Schwartz, *A Monetary History of the United States 1867-1960* (Princeton, NJ: Princeton University Press, 1963), 667-8.

[7] Michael Bordo, "The UK Money Supply," *Research in Economic History* 6 (1981).

credit on the real economy,[8] who have demonstrated how monetary contractions have caused panics,[9] and who have linked panics to seasonal monetary contractions.[10]

The business cycle[11] model of financial crisis has been best articulated by Charles Kindleberger,[12] but draws on an intellectual history that includes Irving Fisher's *Booms and Depressions* and Hyman Minsky's "Financial Instability Hypothesis."[13] These theories commonly understand financial crises to be a necessary rational counterpart of an expansion, tied to real economic factors and not just monetary factors, and associated with the business cycle. Thus, they argue crises have a cyclical character and tend to emerge at some time after an economic expansion. Fisher, often remembered for only his

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[8] Ben S. Bernanke, "Non Monetary Effects of the Financial Crisis in the Propagation of the Great Depression," *American Economic Review* 73, no. 3 (1983).

[9] Phillip Cagan, *Determinants and Effects of Changes in the Stock of Money 1875-1960* (New York: Columbia University Press, 1965).

[10] Jeffrey Miron, "Financial Panics, the Seasonality of the Nominal Interest Rate and the Founding of the Fed," *American Economic Review* 76 (1986), P. Trescott, "Federal Reserve Policy in the Great Contraction: A Counterfactual Assessment," *Explorations in Economic History* 19 (1982).

[11] Michael Bordo describes these models as "neo-Keynesian." Overall, there is no agreed upon label for these models, but "business cycle" focuses on one of the most important characteristics they share in that these authors demonstrate the cyclical nature of crisis and their tie to the business cycle. See Bordo, "Explorations in Monetary History: A Survey of the Literature."

[12] Charles Poor Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.* (New York: John Wiley and Sons, 2000).

[13] Irving Fisher, *Booms and Depressions: Some First Principles* (New York: Adelphi, 1932), Hyman P. Minsky, "The Financial-Instability Hypothesis: Capitalist Processes and the Behavior of the Economy," in *Financial Crises: Theory, History and Policy*, ed. Charles Poor Kindleberger and Jean-Pierre Laffargue (Cambridge: Cambridge University Press, 1982).

early monetarist work, was a strong proponent of the thesis that real factors must be taken into account during a crisis. His debt-deflation theory attributed crises to a series of stages sparked by overindebtedness.[14] Minsky's Financial Instability Hypothesis argues that capital movements happen rationally within a cyclical and speculative context.[15] This creates periods of instability where crises emerge. Crises are consequently a part of the capitalist mode of accumulation, and are present regardless of the composition of banking and or financial institutions.[16]

The most relevant questions business cycle theorists ask are concentrated on understanding what moves the cycle toward crisis and how is a crisis is resolved. Crises emerge because an event changes expectations, increases investment and sends capital seeking greater profits. Different theorists focus on different events. Fisher, for example, attributed the cause of crisis to overindebtedness.[17] As capital becomes spread too thin, markets respond by falling into crisis. Crises are transmitted internationally through trade and capital flows as well as by psychological factors that cause herd-like behavior

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[14] Fisher, *Booms and Depressions: Some First Principles*, Irving Fisher, "The Debt-Deflation Theory of Great Depressions," *Econometrica* 1 (1933).

[15] Minsky's arguments are actually part of an analysis of Keynes' General Theory. See Minsky, "The Financial-Instability Hypothesis: Capitalist Processes and the Behavior of the Economy.", Hyman P. Minsky, *John Maynard Keynes* (New York: Columbia University Press, 1975), 129.

[16] Minsky, "The Financial-Instability Hypothesis: Capitalist Processes and the Behavior of the Economy," 16.

[17] Fisher, "The Debt-Deflation Theory of Great Depressions."

in markets.[18] Once a crisis emerges, it is most often remedied by an institutional response of some sort.[19] Kindleberger argued most forcefully for a "lender of last resort" (LOLR) to provide liquidity during a crisis and prevent it from deepening into a recession or depression.[20] More so than the monetarist school, business cycle theorists are concerned with the need for an international lender of last resort to quiet unstable markets. Effective intercession is the most important issue in this school of thought due to their belief that crises will emerge again.

The traditional monetarist and business cycle frameworks still have relevance. Many theorists use Friedman and Schwartz or Kindleberger as the basis for their analysis of crises, which has entrenched the debate over whether crises can be overcome, or are endemic to the system.[21] But the labels have become less visible as crises have received

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[18] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 119.

[19] Kindleberger argues that some crises are simply permitted to "burn out," meaning that there is no intervention or response by financial or governmental actors and the market is allowed to simply come back into equilibrium. This is a position often advocated by monetarists, but in actuality is a rare occurrence historically. Usually some actor, governmental or otherwise, will take some measures to calm the markets even if that measure proves to be ineffective or if the measure is only to close the markets for a period of time in order for calmer heads to prevail. Although Kindleberger devotes an entire chapter to "letting it burn out," his arguments are not convincing since even though there was rhetoric and perhaps some firms were allowed to fail in his examples of no response, in each of his historical examples measures were taken to alleviate the crisis even if those measures were only meager and ineffective. See Ibid., chapter 9.

[20] Charles Poor Kindleberger, *The World in Depression 1929-1939* (Berkeley: University of California Press, 1973).

[21] For example see Forrest Capie and Geoffrey E. Wood, eds., *Financial Crises and the World Banking System* (New York: St. Martin's Press, 1985), and Charles Poor

more attention through formal modeling and quantitative analysis. The goals of understanding financial crises have not changed. There is still a desire to know why they happen and how they can be best remedied, but the Kindleberger and Friedman and Schwartz approaches searched for holistic patterns and tried to examine incidents over long periods of history.

This methodology has changed somewhat as the literature has become more centered on contemporary events and is particularly concerned with understanding the last crisis in order to prevent the next. There are advantages and disadvantages to approaching crises in this way. The greatest disadvantage is that few authors have chosen to continue with the broad historical analysis begun by Friedman and Schwartz and Kindleberger. Comparisons of individual recent and historical cases are prominent in the literature, but few authors remain interested in understanding longer-term historical trends. The advantages are that understanding a specific event or a series of very similar crisis events happening in a short period of time adds greater depth and precision to crisis models and helps us understand the specific dynamics of major contemporary financial disturbances.

Since there are few studies that take on the historical breadth of Friedman and Schwartz, who examine 100 years of crisis or Kindleberger, who examines nearly 400 years of financial crisis, this section will consider the central arguments that have emerged in economics over four historical periods: early studies (prior to 1914), the

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Kindleberger and Jean-Pierre Laffargue, eds., *Financial Crises: Theory, History and Policy* (Cambridge: Cambridge University Press, 1982).

interwar depression period, the literature of the 1970s and 1980s, and the contemporary period. Examining the literature in this way will give an indication of both how crisis literature has changed and how certain themes have continued to be relevant over time.

It will also illustrate how the literature on financial crisis has developed based largely on the characteristics what type of crisis was salient for each time period. This trend has led to certain kinds of crises being privileged in scholarly analysis in various periods. As the relevant crisis changed, this brought new attention to new kinds of crisis. In each section, the relevant crisis in the literature will be both identified and defined. Last, considering crises in this way will help identify and isolate the conditions in which crises emerge. While this dissertation is not interested in trying to explain the genesis of crisis, understanding the conditions under which a crisis emerges is important for understanding responses.

Early Crisis Literature: Authors prior to 1914. This section discusses the contributions of several prominent nineteenth-century economists to the literature on financial crisis. The nineteenth century would give birth to many influential authors who shaped the study of economics. Karl Marx, David Ricardo and Walter Bagehot are among the most important. These authors were interested in understanding the nature of economic interactions, and within their theories about the role of capital and policies that structured state finance they spoke to the occurrence and management of financial crises. The early literature is important because it shaped the debates about financial crisis that followed, focused analysis specifically on banking crises, and suggested institutions were important for managing crisis. These three themes will be elucidated throughout this review of early crisis theorists.

Financial crises and depressions were central to Marx' understanding of the capitalist system since he thought they were inherent in the system and would bring about a revolutionary period. He considered crises part of an, "oscillatory pattern of economic growth."[22] Marx argued that the laws of the capitalist mode of production made the system prone to instability, depressions and economic fluctuations because of the "disproportionality between production and consumption due to the anarchy of the market."[23] Essentially, due to the increasing adoption of machinery, Marx argued that profit rates would decline over time. Falling profits reduce capital accumulation and help bring about a crisis.[24] Marx argued that crises would become more severe over time and that eventually the instability, economic crises and dislocation of people due to these characteristics of the market would lead to the proletariat revolution and the end of the capitalist mode of production.[25] Until capitalism ended, Marx predicted the cycle would continue. After a depression widespread bankruptcies would devalue money to the point

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[22] M.C. Howard and J.E. King, *The Political Economy of Marx*, 2nd ed. (London: Longman, 1985), 221, Joseph A. Schumpeter, *History of Economic Analysis* (New York: Oxford University Press, 1954), 748-9.

[23] Robert Gilpin, *The Political Economy of International Relations* (Princeton: Princeton University Press, 1987), 36.

[24] Karl Marx, *Capital: A Critique of Political Economy*, III vols., vol. III (London: Lawrence and Wishart, 1894; reprint, 1972), Chapter XV, Schumpeter, *History of Economic Analysis*, 750.

[25] Howard and King, *The Political Economy of Marx*, 221.

that the rate of profit would again increase. This would start the cycle of falling rates of profit and lead to the next crisis. Thus Marx contributed to crisis literature by providing an explanation for periods of crisis and by arguing that they were inevitable.

Ricardo's work on crisis is indicative of liberal economic writing. His main contribution was that crises were the result of exogenous shocks that had the effect of causing a change in preferences and a disruption in markets. Thus, as Say's Law[26] proposed, crises were moments of disequilibrium and they were resolved by re-establishing equilibrium. For crises to be resolved markets need to have mechanisms to adjust prices and mechanisms to clear so that they could react to the exogenous change.

Unlike Marx, Ricardo stressed the stability of the system and how crises ultimately created a new equilibrium brought on by market adjustments. Ricardo added to debates about the causes of crises by being critical of banking policies during the crises of his day.[27] He was instrumental in getting Parliament to restore convertibility after the

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[26] Say's Law, developed by Jean-Baptiste Say in the early nineteenth century is usually described as, "supply creates its own demand," implying prices will rise after a crisis simply by the fact that there will be excess supplies of goods.

[27] He was particularly critical of what banks were allowed to issue convertible notes. David Ricardo, *The High Price of Bullion a Proof of the Depreciation of Bank Notes, Goldsmiths'-Kress Library of Economic Literature; No. 20107* (London: John Murray, 1810), David Ricardo, *Proposals for an Economical and Secure Currency with Observations on The Profits of the Bank of England, as They Regard the Public and the Proprietors of Bank Stock, Goldsmiths'-Kress Library of Economic Literature; No. 21559.57* (London: John Murray, 1816).

crisis of 1810 and his work on crises not only conditioned governmental policies, but also added to a general understanding of what governments could do during a crisis period.[28]

He argued, along with the Bullionists,[29] that banking policies created an over issue of notes and competitive note issue caused monetary disturbances.[30] Although Ricardo believed in the power of markets to successfully respond to a crisis, his support for the government's role in restoring convertibility and his posthumously published writings on the creation of a public national bank in England suggest that institutions could play a powerful regulatory role in note issue that would help avoid, or more quickly resolve crises.[31]

Ricardo's work became the center of one of the most significant early financial debates. The Banking School and the Currency School had different interpretations of the structure of a monetary system each put forth a theory of the causes of financial crises and how they could be resolved. This debate was inspired by the three crisis periods

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[28] David Glasner, "David Ricardo," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 581.

[29] The Bullionist debate emerged after the 1797 Bank of England suspension of gold payments. The argument that the Bullionists made was that the premium on gold, as well as sterling's devaluation after the suspension were caused by the overissue of pound notes, which depreciated the value of the pound sterling. The Bullionists argued that any devaluation was evidence of overissue. Eventually, the Bullionist position led to the Bullion Committee Report of 1811, which advocated a return to convertibility in order to address the continued depreciation of the pound. Ricardo's arguments were instrumental in getting the Bullion committee established.

[30] Ricardo, *The High Price of Bullion a Proof of the Depreciation of Bank Notes.*

[31] David Ricardo, *Plan for the Establishment of a National Bank, Goldsmiths'-Kress Library of Economic Literature; No. 24195* (London: John Murray, 1824).

between 1825 and 1839 as both schools of thought wrestled with the question of reasons and remedies.[32] The Banking School advocated the position that crises were caused by a wave of speculation that was not tied to note issue. Because speculation was a non-monetary event, the remedy for a crisis was to expand liquidity to meet the needs of the speculation.[33] The Currency School believed that crises were caused by an expansion of loanable funds and increased note issue. These conditions caused higher prices and gold reserve losses at the Bank of England. Reserve losses would eventually lead the Bank of England to contract the money supply and raise the discount rate, which would retard business, reduce prices and increase bankruptcies. The Currency School therefore argued for the tight regulation of note issue, particularly from banks outside the city of London.[34]

The schools had opposite recommendations for policy options when a crisis emerged. The Banking School believed the British monetary system was self-regulating, but favored a response during a panic that gave more responsibility to a monetary authority for credit creation.[35] The currency school endorsed more regulation in note issue and management of gold flows, but Kindleberger argues that if hard-pressed, even those who advocated the Currency School controls on credit and note issue would admit

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[32] Lawrence H. White, "Banking School, Currency School and Free Banking School," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 48.

[33] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 52.

[34] White, "Banking School, Currency School and Free Banking School." One must remember that at this point in history, many banks throughout the country issued convertible notes. The Bank of England only had control over note issue within the city limits.

[35] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 52.

the occasional need for credit creation to stabilize markets.[36] Therefore, while both schools of thought favored using institutions to calm panicked markets, the Banking School was in favor of a more interventionist role for monetary authorities. The disagreement between these two early schools is often considered the first significant debate on business cycles, crises and depressions.[37]

Probably the most cited and significant contribution to the early crisis literature came from Walter Bagehot, a lesser-known journalist economist. Bagehot wrote in the mid-1800s and was influenced by the policies of both the Banking and Currency Schools. He was the outspoken editor of the *Economist* (1860-77) and used his position to speak to current problems in the financial community. During his lifetime several severe crises gave him a lot to write about. His most significant work, *Lombard Street*,[38] was "mainly concerned with the central bank's response to panics."[39] Bagehot has been credited with creating the concept of a "lender of last resort," defined as an actor that provides liquidity during a crisis even when all other banks consider it a poor risk to do so.[40] For Bagehot,

[36] Ibid., 163-4.

[37] White, "Banking School, Currency School and Free Banking School," 49.

[38] The title is derived from the name of the street in London where the major banks were located.

[39] Gary Gorton, "Banking Panics," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997).

[40] Though Bagehot is credited with this concept, some argue it was first articulated by Henry Thornton earlier in the century. See Henry Thornton, *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain* (New York: A.M. Kelley, 1802; reprint, 1962).

the lender of last resort was logically the central bank, since it was the only actor large enough and with the capacity to issue currency in any amounts needed in order to stave off banking crises. His emphasis on the role of a central bank prompted his most famous advice, that banks should lend freely at high interest rates during a crisis. Bagehot also made other additions to crisis literature by discussing the pattern of business fluctuations and attributing rises and declines in profits and business activity to a contraction of credit.

Bagehot was less concerned than his contemporaries about the causes of crises, arguing simply that crises happened and would continue to happen due to both internal and external shocks. There were in his opinion, too many causes for crises to be concerned with their specific genesis. Instead Bagehot made a strong argument to focus on crisis resolution: "There is little difference in the effect of one accident and another upon our credit system. We must be prepared for all of them, and we must prepare for all of them in the same way – by keeping a large cash reserve [in the Bank of England]."[41] Bagehot also elaborated on how business connections allowed crises to spread through the domestic economy.[42] Bagehot's contributions to the crisis literature are significant. Not only did he propose the policy of an active last resort lender to respond to the crisis

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[41] Walter Bagehot, "Lombard Street," in *The Collected Works of Walter Bagehot*, ed. Norman St. John-Stevas (London: The Economist, 1965), 110.

[42] Ibid. See especially chapter 7, "Why Lombard Street is often Very Dull and Sometimes Extremely Excited."

situation, but he also established a theory of how crisis spread based on business linkages, credit and supplies of capital.[43]

As a group, early crisis theorists focused their analysis three themes. First, they studied a specific kind of crisis, banking crises. Banking crises can be characterized by a sudden desire for the public to turn their bank assets (e.g. demand deposits or bank notes) into currency (money, specie). As people seek to make their assets liquid, a crisis will ensue if banks lose the ability to honor their contractual obligations to exchange currency for their notes. Thus, debates about note issue, convertibility, and what institutions or monetary authorities should provide liquidity to assure bank could meet their obligations were essential questions. While early authors do not self-consciously choose to only theorize about banking crises, this was the most relevant and frequently occurring crisis of the time. They were significant because they had a most disruptive effect on the real economy; therefore, finding responses to these crises was vital.

The second theme in the early crisis literature is the emphasis on creating institutions to address bank runs.[44] The most significant tool employed to address banking crises was to expand liquidity to those firms that were most in need, thus quieting the public's desire for hard cash. Early authors suggested that this task had to be

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[43] Ibid., 123. One significant criticism of Bagehot's work on crisis was that Bagehot did not provide specific, objective criteria for identifying what constituted a panic or a crisis and this made it difficult for the central bank to determine when it was required to act as lender of last resort. See Hugh Rockoff, "Walter Bagehot and the Theory of Central Banking," in *Financial Crises and the World Banking System*, ed. Forrest Capie and Geoffrey E. Wood (New York: St. Martin's Press, 1985).

[44] Walter Bagehot, *Lombard Street* (London: John Murray, 1873; reprint, 1931), Ricardo, *Plan for the Establishment of a National Bank*.

coordinated by some agent or actor working to quiet markets. Finally, this early literature was significant in situating the debates and analysis that would follow. These authors explored such questions as whether a lender of last resort was necessary, whether crises were irrational or a natural part of an economic system and what economic tools were most relevant for addressing crises. These early themes would greatly influence crisis scholarship in later periods.

The Interwar Period and Great Depression (1919-1944). The second period, the interwar era and Great Depression, is understandably one in which the literature on financial crisis was influenced by the problems of the day. Moreover, the depression of 1929 is one of the most significant events in modern economic history, and that single event altered the course of both crisis literature, and the whole of modern economic theory. The most relevant crises for this period were foreign exchange crises (currency crises), stock market crashes and banking crises. This section will define these crises and review several of the key arguments and authors who contributed to the literature of the Great Depression. Four themes will be highlighted throughout the discussion of significant authors: 1) the emergence of the debate between monetarists and business cycle theorists Keynesians regarding the cause of crisis; 2) the role of institutions and lenders of last resort; 3) the tie between credit expansion and crisis; and 4) the use of historical case studies in the analysis of financial crisis.

Early twentieth century theories of crisis reflected many of the same themes that had been established in the nineteenth century. The first two crises in the twentieth century caused significant bank runs and the literature they generated furthered the themes of lenders of last resort and how weak banking systems contributed to the problem.[45] Authors became more interested in how domestic institutions could be structured to address crises and what powers those institutions should possess.[46] But the crisis caused by the outbreak of the war in 1914, the subsequent abandonment the gold standard, the institution of the gold-exchange standard and the crises surrounding the Great Depression, were events that all led to a significant analysis into business cycles and crises. This section reviews the contributions of several authors including contemporaries of the Great Depression, such as John Maynard Keynes and Joseph Schumpeter and prominent economists who wrote about the events years and decades later, including Charles Kindleberger and John Kenneth Galbraith.

While Keynes is best known for his theories shaping the field of macroeconomics, particularly his *General Theory* where he argued that an activist fiscal and monetary policy were needed to restore full employment, his work did add significantly to crisis

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[45] *The Currency Problem and the Present Financial Situation: A Series of Addresses Delivered at Columbia University 1907-1908*, (New York: Columbia University Press, 1908), Joseph French Johnson, "The Crisis and Panic of 1907," *Political Science Quarterly* 23, no. 3 (1908), O.M.W. Sprague, "The Crisis of 1914 in the United States," *The American Economic Review* 5, no. 3 (1915).

[46] Debates about establishing a central bank in the United States are indicative of how the literature addressed these issues. Edwin R.A. Seligman, "The Crisis of 1907 in the Light of History," in *The Currency Problem and the Present Financial Situation: A Series of Addresses Delivered at Columbia University 1907-1908* (New York: Columbia University Press, 1908), Frank R. Vanderlip, "The Modern Bank," in *The Currency Problem and the Present Financial Situation: A Series of Addresses Delivered at Columbia University 1907-1908* (New York: Columbia University Press, 1908).

literature.[47] His "Notes on the Trade Cycle," one of the final chapters in *The General Theory*, promoted a theory of crises that attributed business cycles and crisis to expectations about the value of capital assets. When capital assets are expected to be less valuable due to poor expectations about the future, a crisis is likely to occur and cause individuals and institutions to seek liquidity.[48] This was a theme stressed as well in Keynes' earlier writings where the outbreak of World War I changed expectations of joint stock banks and depositors and caused them to present notes directly to the Bank of England.[49] In the *General Theory* his propositions for an activist fiscal and monetary policy suggested Keynes' preference for countercyclical governmental measures to address the problems caused by financial crises, and subsequent "Keynesian" theorists elaborated upon this theme.[50] Keynes was also enormously aware of the international linkages through which financial troubles could be transmitted from one country to another. In his discussions of the 1914 crisis Keynes discussed the threat to England's internal financial structure that resulted from the disruption of payments on short-term

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[47] John Maynard Keynes, *The General Theory of Employment, Interest and Money*, vol. 7, *The Collected Writings of John Maynard Keynes* (London: Macmillan and St. Martin's Press, 1973).

[48] Ibid., 313-32.

[49] John Maynard Keynes, "The City of London and the Bank of England, August, 1914," *Quarterly Journal of Economics* 29, no. 1 (1914).

[50] Robert Dimand, "John Maynard Keynes," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland Publishing, 1997), 357, Keynes, *The General Theory of Employment, Interest and Money*.

loans from foreign borrowers.[51] In one of Keynes' better-known works, *The Economic Consequences of the Peace*, he discussed the international ramifications and possible crisis conditions that the reparations required of Germany would cause.[52] In sum, Keynes added to crisis literature by addressing the causes of crises, economic tools that could be used for response and the manner in which international linkages could transmit crisis conditions.

Joseph Schumpeter was most interested in understanding the changes in capitalism over time. He believed the economy was dynamic and he studied business cycles to understand how capitalism evolved. According to Schumpeter business cycles drive the capitalist system and capitalist institutions through four stages of evolution: prosperity, recession, depression and revival.[53] Schumpeter was particularly interested in factors endogenous to capitalism that moved economies through these four phases and he concluded that economies grew based on innovation or technological advancement. When a new innovation is identified, capital moves to that technology and this causes growth in the overall economy. As the technology ages, a downturn ensues and capital

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[51] Keynes, "The City of London and the Bank of England, August, 1914," 48-53.

[52] John Maynard Keynes, *The Economic Consequences of the Peace*, vol. 2, *The Collected Writings of John Maynard Keynes* (London: Macmillan and St. Martin's Press, 1973).

[53] Joseph A. Schumpeter, *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process*, 2 vols. (New York: MacGraw-Hill, 1939), Joseph A. Schumpeter, "The Instability of Capitalism," *Economic Journal* 38 (1928).

diffuses to other parts of the economy.[54] Schumpeter's cyclical phases were tied to specific innovations. As each innovation was adopted, new processes reallocated credit and changed the role of existing factors of production. He identified a process of "creative destruction." Sharing characteristics with a crisis, creative destruction is a moment when the wave of prosperity suddenly "turns" due to the appearance of goods tied to a new innovation and the economic system slumps until it adapts to the change.[55] Schumpeter discussed many historical crises and business cycles, but he used the Great Depression to anchor his analysis.

Schumpeter's work has received extensive criticism, but he made some invaluable contributions to the crisis literature. First, his work represented a truly historical theory of crises. His comparisons of the depressions of 1825, 1873 and the Great Depression suggested that historical cases could help provide an understanding of current crisis and depression periods. Moreover, he believed that that through historical analysis one could better come to grips with the dynamics of crises than through the use of statistical analyses.[56] Second, his work created a theory that allowed the liberal economics tradition to explain crises as endogenous to the capitalist system. From the Schumpeterian tradition, other theorists such as Minsky would use a liberal paradigm to explain crises as a natural part of capitalism instead of a failing of the system. Third, Schumpeter

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[54] Schumpeter, *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process*.

[55] Ibid., chapter 4 especially pages 136-52.

[56] Wolfgang F. Stolper, "Joseph Schumpeter," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland Publishers, 1997), 604.

addressed how capitalism changes and evolves based on the fact that the economic system was embedded within a political and social system that generates and must adapt to innovation. Friction between the political, social and economic system causes institutions to change to in order for them to be successful in a new environment.[57] Finally, Schumpeter contributed to the business cycle theories of crisis, although to describe his theories in this manner misses the complexities of his work. For Schumpeter business cycles were multifaceted historical, cultural, sociological and economic events. Wolfgang Stolper described Schumpeter's work as "integrated analysis of social and economic forces, of continuities and discontinuities in history, including a discussion of the culture of capitalism [and], the increasing 'rationalization' which capitalism has promoted...."[58]

A third, lesser-known scholar, R. G. Hawtrey was a contemporary of the Great Depression and a significant contributor to crisis literature. Hawtrey is perhaps best known for his writing on the role and duties of a central bank in managing financial stability.[59] He also developed a theory of crises that was built around the failure of the gold standard and the interwar gold exchange standard. Hawtrey emphasized the role of credit in the trade cycle,[60] arguing that the boom-and-bust pattern of capitalism was

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[57] Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper and Brothers, 1942).

[58] Stolper, "Joseph Schumpeter," 605.

[59] R.G. Hawtrey, *The Art of Central Banking* (London: Longmans, 1932).

[60] The business cycle and trade cycle are synonymous. American authors preferred the term business cycle, British authors preferred trade cycle.

actually attributed to expansions or contractions of credit.[61] Crises were periods when credit contraction happened quickly. Consistent with his thesis on central banking, Hawtrey argued that the gold standard inadequately regulated the expansion and contraction of credit, and so contributed to the evils of the trade cycle. He concluded that central banks should therefore be more active in regulating the expansion or contraction of credit.[62]

He was a significant proponent of central bank cooperation to address failures in the international credit system, but he was adamant about the need for state monetary authorities, particularly central banks, to be independent while simultaneously remaining sensitive to the international ramifications of their policies.[63] Hawtrey drew these conclusions from the problematic state of international finance throughout the interwar period, when states ignored the international variables in their policies. Hawtrey's contribution then is that he drew attention to the role of credit expansions and contractions for understanding crises and that he articulated the role of the central bank as a response actor.

While Keynes, Schumpeter and Hawtrey were all contemporaries of the Great Depression, most of the analysis of this event, and the contributions to crisis literature

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[61] R.G. Hawtrey, *The Gold Standard in Theory and Practice*, 5th ed. (London: Longmans, Green and Company, 1947), 88. It is important to note that even though Hawtrey wrote on the business cycle, he saw no regularity or discernable patterns in expansion or contraction of credit.

[62] Ibid., 241-2.

[63] Ibid., 241-53.

that were gained, were written long after. Understanding the crises of this time period has been central to creating a general understanding of financial crisis and response, and it is still common for economists to explain current crises with an allusion to the Great Depression.[64] Authors that attribute the Great Depression to the crises between 1929 and 1931 have not only helped explain that particular event, but have furthered the general understanding of financial crises by trying to explain why those particular crises were so devastating to the global economy.

Both the monetarist and business cycle schools of thought have used the Great Depression as a central case for furthering their crisis theories. Friedman and Schwartz use the depression as their main case to support their general theoretical assumption that bank failures are tied to monetary contraction, from which crises are born.[65] They identified the banking crises in the fall of 1930 as the catalyst for the Great Depression. Inept responses from the Federal Reserve Bank to the first series of crises led to more crises between 1931 and 1933. All of the banking crises surrounding the Great Depression were tied to monetary contraction and fed by public fear.[66] The most significant contribution that Friedman and Schwartz' analysis made to crisis literature is their discussion of how monetary factors have been a general cause of crises, and how they specifically contributed to the depression era crises.

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[64] For an example of this see: Paul Krugman, *The Return of Depression Economics* (New York: W.W. Norton, 1999).

[65] Friedman and Schwartz, *A Monetary History of the United States 1867-1960.*

[66] Ibid., Chapter 7.

Kindleberger has written often of the Great Depression and has argued that an increase in credit throughout the 1920s led to an overvalued market and speculative mania. This mania reversed itself when reductions in real assets, particularly a decrease in trade brought about by global tariffs, and a simultaneous agricultural depression caused a decrease in investment capital and hastened the crises of the late 1920s and 1930s.[67] In addition, his analysis of the Great Depression concluded with a discussion of the importance of an economic leader to stabilize the economy during a crisis. The lack of a last resort lender after the global slowdown in 1931 deepened the recession and led to the continuing problems. Kindleberger's general theoretical statement regarding the Depression harkens back to Walter Bagehot's; that during a crisis an economic leader must emerge if global markets and stability are to be restored quickly.[68] Kindleberger was also instrumental in furthering the connection between speculation and credit availability, a combination that he later argued would drive the economy toward crisis.[69]

Perhaps the most significant work on the Great Depression was John Kenneth Galbraith's, *The Great Crash*. Galbraith's account of the depression is mostly descriptive, but relies heavily on understanding the crash as a result of human irrationality and hysteria. These characteristics led the public to invest and speculate heavily when prices were rising, and then to rush to sell when prices dropped and a panic emerged. Market irrationality and speculative mania were fueled by easy access to

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[67] Kindleberger, *The World in Depression 1929-1939*, Chapter 3.

[68] Ibid., Chapter 14.

[69] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*

credit, since the years prior to the crash saw an increase in people buying stocks on margin.[70] The panic was exacerbated by several institutional factors including problematic banking and corporate structures, which further led Galbraith to conclude that the depression was a result of a speculative bubble bursting and "perverse" institutions and policies proving unable to address the problems.[71] Galbraith ends his book with a discussion of the likelihood of the episode repeating itself since humans will continue to be susceptible to speculation and the lure of making money quickly. He saw the solution in strengthening institutions that could curtail the most devastating effects that a speculative bubble would create. Galbraith added to the old but common theme of irrationality, which continues to be a theme expressed in writings today.[72]

Peter Temin's work *"Did Monetary Forces Cause the Great Depression?"* took issue with the theoretical assumptions made by Friedman and Schwartz by arguing the Great Depression was not caused by a monetary contraction but instead by a real drop in income and wealth which caused a deflationary cycle that intensified throughout the late 1920s.[73] The deflationary trend was caused primarily by great power policies that tried to

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[70] John Kenneth Galbraith, *The Great Crash, 1929: The Anatomy of Financial Disaster*, Houghton Mifflin Company Sentry ed. (Boston: Houghton Mifflin, 1961), 16-7 and 67-9. While Galbraith does argue that expanded credit fueled the mania, he does not argue that the only condition necessary for a significant speculation is easy money, just that the credit expansion in the 1920s contributed to the irrationality in this instance.

[71] Ibid., 182-91.

[72] For example see Robert Flood and Peter Garber, "Collapsing Exchange Rate Regimes: Some Linear Examples," *Journal of International Economics* 17 (1984).

[73] Peter Temin, *Did Monetary Forces Cause the Great Depression?* (New York: W.W. Norton, 1976), 171-8.

reinstate the gold standard. Temin's contribution to crisis theory was to crystallize the debate between monetarists and Keynesianists by arguing real economic conditions (rather than monetary) caused the Depression. In doing so, he drew attention back to more fundamental questions of how the decline in specific sectors and in specific national markets can be linked together and lead to a general decline in prices, wealth and consumption. His earlier work discussed the interlinkages between the German and American economies and how similar policies in these economies led to a vicious deflationary cycle.[74] In his later work, *Lessons from the Great Depression* he furthered his argument that governmental deflationary policies led to the perpetuation and entrenchment of the depression.[75] Overall, Temin's work on the depression theorized about crises from a different set of variables and brought attention back to "real" causes of crises, reinvigorating debates between monetarists and Keynesians.

Barry Eichengreen's *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939* focuses on the breakdown and the attempted recreation of the gold standard during the interwar period. His theoretical contribution to crisis literature is significant as he argues that institutional arrangements and cross border cooperation, strong before World War I, lacked the power and cooperative agenda in the interwar

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[74] Peter Temin, "The Beginning of the Depression in Germany," *Economic History Review* 24 (1971): 240-8.

[75] Peter Temin, *Lessons from the Great Depressions* (Cambridge, MA: The MIT Press, 1989).

period to defend against crises.[76] As the system began to break down, the rules of the gold standard actually hindered recovery and left states increasingly unable to respond to depressive conditions. This put pressure on international cooperation, which was necessary to maintain the gold standard. When states broke with the rules of the gold standard, and pursued domestic recovery policies, they were able to address the deep contraction within their borders. Eichengreen examines the crises of the depression as political economic events, which were the result of a monetary system lacking credibility. This system required states to cooperate but the contradiction between stabilizing the international gold standard and addressing domestic economic problems destroyed cooperation. Eichengreen's analysis draws attention to how the rules of a financial system existing in a particular political environment, could force actors to create policies that would make crisis more likely or more difficult to manage once they emerged.

In sum, the literature that has emerged on the Great Depression furthered several themes regarding crises. First, it crystallized the debate between monetarists and business cycle theorists about the causes of crises; the Great Depression being a significant case has been central to both theses. Second, it furthered discussions about crisis response and the appropriate actor to lead a response. Central banking policies and domestic and international lenders of last resort have been widely discussed as having contributed to the crisis by their misinformed policies, their neglect, or inability to act cooperatively to in providing a response. Third, the role that credit expansion and

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[76] Barry Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939* (Oxford: Oxford University Press, 1992), chapters 7 and 9.

contraction had in causing a crisis was highlighted. Finally, a methodological emphasis on the role of historical cases to understand the dynamics of crises was popularized in the analysis of the Great Depression.

Just as in the nineteenth century, the literature that emerged regarding the interwar period and depression emphasized understanding specific kinds of crises that were relevant in this era. While the Great Depression is considered a single event in history, it was actually a period where several types of crises occurred, each of which received attention in the literature discussed above. The three most significant types of crisis during this time were banking panics, the stock market crash and currency or foreign exchange crises. Understanding the role of banking panics underlies much of the monetarist literature on the depression. Since banking panics were as significant a problem during the depression as they were in the nineteenth century, attention to this kind of crisis continued.

The 1929 stock market crash also received attention, particularly from American scholars like Galbraith who defined the crash as a speculative bubble.[illegible] Stock market crashes are defined as a sudden drop in the price of securities that causes a significant amount of selling as people try to liquidate their securities in favor of cash. Often these crises are considered bubbles where the market price of an asset (e.g. securities or land) inflates beyond its worth. Eventually the inflated prices fall, and in the case of a market crash, the prices decrease suddenly causing a massive sell-off. The 1929 stock market crash exemplifies this trend. Stock prices appreciated much faster than dividends or

[illegible] Galbraith, *The Great Crash, 1929: The Anatomy of Financial Disaster.*

earnings throughout 1928; thus, the rationality of the market set prices was questioned after the crash. The eventual market correction came over a year later when security prices dropped and caused all securities to suffer massive selling.

The third kind of crisis that received a significant amount of attention in the depression literature is the currency or foreign exchange crisis. Currency devaluations throughout Europe in the 1930s were common as states lost gold reserves and had trouble maintaining the convertibility of their notes to gold. These crises are defined as periods where excessive buying or selling pressure is exerted on a currency, and jeopardizes either a fixed parity or the state's ability to redeem notes for the quoted amount of specie. In a floating exchange system, selling pressures cause the value of a currency to drop relative to others. A crisis is said to have emerged if the currency is forced off its fixed parity or drops to an unacceptable floating level.[78] When the currency is devalued the economic consequences are significant. One result is capital flight, where investment capital flees the state in crisis, thus reducing available liquidity. A second problem is that the price of imported goods rises in relation to the purchasing power of the local currency, reducing access to possibly essential foreign goods.

Most of the literature on the depression has tied the stock market crash, currency crises or banking crisis to the genesis of the depression and has criticized the adequacy of

[78] A government or the domestic financial community usually determines whether a level is unacceptable. Massive capital flight would be an indication that an unacceptable level had been met but defining what is an acceptable or unacceptable level for a currency is not objectively measurable since it will vary from currency to currency and situation to situation. See Paul Einzig, *Foreign Exchange Crises: An Essay in Economic Pathology* (New York: St. Martin's Press, 1968). See especially chapters 1 and 2.

the responses that were used. Many authors presented some version of the argument that better responses would have ended the debilitating conditions that continued for years. The analysis of the economic tools employed to address the crises during this period have greatly contributed to crisis literature and have influenced the policies that are used to address similar situations today.

The Literature of 1970s and 1980s. The crisis literature that emerged between the Great Depression and the 1990s was substantial for furthering several important debates. This section will discuss the four main issues that emerged from the scholarship of the 1970s and 1980s. First, a substantial portion of the literature, usually classified as neo-liberal, suggested that the failure to follow good economic fundamentals was the primary cause of financial crisis. Thus, countries with problematic balance of payments or other economic indicators were more likely to fall into crisis. Second, the literature addressed the role of global capital flows in creating crisis conditions. Third, there was a renewed methodological interest in understanding crisis in historical context. Finally, a literature to discuss appropriate responses to safeguard the financial system from a widespread global meltdown reinvigorated discussions about institutional responses.

In addition to the literature expanding on these four themes, this period brought scholarly attention to two specific kinds of crisis: currency crisis and debt crisis. The dollar crisis of the 1970s and the Third World debt crisis of the 1980s, were the most relevant crises in the period and influenced a large portion of the scholarship. Before addressing the main themes in the literature, it is important to define the relevant crises of the period.

Influenced by the event of the Dollar Crisis, the literature in the 1970s was committed to understanding currency or foreign exchange crises.[79] As discussed above, these crises are defined as periods where excessive buying or selling pressure is exerted on a currency, and jeopardizes a fixed parity. Crisis conditions emerge when, "market participants lose confidence in the sustainability of a currency's current exchange rate and seek to reduce their exposure in that currency."[80] Krugman, the primary author on these crises during this period has expressed discomfort defining the term "currency crisis," but has suggested a specific course of events where speculators lose confidence in a country's currency and this provokes capital flight.[81] Selling pressure increases as a result of the loss in confidence and fear that a devaluation becomes eminent. The loss of confidence can be the result of many factors, including persistent balance of payment problems, excessive debt or political uncertainty.

The other crisis that received attention was a debt crisis. A debt crisis can be defined as a period when debtors, particularly sovereign debtors, become unable to

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[79] Because of Krugman's work on these crises and the connection to balance of payment problems, the phrase balance of payments crisis is used interchangeably with currency crisis and foreign exchange crisis. All imply a currency devaluation or broken parity.

[80] Crockett, *The Theory and Practice of Financial Stability*, 15.

[81] Paul Krugman, "Introduction," in *Currency Crises*, ed. Paul Krugman (Chicago: University of Chicago Press, 2000), 1.

service their loans and as a result either default or have to re-schedule payments.[82] Debt crises can arise for many reasons including poor economic fundamentals within a state, a political coup or a bad harvest. While an individual sovereign debtor can default on their loans, debt crises are usually considered to have emerged when several states simultaneously declare their inability to pay, thus placing the international financial and particularly the international banking system at risk.

The literature in the 1970s and 1980s was considerably influenced by these two kinds of crisis. For economists, the theoretical discussion about currency crises may be best understood with reference to Paul Krugman's influential article "A Model of Balance of Payments Crises." Krugman explained how under a fixed exchange system a credit expansion beyond a monetary expansion would lead to a loss of international reserves and increase the possibility of a speculative attack on a state's currency.[83] In response to declining reserves, governments would be forced to abandon parities and investors would be motivated to remove investments prior to that abandonment. The resulting effect is capital flight that exacerbates the devaluation and balance of payment problems. In this article, Krugman developed a model for understanding speculative crises and why states would abandon a currency peg, and he drew the connection

[82] Miles Kahler, "Politics and International Debt: Explaining the Crisis," in *The Politics of International Debt*, ed. Miles Kahler (Ithaca, NY: Cornell University Press, 1986), 11, Peter H. Lindert and Peter J. Morton, "How Sovereign Debt Has Worked," in *Developing Country Debt and Economic Performance: The International Financial System*, ed. Jeffrey D. Sachs (Chicago: University of Chicago Press, 1989), 66.

[83] Paul Krugman, "A Model of Balance of Payments Crises," *Journal of Money, Credit and Banking* 11 (1979).

between external and internal balance of payments problems and the occurrence of currency crises. While his model was primarily used to explain crises occurring in the 1960s and 1970s, it received renewed attention in the 1990s when it would be used again as the basis of explanation for a wave of currency devaluations.

By the 1980s, concerns about currency crises were eclipsed by the emergence of the Third World debt crisis, and these new concerns were expressed in the literature. The debt crisis shifted attention to a new type of problem that affected a different set of victims. The currency crisis literature had been focused primarily on incidents within developed countries. Now the attention switched to how less developed countries had defaulted on their loans and what implications that would have for the global financial system. The concern was that developing country debt defaults would have a negative impact on both developed countries and on the overall financial system. The literature of the debt crisis considered several issues that echoed back to the literature of previous periods, but the accumulation of debt became the central variable for explaining crisis.

The theories that emerged to explain the debt crisis made four important contributions to crisis literature. First, many economic theories about the crisis suggested that the problems of default were due to domestic mismanagement of the economy. Second, authors brought attention to the effects that capital flows from private market actors could have on less developed countries, and how changes in the global economy could significantly reverse those flows. Third, there was more emphasis on the role of historical debt crisis cycles. Fourth, the most significant portion of debt crisis literature discussed proper responses in order to safeguard the international financial system, and particularly the developed countries, from a more significant meltdown in the wake of defaults. This reinvigorated debates about domestic and international lender of last resort functions and drew analysis to the role of international institutions in crisis response and financial management. Each one of these themes was more fully elaborated by theorists during the 1980s.[84]

The first theme, the role that faulty domestic policies played in causing the crisis was a favorite theme of liberal economists immediately after the crisis began. Authors emphasized the role of unbalanced budgets, mismanaged domestic economies, the poor application of fundamentals and how the money borrowed was used inappropriately to fund unproductive investments, in contributing to both the crisis and the problems with debt-servicing. These theories argued that unfavorable global economic conditions coupled with poor policies or bad management in the debtor countries were the main reasons for the debt crisis.[85] These theories tended to blame the debt crisis on the debtors

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[84] Another line of debate that emerged during the debt crisis was the difference between historical incidents of bond financing and the 1970s practice of bank financing. This debate focused more on international financial practices and structures than on financial crisis so it will not be elaborated upon here. See Barry Eichengreen, *Globalizing Capital: A History of the International Monetary System* (Princeton, NJ: Princeton University Press, 1996), Barry Eichengreen, "Historical Research on International Lending and Debt," *Journal of Economic Perspectives* 5, no. 2 (1991), Barry Eichengreen and Richard Portes, "After the Deluge: Default, Negotiation, and Readjustment During the Interwar Years," in *The International Debt Crisis in Historical Perspective*, ed. Barry Eichengreen and Peter H. Lindert (Cambridge, MA: MIT Press, 1989).

[85] For example see William R. Cline, *International Debt and the Stability of the World Economy* (Washington, DC: Institute for International Economics, 1983), William R. Cline, *International Debt: Systemic Risk and Policy Response* (Washington, DC: Institute for International Economics, 1984), William R. Cline and Sidney Weintraub, eds., *Economic Stabilization in Developing Countries* (Washington, DC: Brookings

and were the foundation for the IMF structural adjustment policies that emerged to manage the crisis.

The second theme in the literature of the debt crisis brought attention to the role of global capital and particularly the way that international lending grew as a result of petrodollar recycling. Understanding this trend fueled two kinds of theories about crisis that have similar implications. The first kind of theory provided more evidence that a credit expansion contributed to crises. Both Kindleberger and Minsky explained the debt crisis as further evidence of the validity of their credit based theoretical causes of crisis.[86] Kindleberger argued that an expansion in available capital created by petrodollars encouraged banks to, "tumble over one another in trying to uncover new foreign borrowers and practically forced money on the less developed countries."[87] This theme was echoed in arguments that suggested excess credit caused banks to "push" loans to borrowers who had little chance of repaying them.[88] Brimmer argued that loan pushing

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Institution, 1981), John Williamson, "The Lending Policies of the IMF," (Washington, DC: Institute for International Economics, 1982).

86 Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 19 and 2, Minsky, "The Financial-Instability Hypothesis: Capitalist Processes and the Behavior of the Economy."

87 Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*

88 For example see Andrew Brimmer, "International Capital Market and the Financing of Economic Development," in *Addresses, Essays and Lectures of Andrew Felton Brimmer* (Washington, D.C.: Federal Reserve Library, 1973), William Darrity, "Did the Commercial Banks Push Loans on the LDCs?," in *World Debt Crisis: International Lending on Trial*, ed. Michael P. Claudon (Cambridge, MA: Ballinger Publishing, 1986), William Darrity and Bobbie L. Horn, *The Loan Pushers: The Role of Commercial Banks in the International Debt Crisis* (Cambridge, MA: Ballinger Publishing, 1988).

was noticeable in the lending terms offered to LDCs by lending banks, which included longer maturities and lowered spreads. These conditions made the loans particularly attractive to LDC borrowers and allowed lenders to tap this new market.[89] Darrity and Horn argued that lenders developed loan packages to attract borrowers who had been denied access to global credit markets because of their risk factors.[90] These theories suggest that the dramatic rise in oil prices had more of an effect than simply raising the price of a scarce commodity; instead, it was the event that caused a increase in available capital and easy money.

A related set of theories argues the debt crisis was caused by an exogenous shock to the financial system. That shock reversed the "easy money" conditions that had emerged. Several events, but particularly the oil crises, attracted the attention of theorists who tried to explain the debt crisis by understanding how exogenous, unpredictable shocks affected capital markets. Sachs argued that the debt crisis emerged when states fell into arrears in payments as a result of the two oil crises.[91] Cline theorized that non-oil producing countries required more capital to purchase oil due to the rise in prices and that this primary shock started a chain of events that resulted in the threat of massive defaults. The macroeconomic shock that raised oil prices spurred a recession and high

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[89] Brimmer, "International Capital Market and the Financing of Economic Development."

[90] Darrity and Horn, *The Loan Pushers: The Role of Commercial Banks in the International Debt Crisis*, 17-21.

[91] Jeffrey D. Sachs, "LDC Debt in the 1980s: Risks and Reforms," in *Crises in the Economic and Financial Structure*, ed. Paul Wachtel (Lexington, MA: Lexington Books, 1982).

levels of inflation that were dealt with in the developed countries with high interest rates. These conditions produced the defaults and eventual crisis. These theories argued that the macroeconomic shock of the oil crises altered growth policies in developed countries. Less developed countries with no power to alter the conditions were forced to react by defaulting.[92]

Guttentag and Herring attributed the debt crisis to the inability of banks to foresee and manage such economic shocks. They argued that banks suffered from "disaster myopia" and never anticipated that their profit expectations could be affected by any kind of exogenous shock. The inability of banks to change their profit expectations as the oil shocks were developing was the primary reason that Guttentag and Herring blamed banks for creating an environment ripe for default. Banks bandwagoned to make loans with similar profit expectations and were then unable to control the indebtedness of the borrowing countries when those expectations changed in light of a global economic downturn.[93]

Theories that crises are based on capital expansion and that crises are caused by macroeconomic shocks were significant explanations of the debt crisis and added to the overall crisis literature. By explaining the genesis of the crisis, these theorists were

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[92] Cline, *International Debt and the Stability of the World Economy*, Cline, *International Debt: Systemic Risk and Policy Response*. Cline was also central in elaborating on the theory of debt-equity ratio or debt-service ratio that identified the ability of states to be able to resume payments once the macroeconomic shock receded.

[93] Jack M. Guttentag and Richard J. Herring, *The Current Crisis in International Lending, Studies in International Economics* (Washington, DC: The Brookings Institution, 1985), 1-3.

describing the important variables for remedying and stabilizing the financial system. For example, Cline argued that the way out of the debt crisis was to maintain an economic expansion in developed countries, thus overcoming the macroeconomic shock that precipitated the crisis' emergence.[94] Both sets of theories attribute the cause of the crisis to either the overabundance of credit or a sudden revulsion in capital markets that reversed lending and forced default.

The third contribution that the debt crisis made to crisis literature came from the expansion of historical understandings of loan defaults and earlier periods of debt crisis. These theories identified patterns of lending across centuries and explained crises that had occurred throughout history. Lindert and Morton identified six periods of heavy lending that were followed by default.[95] Their study examined these periods to ascertain the risk involved in lending to sovereign debtors, the measures used to punish and restrict credit to states that defaulted, and the policy options for dealing with a debt crisis. They identified consistent patterns in debt crises over the last two centuries, but more significantly compared the risks of bank capital flowing to developing countries versus bond financing for the international financial system. Their work identified patterns in specific countries that had a history of default and suggested that international

[94] Cline, *International Debt and the Stability of the World Economy*.

[95] Lindert and Morton, "How Sovereign Debt Has Worked." The periods are 1820s, 1850s, late 1860-1870s, late 1880s, 1904-14 and late 1920s.

institutions, particularly the IMF and World Bank, created more significant problems for addressing crises than bilateral negotiations had in previous periods.[96]

Fishlow examined the history of international capital markets and capital market failures in the nineteenth century and interwar period to compare these markets and crises to the capital market and the debt crisis of the 1980s. His goal was to identify and compare market characteristics that allowed sovereign default crises to be managed successfully in the nineteenth century with those characteristics that caused the financial system breakdown in the interwar period. He examined four criteria to compare the crises and capital markets. These included the ability of borrowers to use loans to generate wealth from borrowed funds, the connection between debtors increasing exports with their borrowed funds, the institutional form of financial intermediation and the source and degree of politicization of foreign investment.[97] Fishlow argued that historically the successful resolution of debt crises contained a mix of the four characteristics that would bring capital markets into equilibrium and allow global capital flows to return. But Fishlow echoed Kindleberger in his conclusion that role London played as a lender of last resort was a significant feature for weathering a debt crisis in the nineteenth century and restarting capital flows to areas facing liquidity problems.[98] He argued that resolution of the 1980s crisis was proceeding better than the interwar

[96] Ibid., 77-78.

[97] Albert Fishlow, "Lessons from the Past: Capital Markets During the 19th Century and the Interwar Period," in *The Politics of International Debt*, ed. Miles Kahler (Ithaca, NY: Cornell University Press, 1986), 39-41.

[98] Ibid., 90-91.

crisis, but that multilateral institutions did not pursue the correct capital market stabilizing functions that were identified as necessary by the successful resolution of the crises in the nineteenth century. Fishlow's work added an historical depth to the understanding of crisis resolution.

Eichengreen examined historical debt crises to determine what characteristics of capital markets were most likely to lead to crisis and what policies had been the most effective responses for remedying debt crises. In several articles he compared defaults of the 1930s with defaults in the 1980s.[99] He concluded that the difference between debts attributed to bond financing in the 1930s and private bank lending in the 1970s had consequences for the international financial system. Direct bank lending exposed national banking systems to greater destabilization and led to a more active role for governments in negotiating debt repayments. Theorists, mostly political economists, who focused solely on crisis response echoed this conclusion.[100] Bond financing was much less likely to involve active governmental negotiating in resolution of defaults. Eichengreen also discussed the role of global responses to defaults and debt crises and noted the obstacles and historical precedent of failures regarding the creation of global

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[99] Eichengreen, "Historical Research on International Lending and Debt.", Eichengreen and Portes, "After the Deluge: Default, Negotiation, and Readjustment During the Interwar Years."

[100] This line of theorizing is also discussed by political economists more than by economists. See for example Charles Lipson, "International Debt and International Institutions," in *The Politics of International Debt*, ed. Miles Kahler (Ithaca, NY: Cornell University Press, 1986).

solutions.[101] Theoretically Eichengreen's historical examination provided rich historical evidence for understanding and addressing the debt crisis.

Historical theorizing about the debt crisis was also a theme examined by political economists situated theoretically in the Braudelian tradition or world-systems school. While these theorists are not usually economists, their contributions will be discussed here instead of later for two reasons. First, they focus on some of the same historical issues for understanding the debt crisis that economists do and second, they rely on economic theorists to make their arguments.[102] These theorists were interested in long waves or cycles of lending. Christian Suter's work is representative of this larger theme. He examined debt cycles throughout history and correlated peripheral debt to both secular trends and long waves. He theorized that the accumulation of debt in peripheral states was related to Kondratieff growth cycles, Kuznets cycles and world leadership cycles. Core boom phases led to capital exports, which correlated to upswings in the cycles and default or crisis was correlated to bust phases.[103]

The studies using the historical method and analysis have added depth to understanding financial and provided a way to understand both financial crises and the debt crisis in a broader context. Theorists drew parallels between the nineteenth century debt crises, interwar era defaults and the debt crisis of the 1980s. These theories

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[101] Eichengreen, "Historical Research on International Lending and Debt," 166-67.

[102] For example both Kondratiff and Kuznets were economists.

[103] Christian Suter, *Debt Cycles in the World Economy: Foreign Loans, Financial Crises, and Debt Settlements, 1820-1990* (Boulder, CO: Westview Press, 1992).

addressed the causes of crisis, the risks of lending to less developed borrowers and most importantly, ways to resolve default. Each of these theories understood the debt crisis to be part of a larger pattern that could be traced back centuries, not simply as an isolated event. While prior to the debt crisis historical analysis was used for understanding financial crises, in the literature of the debt crisis a growing number of mainstream economic theories about the crisis took on an historical bent.

The third contribution to crisis literature that grew out of analyzing the debt crisis was an emphasis on the most effective policies for stabilizing the global financial system. A literature on the role of institutions and preferred policy recommendations grew out of the debt crisis. In many ways this literature resembles the debates that have recently emerged in the wake of the 1997 Asian Crisis to explain the construction and necessity of the new international financial architecture (NIFA).[104] This literature contributed to our understanding of crisis by identifying the need for global structures and policies to manage the debt problem and stabilize the global economy. It also identified ways to avoid the occurrence of future debt crises. This theme underlies all debt crisis literature since most had something to contribute to the debates regarding how the crisis should be resolved. The above discussions on the role of capital and exogenous shocks, as well as

[104] For example see Michael Hobbs, "Debt Politics for an Evolving Crisis," in *The Global Debt Crisis*, ed. Scott B. MacDonald, Margie Lindsay, and David L Crum (London: Pinter Publishers, 1990). This theme in the economics literature has been important for political economists too. See Miles Kahler, "Conclusion: Politics and Proposals for Reform," in *The Politics of International Debt*, ed. Miles Kahler (Ithaca, NY: Cornell University Press, 1986). In this article Kahler discusses such things as capital regulations and the role of international institutions. These are similar to the debates in the NIFA literature.

the historical theories of crisis have already considered the extension of each theorist's work to address crisis response. This last section considers several other authors who have added to this theme.

Immediate responses to the debt crisis emerged from the policy community. These responses mostly emphasized the continuity of debt servicing and involved case-by-case negotiations between banks, debtor countries and creditor countries. After the initial responses a theoretical literature emerged to evaluate the policies employed and suggest better courses of action. This literature stressed two important themes: 1) the role of economic growth and strong fundamentals for resolving the crisis and 2) the role of institutions.[105]

The emphasis on strong economic fundamentals and how they contribute to economic growth was one remedy. It was argued that states could grow themselves out of their default problems. These policies were synonymous with the 1980s Thatcher Reagan wave of neo-classical reforms in developed countries that endorsed greater market discipline and decreasing the public sector role in the economy in order to spur economic competitiveness and growth. The endorsement of market discipline drove economic theorizing about the benefits of structural adjustment policies. Structural adjustment policies were designed to expand LDC exports which would give debtor

[105] After the debt crisis emerged, there were dozens of policy recommendations for how to deal with the problem of sovereign default. Examples of suggested policies include, complete forgiveness of the loans, developing country moratoriums on repayment in exchange for military and technological assistance and debt for nature swaps, to name just a few proposals. Only two theoretical schools are presented here because these speak most significantly to the debt crisis' contribution to the general understanding and furthering of financial crisis theory.

states more cash to resume payments on their loans. Economic growth was seen as a necessary precondition for alleviating the debt crisis. The Baker Plan, instituted in 1985, was the embodiment of these policies and they were endorsed by many economists from academic and policy circles. It was these voices that shaped the creation of structural adjustment policies.[106]

While the policy and business community overwhelmingly accepted strategies that favored economic growth, these plans spurred a wave of criticism about the political and short-term economic consequences that market based reforms would have on debtor countries.[107] The literature supporting or deriding market based growth solutions for addressing a crisis is substantial. The important issue for our purposes is that market solutions were privileged for remedying debt crisis and this legacy has continued.

The literature discussing responses to the debt crisis also included considerations of the role of institutions and multilateral collective action.[108] Many of the market-based

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[106] Cline, *International Debt and the Stability of the World Economy*, 43-73. International Monetary Fund, *World Economic Outlook* (Washington, DC: International Monetary Fund, 1984), 20-25, 59-77. Also see Richard S. Dale and Richard P. Mattione, *Managing Global Debt* (Washington, DC: Brookings, 1983).

[107] There is an enormous literature criticizing the neo-liberal and structural adjustment policies that were created during the debt crisis. For a well known discussions of the political problems and failures of these policies see: Alejandro Foxley, *Latin American Experiments in Neoconservative Economics* (Berkeley: University of California Press, 1983). From an IPE perspective see Stephan Haggard, "The Politics of Adjustment: Lessons from the IMF's Extended Fund Facility," *International Organization* 39, no. 3 (1985).

[108] This literature overlaps considerably with the issues of economic growth because some of these policies were furthered by multilateral cooperation through creditor clubs or the IMF.

solutions endorsed by economists had to be carried out through international institutions like the IMF. This literature was more significant among political economists but also garnered the attention of economists who were concerned about stability in the international system and interested in the role institutions played in securing that stability. Kindleberger noted the importance of the IMF as a last resort lender and its failings in that capacity during debt crisis.[109] Eichengreen discussed the success of institutions addressing the debt crisis in the 1980s as "depressingly familiar" to the track record of institutions in the 1930s.[110] Both Kindleberger's and Eichengreen's criticisms were echoed by other prominent economists and political economists.[111]

The literature that emerged about responses to the debt crisis furthered an important debate in the crisis literature that can be summed up in one question: What is the correct balance between the role of the market and the role of international institutions in addressing financial crises? To a large degree this critical question has remained unanswered.

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[109] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 201-2.

[110] Eichengreen, "Historical Research on International Lending and Debt."

[111] Charles Lipson, a prominent political economist, provided one of the most expansive discussions of the role of international public institutions in addressing the debt crisis. His argument was that the debt crisis essentially created a role for public institutions to mediate and respond to crises. Institutions such as the IMF were central in overcoming problems of creditor cooperation by pushing for, "incremental reforms designed to overcome inherent gaps in private cooperation." Lipson also argued for a greater role for the IMF in future crises because it could move more decisively to promote collective action than private institutions could. Public institutions such as the IMF and central banks were central to his argument because they could more easily deal with coordination problems than private institutions could.

In sum, the debt crisis was a major event in reviving scholarly and policy interest in global financial markets and in the incidence of crisis. Theories about the debt crisis contributed to several themes in the crisis literature. Most significant perhaps is the role of global capital markets and how their functioning or failing affects the occurrence of crisis. The importance of understanding crisis through an historical context was also furthered, as scholars paid more attention to historic cases to understand the 1980s crisis. Finally, debates about last resort lending were again considered with a particular interest in international institutions that could act in that capacity.

Contemporary Crises. Since the early 1990s the literature on financial crisis has once again expanded. The problems of the debt crisis have been relegated to the background as several noteworthy financial crises have taken center stage. The European Monetary System Crisis, the Mexican Peso Crisis and the Asian Financial Crisis shifted scholarly attention back to currency crises and this has been the most relevant crisis in the current period.

In one of his most recent books, *Currency Crises*, Paul Krugman introduced the topic by saying, "Future historians may, in fact, dub this the Age of Currency Crises: never before, not even in the interwar period, have currency crises played such a central role in world affairs."[112] The characteristics of currency crises have already been discussed. While the concept of currency crisis has garnered the attention of economists

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[112] Krugman, "Introduction."

more in the last decade, it is important to note that the analytical distinction of currency crises from other financial crises seems to be more in question. For example, the Asian Crisis has been identified as a "Twin Crisis" where elements of banking and currency crises existed. Kaminsky and Reinhart further elaborated on this connection between banking and currency crises and identified 19 twin crises prior to 1995.[113] While the analytical usefulness of understanding a currency crisis as a distinct event will be demonstrated, the complexity of financial crises is finally being acknowledged by economists.

This section discusses several themes in the current economics literature. First, it looks at the evolution of two schools of thought regarding currency crises. Krugman's model has been supplemented by a literature that argues crises are not mechanistic but rather they are self-fulfilling.[114] This debate is at the heart of present economics scholarship on crisis, but there are several other themes currently gaining attention. Among those themes growing in importance are: the idea of contagion crises, the expansion of historical analysis methodology, the role of crony capitalism in causing crisis, and policy prescriptions for preventing and addressing crises. The scholarship on crises has become truly diversified in terms of the themes it considers. This section

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[113] Graciela Kaminsky and Carmen Reinhart, "The Twin Crises: The Causes of Banking and Balance of Payments Problems," *American Economic Review* 89 (1999).

[114] It is important to note that self-fulfilling expectations crises and speculative crises that will be discussed below all identify the mechanism that causes a currency crisis, which is defined in an earlier section as a break with parity or a devaluation of a currency.

attempts to make some sense of the growing and diverse literature and identify important themes.

Paul Krugman's work has continued to be the foundation for understanding currency crisis, and his model has been labeled the "first generation" of currency crisis theory. These theories stress the role that central bank reserves play in driving crises.[115] Krugman's model, which has been previously discussed, assumed that currency crises were caused by a mechanist linkage between speculation and the depletion of reserves. The speculative attack, or crisis period, emerged when it became known that reserves had been depleted to a level where the value or parity of the exchange rate could no longer be defended by the central bank.[116] Thus, crises were preceded by states pursuing overly expansive monetary and fiscal policies leading to steady depletion of reserves. Krugman's contribution emphasized the need for relevant macroeconomic determinants of the exchange rate, the role that speculative short selling played in provoking a crisis prior to reserves reaching a critical level, the role of reserves in maintaining a peg and the inability of monetary authorities to fend off an attack without causing a banking crisis.[117]

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[115] Krugman, "A Model of Balance of Payments Crises."

[116] Barry Eichengreen and Oliver Jeanne, "Currency Crises and Unemployment: Sterling in 1931," in *Currency Crises*, ed. Paul Krugman (Chicago: University of Chicago Press, 2000).

[117] Barry Eichengreen, Andrew Rose, and Charles Wyploz, "Contagious Currency Crises: First Tests," *Scandinavian Journal of Economics* 98, no. 4 (1996): 465-67.

These first generation theories were supplemented by a "second generation" of theories that addressed the role of multiple equilibria in speculative attacks.[118] By assuming multiple equilibria, these theories consider how market actors take into account present as well as future macroeconomic policies and assume that states will choose a new equilibrium should an attack take place. For example, these theories can hypothesize two possible equilibriums in the economy. The first would be currency holding value and no panic occurring. The second would be a currency devaluation. In these models, both equilibria are considered rational outcomes. The strength of these theories is that they can examine the role of government policy in causing a speculative crisis and the role of the government in choosing when to defend or abandon a currency value.

Maurice Obstfeld's work best represents the second-generation model.[119] Krugman's model argued that currency crises would happen in states that had exchange rates that were unsustainable over the long run. This suggests that if a state gets the macroeconomic fundamentals wrong a crisis will emerge. Obstfeld, on the other hand, argued that crises contain a strong element of "self-fulfilling expectations."[120] Exchange

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[118] Krugman makes this distinction between first and second generation crisis theory resting on the consideration of multiple equilibria. See Paul Krugman, "Are Currency Crises Self-Fulfilling?," in *NBER Macroeconomics Annual 1996*, ed. Ben S. Bernanke and Julio J. Rotemberg (Cambridge, MA: MIT Press, 1996).

[119] For another example of second generation currency crisis theories see: Flood and Garber, "Collapsing Exchange Rate Regimes: Some Linear Examples.", Maurice Obstfeld, "Rational and Self Fulfilling Balance of Payments Crises," *American Economic Review* 76 (1986).

[120] Obstfeld, "Rational and Self Fulfilling Balance of Payments Crises."

rate crises are the result not of misguided currency valuations or bad macroeconomic policies, instead they emerge from a random speculative attack that is pursued with the intent of forcing policy changes.[121] Krugman's model suggests currency crises are inevitable if a problematic macroeconomic policy makes states unable to maintain parities over the long term. Obstfeld's model suggests currency crises are unpredictable, can emerge anywhere and may be created by the coordinated movement of speculative market actors anticipating a new equilibrium. Reserves need not be in jeopardy for a self-fulfilling expectations crisis to emerge. For example, Dellas and Stockman use Obstfeld's theory to model government preferences for instituting capital controls as a trigger mechanism for a speculative attack on a currency.[122] They correlated investor expectations about the imposition of controls with the probability of a speculative attack and a currency crisis and found that the probability of a crisis increases with the assumption that capital controls will be employed.

The literature on currency crisis seems to split between Krugman's mechanistic model of declining reserves and the self-fulfilling expectations model. This division represents a split between theories focused on the role of economic fundamentals in causing a crisis and theories concerned with the unpredictable nature of currency crises. This is an extremely important distinction. In essence, the difference between understanding a financial crisis as the result of poor fundamentals, or as a function of

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[121] Ibid.

[122] Harris Dellas and Alan Stockman, "Self-Fulfilling Expectations, Speculative Attack, and Capital Controls," *Journal of Money, Credit and Banking* 25, no. 4 (1993).

market actors and governments pursuing policies that trigger a devaluation or currency defense, is the difference between where to place the blame for the crisis emerging.

First generation and second generation models also have different explanations of government policy responses. Krugman argued that the governments have little choice but to dole out reserves until they are exhausted.[123] Ozkan and Sutherland, writing from the second-generation perspective, argued that governments chose to abandon or maintain a currency value based on the benefits derived from either policy. When the costs of maintaining the value became too high, governments chose to abandon the exchange rate in order to gain other benefits.[124]

Jeffrey Sachs is a central author in understanding financial crises of the 1990s and has furthered second-generation theories. Writing with various co-authors, Sachs has conducted major studies of both the Mexican Peso Crisis and the Asian Financial Crisis. His work can be seen as an extension of the self-fulfilling expectations crisis theories of Obstfeld. In "Financial Crises in Emerging Markets" the authors model the Mexican Peso Crisis and the "Tequila Effect," which is the name given the spreading panic that ensued from the Mexican devaluation. The authors looked at 28 countries and determined that while fundamentals were problematic in several of the them, the crises were more often caused by self-fulfilling expectations resulting from credit and debt structures than by real problems, though states with problematic fundamentals

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[123] Krugman, "Introduction."

[124] F. Gulcin Ozkan and Alan Sutherland, "Policy Measures to Avoid a Currency Crisis," *The Economic Journal* 105 (1995). See also Eichengreen and Jeanne, "Currency Crises and Unemployment: Sterling in 1931."

experienced more problems than those without.[125] They further concluded that private bank lending and an expansion in available credit, without sufficient domestic regulation, was a significant reason that countries experienced crisis. Therefore, they argued for greater domestic regulation of bank lending and credit.[126]

Radlet and Sachs furthered this argument by examining the Asian Financial Crisis.[127] They argued that currency crises were indicative of intrinsically unstable financial markets. They found that liberal reforms in East Asian economies had led to fragility in these financial systems and caused them to be particularly vulnerable to sudden reversals in capital flows.[128] When market actors observed others withdrawing capital, they followed suit, creating a self-fulfilling panic and ultimately the currency crisis. This was a rational action for individual investors, but a financial disaster for the East Asian states. Radlet and Sachs reported statistically significant relationship between a state's propensity for crisis and both the ratio of short-term debt and the rapid build up of poorly regulated bank credit.[129] They added to the literature by building on second-generation crisis models and further contributing to the explanation of self-fulfilling

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[125] Jeffrey D. Sachs, Aaron Tornell, and Andres Velasco, "Financial Crises in Emerging Markets: The Lessons from 1995," *Brookings Papers on Economic Activity* 1996, no. 1 (1996).

[126] Ibid.: 193-4.

[127] Radlet and Sachs, "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects," 3.

[128] Ibid.: 43-9.

[129] Ibid.

crisis. They also returned to some themes that were established in earlier crisis literature; particularly the instability of capital markets and the role of credit in causing a crisis. Moreover, several of their articles are critical of responses headed by the IMF because of their inability to restore market confidence and because IMF policies seemed to be addressing the wrong set of issues.[130]

Although first and second generation models represent the bulk of the writing on currency crises, a third line of theorizing has emerged as a result of the Asian Crisis. These nascent third generation theories identify a new contributing factor in the emergence of a crisis: crony capitalism. Crony capitalism is best defined as a form of market economy that is built on nepotism, personal networks and rife with corruption. Though appearing capitalist and market based, especially to foreign capital, personal connections and corruption alter market relationships. Dooley's work is an example of this scholarship. He argued that a problematic relationship arose between the banking community and the government in Asian states. Banks and governments in Asia developed a mutual dependence where governments guaranteed the banks against failure. This relationship had the effect of attracting foreign capital assets but also allowed banks to escape governmental supervision.[131] Borrowing soared in East Asia as a result of these guarantees but as investors began withdrawing the governments lost the ability to cover

[130] Ibid.: 62, Steven Radlet and Jeffrey D. Sachs, "The Onset of the East Asian Financial Crisis," in *Currency Crises*, ed. Paul Krugman (Chicago: University of Chicago Press, 2000), 140-50.

[131] Michael Dooley, "A Model of Crises in Emerging Markets," *Economic Journal* 110, no. 256-72 (2000).

the banks' foreign assets. With no governmental guarantees capital fled from the Asian market and this broke the exchange rates. In essence, a banking crisis turned into a currency crisis because of the incestuous and corrupt relationship between banks and the government.[132]

Eichengreen continues to be a one of the main theorists in the crisis literature and his scholarship needs to be considered separately. He has contributed to the latest round of theorizing in three ways. First, his work with Rose and Wyploz is one of the main theoretical endeavors in the area of contagion effects. Eichengreen, Rose and Wyploz test whether currency crises in one country are correlated to the incidence of crisis in another over a given time period. They conclude that a speculative attack in one part of the world is significantly linked to the chance of an attack in another. However, they are unable to definitively argue that there is spillover because they are unable to distinguish the contagion spillover effect from a general shock to the economy reverberating to other locations.[133] Rose continued to examine the incidence of contagion and concluded in an article with Glick that currency crises were spread as a result of trade linkages.[134]

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[132] Graciela Kaminsky, Saul Lizondo, and Carmen M. Reinhart, "Leading Indicators of Currency Crises," *Working Paper of the International Monetary Fund* WP/97/99 (1997).

[133] Eichengreen, Rose, and Wyploz, "Contagious Currency Crises: First Tests."

[134] Reuven Glick and Andrew Rose, "Contagion and Trade: Why Are Currency Crises Regional," *Journal of International Money and Finance* 18, no. 4 (1999). This hypothesis has been refuted by Van Rijckeghem and Weder who argue bank lending and financial connections are the reasons for contagion. See Caroline Van Rijckeghem and Beatrice Weder, "Sources of Contagion: Is It Finance or Trade," *Journal of International Economics* 54, no. 2 (2001).

The second theme Eichengreen has pursued is the role of historical analysis. Historical analysis is a consistent methodological approach for Eichengreen, but recently his work has extended his analysis to new crises and he has added depth to the understanding of currency crises by applying this form of analysis. Eichengreen and Jeanne examine the 1931 Sterling crisis to understand the role of government policy choices between stabilizing a currency or negatively affecting employment. They conclude second-generation models that explain government policies to defend a currency value, as determined by competing internal and external goals, provides insight into whether a state will experience a currency crisis.[135]

The emphasis on policy is the third theme that Eichengreen addresses. Eichengreen has written considerably on policies and institutional responses to the Asian crisis in the form of the creation of the new international financial architecture (NIFA).[136] This is his most significant recent contribution to crisis literature and the area in which he most bridges the economics and political economy literatures. In his 1999 book, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*, he presents a comprehensive view, his recommended policies, and one of the most significant articulations of the policy agenda for addressing financial crises. Briefly, Eichengreen suggests that a successful financial architecture that can respond to financial crises is one

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[135] Eichengreen and Jeanne, "Currency Crises and Unemployment: Sterling in 1931."

[136] For example see Barry Eichengreen, "Strengthening the International Financial Architecture: Where Do We Stand?," *ASEAN Economic Bulletin* 17 (2000), Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*.

where risks are spread to many financial actors. He endorses four basic policy measures. First, better financial regulation through international standards. This recommendation advocates placing some of the burden for preventing and responding to crises on private market actors such as the International Accounting Standards Committee (IASC) and the like.[137] Second, he argues for domestic action that would regulate the flow of international capital and better regulate bank practices. He believes states should require better domestic banking regulations for things such as capital adequacy. In addition, he endorses Chilean-style inflow taxes which give governments more ability to avoid speculative crises and control destabilizing credit and capital.[138] Third, Eichengreen sees a role for international financial institutions, which can supply information and assistance to assure crises are prevented.[139] He argues the IMF should provide a "financial safety net" and act as an international lender of last resort to the level that it is able to perform that function.[140] But Eichengreen sees the bulk of real changes for addressing financial crises in the hands of private market actors and the state, not international financial institutions.[141]

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[137] Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*, 22-24.

[138] Ibid., chapter 4.

[139] Ibid., 74-7 and 97-121.

[140] Ibid., 120. Eichengreen also argues that the IMF does not have real lender of last resort powers but has an ability to infuse a crisis state with liquidity when it is needed.

[141] Ibid., 121.

Eichengreen's policy recommendations and his focus on the actors necessary for establishing a more stable international financial system are significant contributions that are echoed by other authors. There is a heavy emphasis on the institutions that are necessary to address crises, and this is the basis for the creation of the NIFA. Three policy paths have been articulated in the wider literature: domestic regulation, the role of the private sector and the role of international financial institutions, particularly the role of an international lender of last resort. A literature has emerged around each of these policy options.

Those who favor states imposing policies that control the inflow or outflow of capital best represent the theme of domestic regulation. While liberal economists are skeptical of measures that seek to control the flow of international capital, and argue that capital flows have more benefits than costs,[142] a literature has emerged examining the use of Chilean-style import taxes[143] or Tobin taxes[144] to control the flow of short-term capital. As suggested, Eichengreen has made a strong case for the use of capital inflow taxes.[145]

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[142] For example see Wendy Dobson and Clyde Hufbauer, *World Capital Markets: Challenge to the G-10* (Washington, D.C.: Institute for International Economics, 2001).

[143] Chilean-style import taxes tax short-term capital inflows by requiring a non-interest bearing account be established along with the incoming capital. This account is heavily taxed if the investment leaves the Chilean market before one year is up. The longer the invested money remains in Chile, the lower the tax. These instruments have the effect of securing short-term capital from being withdrawn suddenly and revenue from the tax can compensate for a quick withdrawal

[144] Tobin taxes tax is a tax on all foreign exchange transactions. It discourages the movement of capital by making it more costly move money internationally.

[145] Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*, 49-58.

Robert Rubin and a task force assembled by the Council on Foreign Relations have echoed Eichengreen's thinking in the policy community.[146] In the scholarly community, noted economists Dani Rodrik and Jagdish Bhagwati have argued in support these kinds of measures to regulate capital flows and temper globalization.[147] The benefits of taxes like these have been further examined by DeGregorio, Edwards and Valdes, who concluded that Chilean import taxes had the effect of changing the composition of investments from short to long term, but not the volume of capital flows.[148] This change from short-term to long-term is significant since the withdrawal of short-term investments has been cited as a reason for the genesis of both the Mexican crisis of 1994 and the Asian crisis in 1997.

A focus on the role of private actors and their possible responsibilities for burden sharing in crisis response is another theme that has emerged in the literature. In both the Mexican and Asian crises international assistance was given to investors and private firms who stood to lose enormous amounts of capital.[149] This practice raised the question of whether private investors or private institutions (i.e. banks) could play a role in

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[146] Robert E Rubin, "Reform of the International Financial Architecture," *Vital Speeches* 65, no. 11 (1999). Rubin did suggest these taxes as temporary measures.

[147] Jagdish Bhagwati, "Yes to Free Trade, Maybe to Capital Controls," *Wall Street Journal*, 16 November 1998, Dani Rodrik, *Who Needs Capital Account Convertibility?*, *Essays in International Finance* (Princeton, NJ: International Finance Section, Department of Economics, Princeton University, 1998).

[148] Jose De Gregorio, Sebastian Edwards, and Rodrigo Valdes, "Controls on Capital Inflows: Do They Work?," *The Journal of Development Economics* 63, no. 1 (2000).

[149] This was done to prevent banking the emergence of banking crises, but had the effect of making private investment risk free.

remedying a crisis. The idea of "bailing in the private sector" suggests that private investors and firms should be required to suffer losses for bad investments instead of relying on public actors to bail them out.

Several scholars have furthered this theme. Eichengreen has argued that getting market actors to participate in resolving a crisis, particularly providing liquidity, is a difficult matter. He has suggested that states could create more demanding relationships with private actors that would contribute to stability and ultimately create burden sharing. States could cut their reliance on short term loans, negotiate standby lines of credit with market actors, and redesign loan contracts to better allow prepare for the incidence of crisis.[150] The Meltzer Report[151] supported a more extreme position that suggested letting private actors take losses in a crisis.[152] The Commission argued that the removal of guarantees for a bailout would reduce moral hazard and create lending restraint in private markets. Kenan has argued the importance of the private sector being involved in the resolution of crisis but notes that since private sector participation has been voluntary it is problematic for its success.[153]

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[150] Eichengreen, "Strengthening the International Financial Architecture: Where Do We Stand?," Chapter 5.

[151] The Meltzer Report grew out of a United States appointed commission to study the causes and responses to the Asian Crisis. Its official name was the International Financial Institution Advisory Commission (IFIAC).

[152] International Financial Institutions Advisory Commission (IFIAC), *Report*, (Washington, DC: United States Congress, 2000).

[153] Peter Kenen, *The International Financial Architecture: What's New? What's Missing?* (Washington, DC: Institute for International Economics, 2001), 138-40.

Authors have considered the consequences of several actions that would increase private actor participation in providing liquidity when a crisis emerges. For example, Dooley and Eichengreen separately consider the consequences to a country's reputation and future chances for borrowing should it pressure private actor bail outs and both conclude there are problems with states forcing private actor involvement.[154] The use of standstills[155] has become central to this debate, but the implementation problems they present and the role they would play in causing a crisis has also been examined.[156] The question of what the role of the private sector should be in crisis response should be the focus of a growing literature as economists theorize about how to get private actors involved either coercively or voluntarily.[157]

Last, the resolution of both the Asian and Mexican crises suggested a place for an international safety net to address financial crises. This safety net harkens back to the idea of an international lender of last resort (ILOLR). The main questions of concern

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[154] Dooley, "A Model of Crises in Emerging Markets.", Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda.*

[155] Standstills are a brief suspension of debt payments. They can be used to halt a country's obligations to pay bonds or investments coming due for a short time. The goal in using them is to keep investors from leaving a specific investment, to slow down capital flight or to prevent herd behavior in investment markets.

[156] Kenen, *The International Financial Architecture: What's New? What's Missing?*, 143-50.

[157] The role of making the private sector more accountable has also been discussed in terms of debt and lending arrangements. See International Monetary Fund: Policy Development and Review and Legal Departments, "Involving the Private Sector in the Resolution of Financial Crises: Restructuring International Sovereign Bonds," (Washington, DC: International Monetary Fund, 2001).

have been whether an actor exists or can be created to provide the magnitude of lending that may be required in a contagious crisis, and what role would moral hazard[158] play if such a lender exists? Many authors have suggested the need for some kind of ILOLR. The Meltzer Report came close to suggesting this role for the IMF of the future.[159] Curzio Giannini presented a wonderful analysis of the topic in light of recent crises. He examined the history of domestic last resort lending and the problems and benefits of creating a stronger ILOLR regime.[160] Jeanne and Wyploz examined whether an ILOLR could prevent self-fulfilling financial crises and consider the possibility of creating a global central bank and/or an international banking fund to perform last resort lending functions.[161] They conclude that an able ILOLR could effectively alleviate crises by providing liquidity or by securing domestic banks from failure, and favor that it plays the role of securing banks not providing liquidity.[162] While the ILOLR concept holds

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[158] Moral hazard is the condition that exists when investors are encouraged to make risky investments because they believe the state will cover any losses they might experience. The concern is if private actors are bailed out by a lender of last resort then they will not be discouraged from risky investment because they know they cannot lose their money.

[159] International Financial Institution Advisory Commission, "Report," (Washington, DC: United States Congress, 2000).

[160] Curzio Giannini, *Enemy of None but a Common Friend of All? An International Perspective on the Lender of Last Resort Function, Essays in International Finance, No. 214* (Princeton: International Finance Section, Department of Economics, Princeton University, 1999).

[161] For a discussion of a global central bank see also Jeffrey E. Garten, "In This Economic Chaos, a Global Bank Can Help," *International Herald Tribune*, 25 September 1998.

[162] Oliver Jeanne and Charles Wyploz, "The International Lender of Last Resort: How Large Is Large Enough?," *Working Paper of the International Monetary Fund* WP/01/76 (2001): 27.

promise, they argue that it could only be created through exceptionally large reforms to the international financial system that they see as unlikely. Though the potential is there, they are skeptical of the existence of the political will to create such an institution.[163]

Another line of inquiry into the ILOLR function has considered whether the IMF has the ability to act in this capacity. Fischer argued that the Fund is beginning to look more like a *de facto* international lender of last resort and that the functions of the Fund should be further institutionalized to give it more capacity to act in this way. He cited several facilities created by the fund that helped it function as an ILOLR such as the Supplemental Reserve Facility and Contingent Credit Line.[164] Kenen concluded that the Fund shared the functional role of an ILOLR even in the absence of being able to create currency.[165] Overall, the literature suggests the Fund performs some functions of an ILOLR but is ultimately a poor substitute.

The moral hazard issue in last resort lending is perhaps the most significant debate on the issue. The question is: Does the guaranteed provision of liquidity cause more risky investments by banks and private investors? This issue has been debated since Bagehot began discussion of the topic in the late nineteenth century, but in light of growing IMF bailouts and discussions about the IMF as an ILOLR, the debate has been revisited. The remedy for the Mexican Peso Crisis ultimately bailed out investors who

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[163] Ibid.: 28-30.

[164] Stanley Fischer, "On the Need for an International Lender of Last Resort," *Journal of Economic Perspectives* 13, no. 4 (1999).

[165] Kenen, *The International Financial Architecture: What's New? What's Missing?*

had bought *tesobonos*,[166] and this response has been identified by scholars as having created a moral hazard.[167] Calomiris, one of the more vocal scholars on the subject, has argued that the moral hazard problem has caused the fragility of the international financial system.[168] He has strongly suggested that the IMF adopt rules, restrictions and requirements that would reduce the risk of moral hazard.[169] Giannini argued to the contrary that the transformation of the IMF into a true lender of last resort would create moral hazard "beyond acceptable limits," regardless of the safeguards that might be employed.[170] The question of how to cope with moral hazard is still being debated and no consensus has yet emerged as to what the proper balance is between providing stability or creating moral hazard.

While the above overview is sufficient for understanding current trends in financial crisis theory there is an enormous and quite disparate economic literature that

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[166] Tesobonos were dollar indexed short-term Mexican government bonds

[167] See Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*

[168] Charles Calomiris, "The IMF's Imprudent Role as Lender of Last Resort," *Cato Journal* 17 (1998).

[169] Calomiris, a primary author on the Meltzer Report suggested the use of pre-qualification for IMF lending to reduce moral hazard problems yet still allow the IMF to act as a safety net. In contrast, Kumar, Masson and Miller found the use of pre-qualification to be highly destabilizing. See Manmohan S. Kumar, Paul Masson, and Marcus Miller, "Global Financial Crises: Institutions and Incentives," *Working Paper of the International Monetary Fund* WP/00/105 (2000).

[170] Giannini, *Enemy of None but a Common Friend of All? An International Perspective on the Lender of Last Resort Function*. He further suggested a greater role for the private sector in bailing out and restructuring loans when a crisis emerged. See pages 58-60.

models many specific aspects of crises.[171] As discussed earlier, the crisis to gain the most attention in the recent literature is the currency crisis since it seems to be the most relevant contemporary crisis. The literature has identified the economic conditions under which these crises emerge, it has examined policy and institutional options for addressing them, it has considered the role that credit plays in causing them and finally, it has considered the role of the lender of last resort in responding to them.

The Contributions of International Political Economy

Most of the literature on financial crisis come from the perspective of economics. Those in other disciplines, as noted, have followed up on a few of their major points. Since the 1970s, international political economy has become an important part of the study of international relations and lately the topic of international finance has piqued the interest of IR scholars.[172] The increasing evidence of growing financial interactions and the scholarly preoccupation with the general concept of globalization have inspired the renewal of interest in global finance that has not been rivaled since the interwar period. Moreover, the globalization of finance has been one of the most dramatic developments in international relations in the post-World War II period. Capital flows are largely unregulated, markets have gained power and states have lost policy autonomy. In this

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[171] For a very thorough review of the economic literature on currency crises see Kaminsky, Lizondo, and Reinhart, "Leading Indicators of Currency Crises."

[172] Cohen, "Phoenix Risen: The Resurrection of Global Finance.", Peter Dombrowski, "Haute Finance and High Theory: Recent Scholarship on Global Financial Relations," *Mershon International Studies Review* 41, no. 1 (1996).

environment, international political economy scholars and have raised many questions about the impact of financial globalization on states and are beginning to consider the phenomenon of financial crisis.

Since the 1990s the literature on global finance has grown by leaps and bounds. While to date there has been no significant attempt to provide a comprehensive theory of financial crisis from a political economy perspective, embedded in the international finance literature are discussions of the phenomena. Four important themes have emerged in the finance literature that contribute to the understanding of crisis. They are: 1) the politically and economically destabilizing role of global capital, 2) the role of international financial institutions (IFIs) in the global economic system, 3) specific case studies of states in the global financial system, and 4) the construction of the new international financial architecture (NIFA). For many authors these themes are intertwined, but for the purpose of this review I will examine these categories as analytically separate and look at the literatures that have the most relevance for theorizing about financial crisis.

A significant portion of the finance literature addresses the role of global capital in the international system.[173] This is not a new theme, but one that became relevant after the emergence of the Eurocurrency markets in the 1960s. The earliest themes in this literature considered the role that unregulated offshore capital markets could have on the

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[173] For a more economics discussion of global capital flows see Martin Feldstein, ed., *International Capital Flows, National Bureau of Economic Research Conference Report* (Chicago: University of Chicago Press, 1999).

global economic system and particularly whether the Euromarket was destabilizing.[174] Starting in the 1970s, after the collapse of the Bretton Woods exchange system and the dollar peg, scholars began to consider the growing importance of capital movements. Analyses examined the role of both foreign direct and portfolio investment. Of particular concern was the political role of multinational corporations (MNCs)[175] in assisting or hindering development and as major recipients of foreign capital.

In 1975 Robert Gilpin wrote one of the earliest studies about the global role of MNCs and how these corporations were increasingly attracting capital from the United States. He considered the dangers to American industrial competitiveness caused by the unfettered flow of capital to foreign endeavors, and painted a picture of U.S decline and impending crises as a result of the expansion of global economic interdependence and the

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[174] For a discussion of the Eurocurrency market see G. Bell, *The Eurodollar Market and the International Financial System* (London: Macmillan, 1973), Paul Einzig, "Some Recent Changes in the Euro-Dollar System," *Journal of Finance* 19, no. 3 (1964), M.S. Mendelsohn, *Money on the Move* (New York: McGraw-Hill, 1980), Robert Triffin, *Gold and the Dollar Crisis: The Future of Convertibility* (New Haven, CT: Yale University Press, 1960), Robert Triffin, *Our International Monetary System* (New York: Random House, 1968). and Susan Strange, *International Monetary Relations*, ed. Andrew Shonfield, 2 vols., vol. 2, *International Economic Relations of the Western World 1959-1971* (London: Oxford University Press, 1976).

[175] In the current environment a change in usage of the term multinational corporation is becoming noticeable. For the last few decades, the preferred term for a corporation operating branches across state borders has been multinational corporation. However, the term transnational corporation is gaining acceptance as being more precise in describing the actual workings of corporations which operate across national boundaries (trans) instead of being inclusive of several states (multi). For the purpose of this project, I will use the terms interchangeably, preferring the more commonly used term multinational corporation (MNC).

increase in cross-border capital flows.[176] While he explained the problematic nature of the expansion of foreign direct investment capital and forecast a crisis in American hegemony as a result, he offered few solutions to staving off the problem save the advice that American firms should invest more domestically.[177] Gilpin was one of the early voices in IPE examining the role of cross border investment and its potential dangers, although many of his early predictions have not been realized and the "America in Decline" theme has largely disappeared from the IPE literature. But Gilpin identified the role of increases in both portfolio capital and foreign direct capital as central in understanding global finance and that these capital movements have great potential to generate political problems.

Susan Strange made significant contributions to understanding the destabilizing role of global portfolio capital. Strange took up the issue of capital movements in some of her earlier scholarship,[178] but in her influential work *Casino Capitalism*, she focused directly on the dangerous and gambling-like nature of global capital movements. In contrast to the stability of the sixties, the seventies and early eighties represented a time of far greater instability that was a direct result of decisions and non-decision of states in the international system, which allowed markets to move beyond the control of most state

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[176] For example see Robert Gilpin, *U.S. Power and the Multinational Corporation: The Political Economy of Foreign Direct Investment* (New York: Basic Books, 1975).

[177] Ibid., 198-200 and chapter 8.

[178] For example see Strange, *International Monetary Relations*, Susan Strange, *Sterling and British Policy* (London: Oxford University Press, 1971).

institutions.[179] In her analysis, the high level of uncertainty and risk in global financial markets was a result of capital movements. She further argued that risk and uncertainty in the financial sector had historically been responsible for economic crises. To control this problem, she believed the United States should exert its structural power over the system and better manage global finance and credit creation.[180] Her description of the casino-like nature of global capital markets would become one of the earlier expressions of the dangers of unregulated capital movements, and her suggestion for management would influence the financial architecture debates that followed over a decade later.

Jeffry Frieden considered how capital markets had become potentially unstable by considering the role of banks in creating the markets. By the 1980s, Frieden argued that global capital was growing beyond the reach of national governments.[181] The international banking system contributed to this because it was beneficial to their business success to lead the charge toward global economic interdependence and the abolition of capital controls.[182] Frieden was primarily concerned with the interactions

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[179] Susan Strange, *Casino Capitalism* (Oxford: Basil Blackwell Publishers, 1986). This is also a theme that Strange elaborates on in Susan Strange, *The Retreat of the State: The Diffusion of Power in the World Economy* (Cambridge: Cambridge University Press, 1996).

[180] Strange, *Casino Capitalism*.

[181] Though many authors argued that this had happened with the creation of the Eurodollar market twenty years earlier. See Bell, *The Eurodollar Market and the International Financial System*, Einzig, "Some Recent Changes in the Euro-Dollar System.", Mendelsohn, *Money on the Move*, Triffin, *Gold and the Dollar Crisis: The Future of Convertibility*, Triffin, *Our International Monetary System*.

[182] Jeffry Frieden, *Banking on the World: The Politics of American International Finance* (New York: Harper and Row, 1987), 2.

between political and economic actors. Specifically, he studied how financial actors worked to influence political decisions and strengthen their economic position by lobbying for specific policy choices. Banks used their political power and influence to achieve policies that helped foster an interdependent global financial system that increased their bottom line.[183] While his main focus was on these political economic dynamics, his work identified both the significant expansion of international capital and the potential for crisis in the system as a result.[184] He suggested the imperatives of financial integration created a complex set of political and economic relationships that had privileged bankers' creation of interdependent global capital markets. Unfortunately, Frieden stopped short of recommending ways to manage the political economic relationships to avoid crisis, instead he argued that political and financial actors had to rely on each other; especially in times of crisis when financial markets and actors would have no choice but to depend on governmental actors to address and ameliorate problems.[185]

These authors represent some of the earlier voices that identified the increasing transnationalization of capital markets and wrestled with the problems, and potential

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[183] Ibid., 120-21.

[184] Ibid., 116-20.

[185] Ibid. Frieden has also spent time considering the role that international capital mobility has had on lobbying and the distributional implications of international capital mobility. To understand the latter he applied a Hekscher-Ohlin model to explain where capital tends to go. See Jeffry Frieden, "Invested Interests: The Politics of National Economic Policies in a World of Global Finance," *International Organization* 45, no. 4 (1991).

problems, that this caused. While none of this early scholarship dealt with financial crises *per se*, each author identified the potentially destabilizing role that changes in global capital movements caused. These writings set the stage for the scholarship that would follow. By the 1990s the transnationalization of capital markets and their effects on global economic and political stability and was a central theme in IPE.

One of the first books of the 1990s to consider the role of capital markets was Philip Cerny's edited volume, *Finance and World Politics*. This book presented a compilation of articles that taken together sought to explain the nature of and problems regarding the changing role of money and international finance in the global system.[186] Central to this endeavor was developing an understanding of the role of global capital, the transnationalization of finance and its relationship to the state. Many of the authors argued the transnationalization of capital was significant for understanding change in the international system as market autonomy supplanted state control in finance. Financial crises were not addressed directly by these authors. But indirectly the issue of stability in global finance and financial markets was considered and the identification of the relative power relationship between states and market actors contributed to the understanding of crises as events that had possibly grown beyond the state's capacity to manage.

Cerny took on both of these themes. He examined the transnationalization of capital markets by arguing that state deregulation was actually placing power in the hands of transnational networks, which were essentially creating a financial system re-regulated

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[186] Philip G. Cerny, "The Political Economy of International Finance," in *Finance and World Politics: Markets, Regimes and States in the Post-Hegemonic Era*, ed. Philip G. Cerny (Cambridge: Edward Elgar, 1993), 5.

by market actors.[187] This changed the role and responsibilities of the state by forcing states to respond to the needs of transnational capital and the networks created by financial relationships. States that refused to alter their policies in favor of market imperatives would risk losing investment, so there was little choice but to re-regulate as a way of attracting investment.[188] Cerny coined the term "competition state" as a way of describing the importance of considering international markets in forming state policy and altering the ability of states to manage their domestic economies. Cerny briefly suggested that these new relationships acted to form a financial system and that system was potentially unstable and crisis prone, but he did not go far beyond raising the issue.[189]

A desire to understand globalized and liberal capital markets underlies Eric Helleiner's scholarship. Helleiner explains the transition from a system where "finance was the servant" and controlled by the state to a system where it was the "master" and could exercise pressures on the state and state policies.[190] He asked what caused capital to become more liberalized and detached from the regulation of the state? Arguing like

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[187] Philip G. Cerny, "The Deregulation and Re-Regulation of Financial Markets in a More Open World," in *Finance and World Politics: Markets, Regimes and States in the Post-Hegemonic Era*, ed. Philip G. Cerny (Cambridge: Edward Elgar, 1993).

[188] Philip G. Cerny, ed., *Finance and World Politics: Markets, Regimes and States in the Post-Hegemonic Era* (Cambridge: Edward Elgar, 1993), 56-69.

[189] Ibid., 55.

[190] Eric Helleiner, "When Finance Was the Servant: International Capital Movements in the Bretton Woods Order," in *Finance and World Politics: Markets, Regimes and States in the Post-Hegemonic Era*, ed. Philip G. Cerny (Cambridge: Edward Elgar, 1993).

Frieden, but considering a much longer time frame, Helleiner concluded that the creation of a liberal economic order was the result of specific choices by governments that were influenced by domestic financial actors.[191] Essentially, governments made choices that gave power to capital markets and other market actors with the goal of making their states more attractive to investment.[192] Thus, states have been central to the creation of globalized finance and unregulated capital flows. An ideational change within the state from Keynesianism to neo-liberalism in finance motivated the change in state policies, and states created the framework that made finance their "master."[193]

Helleiner considered financial crisis within this context. At the behest of states, markets gained power but the threat of financial crisis was a significant drawback to this power since crisis held the potential to destroy the liberal order. Historically, Helleiner

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[191] Eric Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s* (Ithaca, NY: Cornell University Press, 1994), Helleiner, "When Finance Was the Servant: International Capital Movements in the Bretton Woods Order."

[192] Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*. This theme is supported by Philip Cerny's definition of a "competition state." Philip G. Cerny, *The Changing Architecture of Politics: Structure, Agency and the Future of the State* (London: Sage, 1990), chapter 8. Andrew Sobel argues an opposite point, that financial globalization was not a result of global competition or integration, but that it came about because of the power of domestic pressure and interest groups. See Andrew C. Sobel, *Domestic Choices, International Markets: Dismantling National Barriers and Liberalizing Securities Markets* (Ann Arbor, MI: University of Michigan Press, 1994).

[193] Another line of inquiry regarding capital mobility has examined the role of domestic governmental policy constraints generated by the increase in global capital movements. For example see Benjamin J. Cohen, "The Triad and the Unholy Trinity: Lessons for the Pacific Region," in *Pacific Economic Relations in the 1990s: Cooperation or Conflict?*, ed. Richard Leaver Higgott and John Ravenhill (Boulder, CO: Lynne Rienner, 1993), John B. Goodman, *Monetary Sovereignty: The Politics of Central Banking in Western Europe* (Ithaca, NY: Cornell University Press, 1992).

attributed the creation of a managed capital policy under the Bretton Woods system to the desire of the Bretton Woods architects to avoid or prevent financial crisis.[194] When the Bretton Woods financial system began to break down after the creation of the Eurocurrency market, Helleiner argued that states continued to have a central role in managing and preventing crisis.[195] Capital movements make financial markets vulnerable. This entrenches a role for states and international institutions, regardless of how globalized the financial system becomes.[196]

In more recent work, Helleiner continues to examine the role of capital mobility in making the financial system vulnerable to crisis. Specifically, he has been interested in how the system can better regulate destabilizing capital flight from developing countries to developed countries.[197] Often flight is caused by problems in the underdeveloped economies, and this exacerbates crisis conditions. His argument again draws on the historical example of the Bretton Woods architects who controlled capital in order to prevent crisis and allow the global economy to recover from World War II. Helleiner argues that crises in the current liberal period of capital movement could be better

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[194] Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*, 170.

[195] Ibid.

[196] Ibid.

[197] Eric Helleiner, "Regulating Capital Flows," *Challenge* 44, no. 1 (2001).

managed by international cooperation[198] a theme to which we will return in the next two sections.

Louis Pauly has also contributed to the literature on the crisis causing nature of global capital flows. In an article with John Goodman, the authors consider the policy convergence toward the removal of capital controls.[199] They attribute the removal of controls to the "growth of liquid international funds and the globalization of production."[200] These conditions allowed global market actors to avoid controls, which spurred the growth of capital markets. States were forced to respond to market pressures with their policy choices. Market actors prompted states to deregulate but these policies quickly became embedded in the global system as a result of the continuing frown of capital markets.[201] Pauly's subsequent work discusses the dangers that a system of increased capital mobility caused for states and how the embedded liberalization of capital markets could be quickly reversed should a serious crisis appear.[202] While not directly attacking the issue of financial crisis, Pauly has suggested that the threat of crisis is increased by capital mobility. Capital mobility altered state policies globally, making

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198 Ibid.: 26-33.

199 Louis Pauly and John B. Goodman, "The Obsolescence of Capital Controls? Economic Management in an Age of Global Markets," *World Politics* 46, no. 1 (1993).

200 Ibid.: 75.

201 Ibid.

202 Louis Pauly, "Capital Mobility, State Autonomy and Political Legitimacy," *Journal of International Affairs* 48, no. 2 (1995).

them friendlier to open capital markets, but leaving them more vulnerable in the event of a crisis.

Miles Kahler edited a volume that directly addressed the role of capital flows in causing crisis. Most of the articles were by economists, but several political scientists contributed as well. Kahler argued that the crises that emerged in 1997 signaled an abrupt ending to the "capital feast" of the 1990s where less developed countries gorged themselves on private capital.[203] Kahler suggests that the capital flows in the 1990s were different from earlier flows to the developing world in two respects. First, there was a dramatic decline in the amount of foreign aid and private investment was far higher percentage of international capital. Second, while capital flows throughout the 1970s came through the intermediaries of commercial banks, capital flows in the 1990s often came from foreign direct investment or individual portfolio investment. The growth of portfolio investment means that more foreign capital is securitized than ever before. Kahler suggested that the volume and composition of capital to developing countries in the 1990s is far different from previous periods, and that this contributes to the risk of crisis.

Sylvia Maxfield, who argued that capital flows and greater capital mobility placed some constraints on state policies, examined these points more closely.[204] She concluded that monetary policies were more constrained than fiscal polices due to the nature of the

[203] Kahler, "Introduction: Capital Flows and Financial Crises in the 1990s."

[204] Sylvia Maxfield, "Effects of International Portfolio Flows on Government Policy Choice," in *Capital Flows and Financial Crises*, ed. Miles Kahler (Ithaca, NY: Cornell University Press, 1998).

investor. More securitized capital, and investors searching for short-term yields, affected state policies more than investors seeking value.[205] This is an important conclusion because value oriented investors seek long-term growth and stability while short-term yield investors seek a quick profit. Therefore, yield investors are more interested in state policies that have fast-acting consequences. Since yield investors make up a large percentage of the market, states are constrained in their monetary policies, which tend to have quick results, but less constrained in their fiscal policies which take a longer time to be felt and only affect value investors.

Eichengreen and Fishlow examined the composition of capital from an historical perspective. They concluded that in the 1990s capital mobility was a more significant risk because capital was more likely to be invested in equities. This created more volatile capital movements, and a new environment for crisis and challenges for policy responses.[206]

Two scholars who were the earliest voices in IPE to discuss global finance and capital markets have continued to be influential in the recent discussions of capital mobility and financial crisis. Robert Gilpin's concern for global economic interdependence continues in his most recent work. He now considers the role of expanded global capital flows (both portfolio and foreign direct) in contributing to

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[205] Ibid., 89-90.

[206] Barry Eichengreen and Albert Fishlow, "Contending with Capital Flows: What Is Different About the 1990s," in *Capital Flows and Financial Crises*, ed. Miles Kahler (Ithaca, NY: Cornell University Press, 1998).

financial vulnerability.[207] The expansion of global capital along with the speed that capital can move has created, "a major threat" to the global economy.[208] But Gilpin's writing on financial crisis is tentative. While he sees crises as a major global threat, he also seems unconvinced that crises are caused by capital flows and suggests that domestic macroeconomic reasons for crises are also important to understand.[209] To add greater confusion, while not convinced that there are international causes of crisis, he is convinced that the solutions are international and that better regulation of the global financial system is important. His preferred solution to addressing financial crises and the problems that result from them is centered on international cooperation and reestablishing American leadership in the global economy.[210]

Susan Strange contributed to the more recent finance scholarship in her final book *Mad Money*. This work brings together many of the themes she identified throughout her career. Unlike Gilpin, Strange is not tentative in her discussions of crisis; she argues that largely as a result of unfettered and expanding capital movements, facilitated by financial

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[207] Robert Gilpin, *The Challenge of Global Capitalism: The World Economy in the 21st Century* (Princeton, NJ: Princeton University Press, 2000), chapter 5, Robert Gilpin, *Global Political Economy: Understanding the International Economic Order* (Princeton, NJ: Princeton University Press, 2001), chapter 10.

[208] Gilpin, *The Challenge of Global Capitalism: The World Economy in the 21st Century*, 324.

[209] Ibid., 136-9, Gilpin, *Global Political Economy: Understanding the International Economic Order*, 264-7.

[210] Gilpin, *The Challenge of Global Capitalism: The World Economy in the 21st Century*, chapter 11, Gilpin, *Global Political Economy: Understanding the International Economic Order*, chapter 15 and 271-77.

and technological innovation, the financial system has gone "mad."[211] This madness has caused instability and is a key component in crises affecting the global economy. Her simple thesis is that capital movements and the global financial system have expanded beyond the control of any government or governing body. This has created an environment where greed and profit seeking perpetuates instability. Greed, of course, cannot be eliminated, but according to Strange, the global financial system must be better regulated. Regulation presents its own problems since market, international and state based regulating bodies all face considerable challenges to being effective, but greater regulation seems to be central for creating a less mad financial system.[212]

Overall, the growth of global capital markets and their effect on states and state policies have provided global finance scholars with fertile ground for considering many questions. Though often not directly discussed, crisis is an underlying theme in much of this work. Instead, the recognition of financial vulnerability stemming from capital movements and the growth of capital markets combined with state policies that have liberalized capital flows and connect more states to the global financial system is a common thread that links this literature to financial crisis.

Many of the same authors who discussed the role of capital in the global financial system also addressed the second theme: the role of international financial institutions (IFIs) in global finance. Broadly defined, this theme has examined the organization of the financial system in terms of groups of actors. Some scholarship has considered

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[211] Susan Strange, *Mad Money* (Ann Arbor, MI: University of Michigan Press, 1998).

[212] Ibid.

official international organizations such as the International Monetary Fund or the Bank for International Settlements, but other literature has addressed the institutions and actors that organize portions of the financial system. Among the most important of these institutions are banks. This literature has identified a role for IFIs in managing and stabilizing the global economy.

Benjamin Cohen was one of the first scholars to consider the role of institutions and organizations in global finance. His influential work, *Organizing the World's Money* was one of the first attempts to understand the power structures behind the international financial order. Cohen argued that a well-functioning monetary order was predicated on achieving both efficiency and consistency.[213] Efficiency was an economic condition that assures the world's resources are used effectively to increase global wealth.[214] Efficient markets are important because they assure balance of payments adjustment and international liquidity.[215] Consistency was the political condition that examined policy convergence for states.[216] He considered four paths to achieving a balance between the efficiency and consistency objective. First, automaticity is relying on market based solutions that have an agreed upon code of conduct. This path was suggestive of the

[213] Benjamin J. Cohen, *Organizing the World's Money: The Political Economy of International Monetary Relations* (New York: Basic Books, 1977), 8.

[214] Ibid., 15.

[215] Ibid., chapter 1.

[216] Ibid., chapter 2.

recreation of a nineteenth century-like gold standard regime.[217] Second, under the category of supranationality, Cohen considered the role of role of the IMF in performing global central banking functions.[218] Third, Cohen examined the benefits of hegemony the role of a dominant power in preserving the rules of a monetary order.[219] Last, the path of negotiation considered basing a monetary order on *ad hoc* multilateral negotiation.[220] Cohen's conclusion was that a well-functioning monetary order, that reached an economic balance between efficiency and consistency, required elements of all four paths.

Cohen only briefly dealt with crisis in this book, but the underlying premise of the work was that a non-working monetary order, (i.e. one that could not provide both efficiency and consistency) was inherently unstable or crisis prone. The importance of this work is that Cohen, decades before it was intellectually fashionable, articulated the roles of market actors, states and institutions in creating a stable monetary system that responds to or prevents crisis. Not only did Cohen influence the debate on the role of international financial institutions like the IMF, this work is suggestive of the NIFA debates that would become salient after the Asian Financial Crisis.

The neo-liberalization project of the 1980s brought significant attention to the role of market actors and led policies away from the post-war vision of a regulatory structure

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[217] Ibid., chapter 5.

[218] Ibid., chapter 6.

[219] Ibid., chapter 7.

[220] Ibid., chapter 8.

of international institutions. IFIs, such as the IMF, were seen by many authors as tools of the great powers used to force, willingly or not, liberal reforms onto weaker underdeveloped countries.[221] In effect, these institutions became hollowed out – promoters of liberal reforms, not regulators of the global economy that they were originally created to be. By the 1990s; however, IFIs once again grew in importance since they were thrust into the role of crisis managers in 1994 and again in 1997.

A broad interpretation of the role of IFIs was taken up by Eric Helleiner in his analysis of the Bretton Woods financial system. He argued that the globalized financial system was designed by state policies that favored financial liberalization. Creating a means by which financial crises could be managed was a necessity since private market actors would be inclined to withdraw capital should a crisis occur.[222] The system that emerged was a "regime" created around the Bank for International Settlements that provided a negotiating forum for central bankers to coordinate crisis policies and promote international financial regulations. Helleiner argued this crisis response and prevention system worked well, addressing upheavals in the system throughout the 1970s and 1980s.[223]

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[221] For some well known statements along this line, see Theotonio Dos Santos, "The Structure of Dependence," *The American Economic Review* 60 (1970), James Mittelman and Moustapha Pasha, *Out from Underdevelopment Revisited* (Princeton: St. Martin's Press, 1998).

[222] Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*, 16-8 and 169-71.

[223] Ibid., chapter 8.

Louis Pauly considered the evolution of international monetary cooperation from the League of Nations to the International Monetary Fund. Pauly argued that the creation of liberal and globalized capital markets emerged from conscious decisions by governments to enhance their economic well-being. The irony is that now the power of these markets and international financial institutions constrain state governments' ability to operate freely.[224] Overall, Pauly considered how private market actors, such as bankers, and state representatives to multilateral organizations, such as finance ministers and central bankers, exercised control over global financial markets and indirectly constrained state policies.[225] Pauly argued that IFIs increased in power over time because of their important role in managing and coordinating policy during periods of international crisis. States in crisis often chose to rely on IFIs in order require policy changes that were unpopular and difficult for domestic economies. Multilateral financial institutions could be blamed for forcing these changes, even though the state may be unwilling.[226] In turn, this increased the surveillance role of IFIs in the international system, particularly in regards to managing international financial crisis.[227] Pauly relies on two historical examples to make his case: the oversight functions of the League of Nations and the surveillance functions of the International Monetary Fund. Both of

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[224] Louis Pauly, *Who Elected the Bankers? Surveillance and Control in the World Economy* (Ithaca, NY: Cornell University Press, 1997).

[225] Ibid.

[226] Ibid., 120.

[227] Ibid., chapter 6.

which, he argues, were increased in the wake of financial crisis.[228] One of the central points of Pauly's book is to examine the expansion of surveillance and control in the global economy, not to examine financial crisis. But this corollary argument concerning the importance of crisis in cementing the surveillance and oversight roles of multilateral institutions makes his work relevant for understanding financial crises as well.

Ethan Kapstein elaborated on the faith in international financial institutions in his notable article, "Shockproof." Kapstein argued that since the 1970s, "leading economic powers have created a regulatory structure that has permitted the financial markets to continue toward globalization without the threat of systemic collapse."[229] He went on to explain that financial contagion had been eliminated through reliance on policy negotiation and coordination forums such as the G-10, the BIS, and even the IMF. Kapstein argued, "the international financial markets have not suffered from contagion because the roots of the disease have largely been eradiated," by international cooperation which created better supervision and better global standards.[230] These standards have been negotiated through IFIs and these institutions have exerted control over global capital markets to the extent that crisis is a thing of the past. Kapstein was an

[228] Pauly argues that the case with the League of Nations is more complex than with the IMF. While League oversight increased with successes throughout the 1920s, an ideological shift in the 1930s caused the League to lose centrality and basically become an information gathering agency. But the idea of oversight remained and the mantle was passed from a dying League to an emerging IMF.

[229] Ethan Kapstein, "Shockproof: The End of the Financial Crisis," *Foreign Affairs* 74, no. 1 (1996): 2.

[230] Ibid.: 9.

unfortunate victim of poor timing, as his prediction of the end of financial crisis was made about one year prior to the Asian Financial Crisis – the most salient contemporary example of contagious global financial crises. But his argument does suggest the role of international financial institutions in having established a framework for preventing crisis and ultimately systemic collapse, albeit perhaps less perfect than Kapstein would like to believe.

Randall Germain looks at the issue of IFIs from a unique perspective and his most significant work is only tangentially related to this literature. In *The International Organization of Credit*, Germain discusses the historical evolution of principal financial centers (PFC) of credit markets and how these centers are tied into the growth of monetary order. PFCs are not based on public institutions, but rather represent centralized nodes of credit organization and the interaction of several actors including governmental entities, private and central banks, and markets.[231] For Germain, stability in the international monetary system is dependent on the stable international organization of credit.[232] When the PFC begins to face competition or becomes decentralized, instability in monetary relations emerges.[233] Thus, Germain suggests that a transition from one PFC to another will be accompanied by crisis. As the new PFC begins to consolidate its control over global credit creation, stability begins to return.

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[231] Randall D. Germain, *The International Organization of Credit: States and Global Finance in the World-Economy* (Cambridge: Cambridge University Press, 1999), 21.

[232] Ibid., 25.

[233] Ibid.

In other work, Germain has argued that one of the current characteristics of the institutional establishment of the NIFA has been a reformulation of IFI policies based on the inclusion of emerging market economies.[234] Thus, the political agenda of IFIs has become more receptive to the concerns of a broader international community. Germain argues that the G-20, a grouping of finance ministers and central bank officials from both G-7 and major emerging market economies, is playing a central role in reforming the policies of IFIs. This change is particularly noticeable within the IMF's International Monetary and Financial Committee where regardless of IMF voting share, all states have an opportunity to alter policies.[235] Germain argues that financial governance is fundamentally changing due to inclusion changes within IFIs and that this change, though far from complete, is necessary to address problems that emerge in the global financial system.

The role of IFIs in the international financial system has become more important over the last few decades since Cohen began considering the organization of the monetary system. This literature has grown considerably in light of the Asian Financial Crisis, which emphasized the role of IFIs, such as the IMF, in resolving or exacerbating

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[234] Randall D. Germain, "Global Financial Governance and the Problem of Inclusion," *Global Governance* 7 (2001), Randall D. Germain, "Reforming the International Financial Architecture: The New Political Agenda" (paper presented at the International Studies Association, Chicago, IL, 2001).

[235] Germain also points to other pieces of the IMF, particularly the Contingent Credit Lines facility and the Financial Stability forum and the BIS (e.g. the Basle Committee of Banking Supervisors or International Organization of Securities Commissions) as parts of IFIs that have undergone changes in the amount of participation of emerging market economies. See Germain, "Global Financial Governance and the Problem of Inclusion," 415-21.

crisis conditions. In international finance, the goal of the IFI literature is to understand the role and responsibilities of these institutions for safeguarding or managing the global economy. This literature directly speaks to financial crisis. The recognition of the centralities of IFIs for the management or governance of international finance also makes up the core of the NIFA literature, which is discussed as the fourth theme.

The third prevalent theme in finance literature has been to examine financial crisis through case studies. This literature has examined specific country experiences to better understand how states have avoided or why they have experienced crisis. Most of these studies are comparative in nature and consider the domestic factors that have contributed to crisis. Several works are noteworthy, but the premise of this literature is that unique domestic characteristics interacting with international capital markets are responsible for financial crisis. A companion literature examines how other states do or do not possess specific characteristics of states that have gone into crisis. Since these explanations focus on unique characteristics, they are less relevant for understanding the overarching theme of crisis response. Still this line of inquiry has been prevalent.

The Mexican Peso Crisis of 1994 prompted literature on the domestic politics and conditions that brought about this crisis.[236] Early understandings of the Asian Crisis followed this same pattern. Economists, such as Morris Goldstein, suggested the

[236] For example see Riordan Roett, ed., *The Mexican Peso Crisis: International Perspectives* (Boulder, CO: Lynne Rienner, 1996). This book closely examined many of the domestic reasons for the crisis as interpreted through the eyes of various international observers. The bottom line however, is that the Mexican government could have chosen better policies that probably would have prevented the crisis from occurring.

problems within these economies caused crises.[237] His analysis examined how crisis countries poorly managed their currency pegs, controlled their capital account, and neglected to supervise their banking sectors.[238]

Three more recent works are also excellent examples of this theme. Horowitz and Heo edited a volume that attributed the Asian Crisis to varying domestic dynamics.[239] This study examined the role of coalitions and institutions in creating and responding to the crisis in Southeast Asia, Latin America and Eastern Europe. Relying on the variables of economic interest groups and ideologies, the authors discussed how domestically dominant voices led to policies that caused crisis or exacerbated domestic problems once the crisis became contagious. This study is an excellent example of the comparative work since it considers the formation of policies and the powers of coalitions and interest groups among several states and by regions.

Examining the crisis comparatively, but also taking international dynamics into consideration is the goal of a volume edited by T.J. Pempel. This was written by a group of Asian experts who argue that the "one size fits all" model of understanding the crisis

[237] Goldstein argued that the problems seemed to be poor management of their currency pegs. See Morris Goldstein, *The Asian Financial Crisis: Causes, Cures and Systemic Implications* (Washington, DC: Institute of International Economics, 1998).

[238] Ibid.

[239] Shale Horowitz and Uk Heo, eds., *The Political Economy of International Financial Crisis: Interest Groups, Ideologies, and Institutions* (New York: Rowman and Littlefield Publishers, 2001).

ignores the real differences in how countries experienced the crisis.[240] Pempel argued that international and regional changes, notably Asian integration and the amount of cross-national capital Asia received, were contributing macroeconomic causes. Pempel extends his argument to conclude that one cannot really understand the crisis if domestic dynamics, such as such as the health of the banking system or exposure to United States investment are not considered.[241] Pempel argues this is particularly the case in understanding bilateral responses as the United States protected and assisted political allies' economies better than those where the United States had fewer interests.[242] Pempel's argument is reinforced with Winters' account of the crisis which tried to differentiate between country experiences and add domestic variables to the analysis.[243] Winters analysis argued that domestic variables were as significant as international dynamics. Other authors writing about specific countries focus on the role of such things as *chaeb ls* in South Korea or the unregulated banking sector in Thailand as being significant contributors to the Asian Crisis.[244]

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[240] T.J. Pempel, "Introduction," in *The Politics of the Asian Economic Crisis*, ed. T.J. Pempel (Ithaca, NY: Cornell University Press, 1999).

[241] Ibid.

[242] T.J. Pempel, "Conclusion," in *The Politics of the Asian Economic Crisis*, ed. T.J. Pempel (Ithaca, NY: Cornell University Press, 1999).

[243] Jeffrey A Winters, "The Determinant of Financial Crisis in Asia," in *The Politics of the Asian Economic Crisis*, ed. T.J. Pempel (Ithaca, NY: Cornell University Press, 1999).

[244] Andrew MacIntyre, "Political Institutions and the Economic Crises in Thailand and Indonesia," in *The Politics of the Asian Economic Crisis*, ed. T.J. Pempel (Ithaca, NY: Cornell University Press, 1999), Meredith Woo-Cumings, "The State, Democracy and the

Nobel and Ravenhill present a more sophisticated analysis of the crisis and examine its global causes and consequences. They argue that the crisis was caused by several international dynamics including the amount of international private capital, but they spend more time analyzing domestic concerns such as problematic banking regulations and poorly managed exchange rate pegs.[245] This volume also considers the domestic differences that caused the crisis to emerge and be resolved differently in several states, and it attempts to combine these domestic variables with the international conditions that put strain on the domestic systems.[246]

The last theme, the creation of the New International Financial Architecture (NIFA), is currently the central literature in both IPE and international finance. Drawing on the tradition of the creation of the Bretton Woods financial system, this literature assumes that financial systems are created structures that can be recreated in order to better achieve efficiency and manage crises. The literature and the concept of a New International Financial Architecture emerged after the 1997 Asian Financial Crisis when

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Reform of the Corporate Sector in Korea," in *The Politics of the Asian Economic Crisis*, ed. T.J. Pempel (Ithaca, NY: Cornell University Press, 1999).

245 Gregory W. Nobel and John Ravenhill, "Causes and Consequences of the Asian Financial Crisis," in *The Asian Financial Crisis and the Architecture of Global Finance*, ed. Gregory W. Nobel and John Ravenhill (Cambridge: Cambridge University Press, 2000).

246 See also Stephan Haggard, *The Political Economy of the Asian Financial Crisis* (Washington, DC: Institute for International Economics, 2000). Haggard's book looks particularly at the political causes and consequences of the Asian Crisis. While he applies a multidimensional explanation that includes the role of global capital, he does strongly emphasize particular domestic political relationships that made the crisis more serious. Among his explanations for the crisis are corruption, business government relationships and moral hazard.

scholars examining the crisis attributed some of its causes to ineffective global rules and institutions that allowed state actors to hide problems in their economies and created impediments to transparency and regulation. The central questions in this theme consider the role of institutions in managing and correcting problems in international finance. The New International Financial Architecture (NIFA) literature has grown quickly in the last five years, both from the economics perspective, of which Eichengreen's work discussed above is the best example, and from the IPE perspective, which borrows heavily on Eichengreen and other economists but considers more political variables.

Leslie Armijo created a helpful taxonomy for understanding this literature.[247] She argued that there are four theoretical approaches represented within the debates surrounding the NIFA and that advocates of these approaches are furthering policies about how the NIFA should be reconstructed. The NIFA is being reformed by: laissez-faire liberalizers, transparency advocates, financial stabilizers and antiglobalizers. Each

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[247] Leslie Elliott Armijo, "The Political Geography of World Financial Reform: Who Wants What and Why," *Global Governance* 7 (2001). Bird and Rajan suggest a similar breakdown of the NIFA literature that is more comprehensive. They suggest eight perspectives: detecting and monitoring external vulnerability, strengthening financial systems, international standards and codes, capital account issues, sustainable exchange rate regimes, involving the private sector in forestalling and resolving crises, reform of IMF financial facilities and related issues, and measures to increase transparency. Some of these are lumped together in Armijo's approach. Bird and Rajan examine these lines of debate in relation to the actual reforms that are being considered and argue that the chances for real reform and the creation of an international financial architecture have died down and will probably never be realized. However, a newly reformed Asian Financial Architecture is emerging and has the likelihood to provide greater global financial stability. See Graham Bird and Ramkishen Rajan, *The Evolving Asian Financial Architecture, Essays in International Economics* (Princeton, NJ: Department of Economics, Princeton University, 2002).

perspective privileges a set of beliefs about the causes for financial crises, and therefore proposes solutions appropriate to addressing those causes.

The laissez-faire liberalizers represent private market actors and conservative economists who believe government interference in markets creates moral hazard and this contributes to crisis. The adherents to this perspective favor market solutions to crisis that require little more than good information and laws to restrain criminal behavior.[248] This is strongly supported by the most established liberal economists today including Milton Friedman.[249] Crisis is considered a result of poor laws and governmental action that compromise the efficiency and equilibrating effect of the market. The NIFA should thus focus on making sure that liberal market principles are preserved and that state intervention into markets is limited.

The second group, transparency advocates, have the most international support and do the most policy oriented work on the NIFA. Crisis comes from domestic problems or corruption that is hidden from investors. Thus removing the barriers that prevent this information from being widely circulated is fundamental to preventing crises. This set of principles, advocating less secrecy and more openness in financial transactions and bank accounting, comes from the Organization for Economic Cooperation and Development (OECD), G-7 and G-20 countries that believe the Asian Crisis represented a failure of domestic policies. Specifically, failures of regulation and

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[248] Armijo, "The Political Geography of World Financial Reform: Who Wants What and Why," 383.

[249] For example see Milton Friedman, *Money Mischief: Episodes in Monetary History* (New York: Harcourt, Brace, Jovanovitch, 1992).

supervision in the banking industry have been targeted for transparency reforms.[250] This perspective argues that the NIFA should pay most attention to reforms that remedy the problems within domestic institutions such as corruption or poor business and banking practices.[251]

The third NIFA theme is heavily represented in the IPE literature. Armijo describes this perspective as the financial stabilizers and argues that this group focuses more on the global characteristics of the financial architecture rather than the national or domestic problems and issues. Financial stabilizers are essentially interested in oversight, regulation and management of capital markets.[252] This perspective has been advocated by a large and diverse number of academics and policy specialists in the fields of economics and international relations.[253] The financial stabilization theme relies heavily on the evolution and use of IFIs to oversee financial markets.[254]

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[250] This theme is very apparent in some of the work that the IMF has been involved with. The Financial Stability Forum in 1999 focused on transparency and several reports that have come out of the IMF since the Asian Crisis reinforce this theme. For example, Carl-Johan Lindgren et al., "Financial Sector Crisis and Restructuring: Lessons from Asia," (Washington, DC: International Monetary Fund, 1999).

[251] Armijo, "The Political Geography of World Financial Reform: Who Wants What and Why," 384.

[252] Ibid.: 385-87.

[253] Economists for example include James Tobin, Joseph Stiglitz and Jagdish Bhagwati. See Jagdish Bhagwati, "The Capital Myth," *Foreign Affairs* (1997), Bhagwati, "Yes to Free Trade, Maybe to Capital Controls.", Joseph Stiglitz, "The Insider: What I Learned at the World Economic Crisis," *National Republic* 17 (2000), James Tobin, "A Proposal for International Monetary Reform," *Eastern Economic Journal*, no. 4 (1978).

[254] Scholars are also considering how these institutions should be constructed. Particularly the role of democracy and voting share in the creation of IFIs. For an

Authors such as Ralph Bryant argue that IFIs must be at the center of the NIFA.[255] Bryant contends that management of global finance ultimately depends on "pragmatic incrementalism," which will lead slowly toward vesting the IFIs with more responsibility. While he is cautious and skeptical about the ability of institutions to be radically altered, citing the political misgivings from domestic governments and particularly the most powerful countries, he is optimistic that slow changes will create a system that is more able to manage and prevent the problems that global capital has created.[256] Bryant's argument is based on his understanding of the global financial system as something that is evolving toward greater globalization or internationalism, but also a system where the cross border problems are outpacing the system's ability to keep pace.[257] Political constraints discourage radical reforms to the NIFA, but incremental changes are already mounting to create a better system of governance based on the interaction between IFIs and between IFIs and states.

Susan Strange argued that expanding global capitalism and capital markets were the real culprits for her "mad money," since they outpaced the ability to provide management. Though writing prior to the real emergence of the NIFA debates, Strange considered two approaches that could be termed financial stabilization approaches and

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example of this line of inquiry see Tony Porter, "The Democratic Deficit in the Institutional Arrangements for Regulating Global Finance," *Global Governance* 7 (2001).

[255] Ralph Bryant, *Turbulent Waters: Cross-Border Finance and International Governance* (Washington, DC: Brookings Institution, 2002).

[256] Ibid., chapter 1.

[257] Ibid.

concluded that neither suggested a solution that was practically or politically viable. She argued that systems of domestic regulation were too diverse and originally created to meet the criteria of domestic groups. Therefore, expecting coordination between domestic systems, particularly domestic banking regulation, as a way to promote stability and reconstruct the financial architecture is problematic.[258] IFIs on the other hand present their own problems. They are grossly unprepared and lack the capacity to meet the challenges of a fast changing global financial marketplace.[259] Her suggestion for the stabilization of global finance is to find a regulatory path that lies between the domestic regulation and the international institutional approach, where international institutions have more managerial and oversight control over markets and domestic actors agree on general principles of supervision.[260] Strange is not at all confident that such a solution could be attained, but remained hopeful.

The last theme that Armijo articulates in the NIFA is that of the antiglobalizers. This hodgepodge of activists includes conservative political pundits, right-wing religious groups, labor unionists and environmentalists.[261] While lacking a specific theoretical position, they decry the evils of globalization and fear international organizations that could compromise state sovereignty and negatively affect the most disadvantaged

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[258] Strange, *Mad Money*, chapter 8.

[259] Ibid., 175.

[260] Ibid., 141.

[261] For an example of this position see Kevin Danaher and Roger Burbach, eds., *Globalize This: The Battle against the World Trade Organization and Corporate Rule* (Monroe, ME: Common Courage Press, 2000).

states.[262] Financial crises are evidence of the problems that globalization causes. The interconnections between markets make crises more widespread and financial capital flight contributes to the can impoverishment of developing country populations.

While Armijo's taxonomy is helpful to understand the current trends in the NIFA literature, and represents a lot of the current work on this theme, some other issues have begun to emerge. First, there are authors considering the progress that has been made to date. Bird and Rajan examine the financial architecture that has emerged in Asia since the crisis and argue that this area is pursuing a regional financial stabilization strategy based on a network of credit swaps. They see the Asian Crisis as a contained regional phenomenon and think the greatest hope for financial stability rests in the ability of Asia to develop a regional response mechanism that is connected to a better IMF international response. This kind of financial stabilization system relies on regional institutions to support the international financial architecture.[263]

Other suggestions about the creation of the NIFA and criticisms about whether there are true changes in the financial system have come from many authors. Miles Kahler suggests that the project is flawed because it is really not a new architecture at all, but rather a further entrenchment of the current IFIs. Kahler argues that the developing world will probably still suffer from financial crises and that it needs to consider the role

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[262] Armijo, "The Political Geography of World Financial Reform: Who Wants What and Why," 387-88.

[263] Bird and Rajan, *The Evolving Asian Financial Architecture*.

of regional institutions for aiding in financial crisis while the global financial architecture changes slowly and incrementally.[264]

Susanne Soederberg considered the NIFA as an ideological reaction to the capital controls debate that focused on perpetuating the "Washington Consensus."[265] Her argument is that the NIFA is strongly based on the structural power of the United States and even though it seems to advocate capital controls, the NIFA is a free market solution that reinforces a liberalization process. From this perspective the NIFA is simply a reproduction of the status quo and a furtherance of neo-liberal policies that ultimately benefits United States markets. But crises may undermine the NIFA as they bring greater contradictions in terms of how liberal capital movement are conditioned by irrational herd behavior, not by the proper and efficient functioning of the market.[266] This is a similar theme that has been pursed by Langley, who also questioned the "newness" of the reforms proposed NIFA. Langley argued that the NIFA is a continuation in policies that have embedded financial liberalization.[267] The focus on the NIFA has started to switch

[264] Miles Kahler, "The New International Financial Architecture and Its Limits," in *The Asian Financial Crisis and the Architecture of Global Finance*, ed. Gregory Noble and John Ravenhill (Cambridge: Cambridge University Press, 2000).

[265] The Washington Consensus has been described in the literature as a series of policies on global finance and capital flows that favors liberal capital markets.

[266] Suzanne Soederberg, "The Emperor's New Suit: The New International Financial Architecture as a Reinvention of the Washington Consensus," *Global Governance* 7 (2001).

[267] Paul Langley, "What's 'New' About the New International Financial Architecture?" (paper presented at the International Studies Association, New Orleans, Louisiana, March 25-27 2002).

again. Instead of the literature considering the proper reforms, the literature has begun to look into the reforms that have been implemented and examine their effectiveness.[268]

The NIFA literature is becoming larger and more varied every day. This literature in many ways builds on the now 50 year old tradition of the creation of the Bretton Woods organizations to manage international economic relationships after World War II. The suggestion that there could be a financial management system, and that existing institutions could be central to that system is a compelling area for IPE research. Better managing and preventing crisis is at the heart of this scholarly endeavor. Though few of the authors have crisis at the center of their inquiry, the implication is that a better structured system will alleviate the problems caused by crises and particularly the problems caused by the global and heavily integrated economic system that has emerged

Overall, the finance literature in IPE examines several themes central to understanding and managing financial crisis. The role of capital suggests as capital has become more mobile crises are more of a threat. This theme speaks directly to the issue of financial globalization and the role of neo-liberal policies in the global economy. Second, the role of IFIs in the global economy draws attention to the existence of management and governance through these institutions. It also suggests that financial institutions hold the ability to stabilize the global economy when crises emerge. The third trend has been to focus on individual country efforts and problems in facing financial crisis. This is also a growing literature that considers the unique experiences

[268] There's also a theme in the NIFA literature that suggests there is illegitimate based the lack of democratic ideals pursued. For example see Porter, "The Democratic Deficit in the Institutional Arrangements for Regulating Global Finance."

that cause and help remedy crisis on a country by country basis. Last, the most significant recent trend has been the discussions of the NIFA. This literature extends the arguments about IFIs into the purposeful creation of structures and policies that will manage crisis. These four themes capture the scholarship of IPE scholars on the issue of financial crisis.

## Summary of the Literature

This chapter has identified the major themes in the research on financial crisis and how this research speaks to the issue of response. It has reviewed the prominent authors and arguments in both the literatures of economics and international political economy. Both of these traditions have added to our understanding of this phenomenon, but there are more questions to be answered. This section will try to elucidate some of the more relevant issues for this dissertation and suggest how this study will both use and add to the existing literature.

The enormous literature on financial crisis from the tradition of economics has done best at analyzing two issues. First, why do crises emerge and second, what is the role of the lender of last resort. Both of these points are relevant for the current study. One prominent school of thought for understanding the genesis of crisis argues that global capital and credit play important roles. This suggests an important issue for this dissertation to consider, because if global capital and credit affect the incident of crisis, then it is likely they affect responses. This dissertation will examine the role of global capital and credit expansions in order to understand how these may affect response. The economics literature suggests that economic expansions create the conditions for crisis. This dissertation suggests that global economic expansions create new conditions for response.

Second, for over a century, the economics literature has suggested that there is a role for a lender of last resort when a crisis emerges. While lenders of last resort have many responsibilities, one of their primary duties is to provide liquidity. This is the most significant statement that the economics literature has made regarding response actors. This dissertation considers crisis response, and one of the main duties of a crisis response actor is the provision of liquidity to calm markets in crisis. While response actors use a series of important measures to remedy a crisis, it is their role as lender of last resort that will be primarily used to identify which actor is providing a response. Thus, this study will add indirectly to an understanding of who acts a lender of last resort and whether international lenders of last resort actually exist and whether they change over time.

The literature from international political economy has made significant contributions in understanding the role of capital as it relates to interdependence among states and financial crisis. It has also looked more carefully at the role of international financial institutions for managing the global economy. This dissertation will build on both of these traditions to better understand how financial markets affect connections between states and particularly how changes in financial institutions are related to changes in the movement of investment capital.

While no literature examines the historical evolution of crisis response, the insights from both economics and IPE provide a starting point for examining this topic.

They also provide theoretical insights into what issues and processes are most relevant for understanding crisis response and change in response. Thus they direct my scholarship by informing me as to the important dynamics to address while examining specific incidence of financial crisis. The next chapter will further develop the theoretical assumptions of this dissertation.

Chapter 2

# THE METHOD AND MODEL

> History, including economic history, is the essential corrective for intellectual hubris. Economists, please note.
>
> *Susan Strange*[269]

## Introduction

The literature on financial crises provides a springboard for this project. The intellectual tradition for studying financial crisis is well established, and as shown, there is vast literature from several different disciplinary perspectives. This project considers an issue that is only tangentially discussed in the existing literature; it examines the development of institutions that provide response to financial crisis. This study builds on the international political economy contributions by attempting to extend our understanding of the financial architecture and financial institutions. It does this by examining the creation of institutions throughout history to determine if patterns in institutional development exist. This project builds on the economics literature by considering the role that international financial integration, capital and credit expansions, and actual crisis episodes play in driving institutional selection and development. This

[269] Strange, *Mad Money*, 20.

project therefore hopes to fill some intellectual gaps in both literatures and provide a better understanding of financial crisis and response.

This chapter proposes a model of crisis response. First, I will discuss the central thesis of this study and its research questions. Included in this discussion will be an elaboration of the definition of financial crisis. Second, I will identify the theoretical underpinnings of the model that I develop by discussing the Kindleberger Minsky model of financial crisis. This theoretical tradition is suggestive of a line of inquiry that my study builds upon. Third, I will present my model of financial crisis response. This model draws on the tradition of Kindleberger, but goes further toward explaining the role of crisis and state financial interlinkages as driving forces in the evolution of global financial institutions. This model will be considered in the following three chapters through examining historical cases of financial crisis. I will again rely on Kindleberger's scholarship to identify the cases examine.

## The Research Questions

This dissertation addresses three questions regarding financial crises. How do we respond to crises? Has the actor leading the response changed over time? And if there are changes, what drives them? The goal of asking these questions is to better understand whether there are overarching patterns that one can discern in crisis response, and more importantly to help determine what may drive any patterns that do emerge. This section will deal with each of these questions after considering definitions of the most basic concept employed in this project. Simply, what is a financial crisis and how will this dissertation identify them?

Identifying and Defining Financial Crises

Defining what a financial crisis is seems straightforward enough, yet presents a far more challenging problem. There is no well-accepted definition of which economic events qualify as "financial crises," or how long a crisis period lasts. A common perception is that financial crises are analogous to things such as pornography or beauty, "difficult to define but recognizable when seen."[270] Approaching crises without a sound definition leads to ambiguous conclusions.

More formal definitions of crises range from the very general to the very specific and depend largely on what authors see as the most important issue to understand regarding crises. Those who are interested in broad trends, such as Kindleberger, offer little beyond, "we know them when we see them." Kindleberger did not even choose to include a definition of crisis, or panic in the first edition of his influential work, *Manias, Panics and Crashes*. Others have echoed Kindleberger's comfort with a lack of precision; for example, Swoboda defines a crisis as a threat to the stability of the financial system.[271] Still others offer only slightly more precision. Goldsmith argues that a sharp change in all or most of the significant economic indicators such as interest rates, asset

[270] Charles Poor Kindleberger and Jean-Pierre Laffargue, "Introduction," in *Financial Crises: Theory, History and Policy*, ed. Charles Poor Kindleberger and Jean-Pierre Laffargue (Cambridge: Cambridge University Press, 1982), 2.

[271] Swoboda as quoted in Ibid.

prices or commercial and financial institution failures, identifies a financial crisis.[272] Minsky describes financial crises as changes in asset prices relative to output prices.[273] Einzig simply lists thirty-six symptoms that indicate a crisis.[274] Similarly, Bordo refuses to define a crisis but instead lists its ten key elements.[275] These elements include changes in expectations, fear of institutional insolvency, a search for liquidity, bank runs, falling prices and actions by a lender of last resort, among other criteria. While all of these definitions are more specific than, "we know it when we see it," and they help isolate some of the more important effects or indicators of crisis, many of them simply argue that crises are identified by a negative change in some group of economic indicators. All of these definitions lack accuracy on what indicators are most important, and there is no agreement on how many of these indicators must change in a true crisis.

The lack of precision can be problematic because it leads to different scholars identifying and studying financial episodes differently. But the ambiguity can also be positive in the sense that defining crises in broad strokes allows for the study of comprehensive trends over many different episodes that can be classified as having

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[272] Raymond W. Goldsmith, "Comment," in *Financial Crises: Theory, History and Policy*, ed. Charles Poor Kindleberger and Jean-Pierre Laffargue (Cambridge: Cambridge University Press, 1982), 42.

[273] Minsky, "The Financial-Instability Hypothesis: Capitalist Processes and the Behavior of the Economy."

[274] Einzig, *Foreign Exchange Crises: An Essay in Economic Pathology*, 9-12.

[275] Michael Bordo, "Financial Crises, Banking Crises, Stock Market Crashes and the Money Supply: Some International Evidence, 1870-1933," in *Financial Crises and the World Banking System*, ed. Forrest Capie and Geoffrey E. Wood (New York: St. Martin's Press, 1985).

caused economic disruption and decline. Regardless of how that disruption or decline is specifically measured or what may have been the triggering event, broad definitions of crisis help us understand broad patterns.[276]

This generalized approach has been criticized by those interested in understanding particular types of crisis or wishing to consider more specific remedies. Therefore, on the other end of the definitional debate are those who want to categorize crises and study similarities among those of a specific kind. Prominent in this definitional camp are Milton Friedman and Anna Schwartz, who closely associate financial crises with the banking system.[277] A financial event that may lower prices, decrease wealth, crash a stock market or raise unemployment may be serious, but does not warrant being categorized as a crisis. Crises only exist when there is a threat to the stability of the banking system because people are seeking liquidity. Because of this precise definition, Schwartz classifies most crises as "pseudo-crises," and argues that institutions to prevent crisis have existed since 1866 in England and 1933 in the United States.[278] According to Schwartz, the creation of adequate institutions rules out the occurrence of "real" crises.

While Friedman and Schwartz may appear narrow, it is not uncommon for authors to choose to avoid a comprehensive concept such as financial crisis and instead

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[276] Generalists also do not distinguish between words such as panic, crisis or crash. All are considered as similar events and the words are mostly used interchangeably.

[277] Friedman and Schwartz, *A Monetary History of the United States 1867-1960.*

[278] Anna J. Schwartz, "Real and Pseudo-Financial Crises," in *Financial Crises and the World Banking System*, ed. Forrest Capie and Geoffrey E. Wood (New York: St. Martin's Press, 1985).

concentrate on a narrow range of specific characteristics. Much of this literature has been discussed in the previous section. It is clear that in specific time periods specific kinds of crises are considered more relevant or more likely to garner scholarly attention. Early literature focused on the prevention and response to banking crises. The Great Depression led to an enormous literature that extended the debates on banking crises, currency crises and added to that an emphasis on stock market speculation and crashes. The 1980s were a period when developing country debt defaults captured the headlines and so debt crises were the mainstay of the literature. In the most recent literature, the currency crises in Mexico, Russia, Asia and Latin America have now led to a cottage industry built around investigating the phenomenon of currency crises. The definitions of banking crises, currency crises, debt crises and self-fulfilling crises have already been covered in Chapter One

Every kind of crisis possesses some specific characteristics that seem to make them unique and in some cases specificity helps in analyzing events. As well, the economic tools can vary slightly in trying to address one kind of crisis or another.[279] Thus there is a trend in the literature to narrow the definition of financial crisis. For example, Radlet and Sachs identify five distinct kinds of crisis in economic literature. These are macroeconomic policy-induced crises, financial panics, bubble collapses,

[279] It is also important however to note that most of these economic tools have the effect of increasing liquidity. The questions of what economic tool to use has mostly revolved around the best way to increase liquidity (e.g. through monetary policy, through direct loans).

moral hazard crises and disorderly workouts.[280] Although Radlet and Sachs argue that the theoretical differences among crises are substantial and affect the, "diagnosis, underlying mechanism, predictions, prevention and remediation" of crises,[281] they perhaps overstate their case. All of these crises and the ones presented above share many common traits that bind them together under the rubric of financial crisis. Even Radlet and Sachs, following their impassioned plea for the distinction between crises cannot effectively categorize the 1997 East Asian Crisis. Thus they call the crisis a panic *and* disorderly workout.[282]

When considering the definition to employ in my study, I found it more beneficial for a study that wishes to examine general trends in the creation and use of response actors to adopt a wider definition. This is consistent with much of the literature that considers broad historical trends, particularly Kindleberger's work and the work theorists operating from a business cycle perspective. Moreover, focusing on one specific kind of crisis becomes problematic when looking across a long time period. Since scholars tend to focus on the specific kind of crisis that is affecting the economy during their lifetime, the relevant type of crisis for each period will depend on relevant economic conditions and on which kind of crisis seems to be of greatest threat. For example, the term currency crisis loses all meaning during a time period when specie was currency.

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[280] Radlet and Sachs, "The Onset of the East Asian Financial Crisis."

[281] Ibid., 109.

[282] Ibid., 111.

However, the most important reason for using a broader definition of financial crisis is because to some degree, separating crises into specific categories such as "currency crisis" or "debt crisis," is to adopt an analytical tool that does not accurately portray the reality of these financial episodes. Perhaps this is the reason Radlet and Sachs have difficulty neatly categorizing the Asian Financial Crisis. All crises are complex financial events with widespread implications for various sectors of the economy and political landscape. Therefore, it is difficult to focus analysis on a "debt crisis" when currency revaluations may occur during the event; bank runs and "banking crises" occur during "self-fulfilling crises," and so on. Since this work does not examine nor propose specific economic tools for addressing crises, a task that may require more specific definitions of crisis, limiting this study's analysis is at odds with the purpose of understanding the evolution of crisis response actors in historical perspective.

Still, some definition of crisis is required. Eichengreen and Portes give a particularly useful definition, "A financial crisis is a disturbance to financial markets, associated typically with falling asset prices and insolvency among debtors and intermediaries, which ramifies through the financial system disrupting the market's capacity to allocate capital within the economy. In an international financial crisis, disturbances spill over national borders, disrupting the market's capacity to allocate capital internationally."[283] This definition is congruent with the goals of this project since it tries to maintain a broad definition while focusing on a particularly important

[283] Barry Eichengreen and Richard Portes, "The Anatomy of Financial Crises," in *Threats to International Financial Stability*, ed. Richard Portes and Alexander K. Swoboda (Cambridge: Cambridge University Press, 1987), 10-11.

continuity, the role of capital flows in the event. This definition acknowledges the ability of financial crisis to affect several sectors of the economy. By doing this, it avoids the problems of keeping analytical simplicity at the expense of distorting the reality of financial crises. Last, the definition is sensitive to international consequences of a financial crisis whereas most authors are focused only on domestic issues.

This definition allows some precision in identifying the crises that are examined in this project and facilitates the use of Charles Kindleberger's well accepted and established list of relevant crises.[284] Another definitional issues that must be addressed is the length of an event defined as a crisis. As with the problems defining a crisis, the length of an event considered a crisis can vary enormously. Einzig provided great insight into this issue. He argued that crises are of variable lengths, some being chronic or prolonged and others being acute.[285] Thus, when several crises happen in a short period of time the period can be characterized as a prolonged crisis with several acute climaxes. Einzig used the Depression crises of the 1930s and the Sterling crisis of 1964-1967 to illustrate his remarks. During those years there were several acute crises that accentuated the instability of the time. On the other hand, some crises are more singular events with a few days or weeks of instability followed by a quick resolution. This dissertation will follow Einzig's suggestion that both the prolonged and the acute crisis are important for understanding the events and resolution of financial crises. As will be established, responses are often directed at alleviating acute crisis conditions, but in some cases

[284] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*

[285] Einzig, *Foreign Exchange Crises: An Essay in Economic Pathology*, 2-7.

responses consider larger scale instability and try to address prolonged structural problems that cause crisis.

How Do We Respond?

Having established a working definition of financial crisis, responding to crisis implies those methods and actors involved ameliorating the root cause or the problems associated with a crisis. In terms of responding, or coping with crises, economists are overwhelmingly focused on the specific economic tools that should be employed to end a crisis quickly. These tools tend to change over time as the most prevalent kind of crisis changes. For example, early crises that can best be described as "banking" crises, favored a specific kind of response (e.g. securing bank reserves) while later "currency" crises required something different (e.g. securing governmental reserves). Examples of economic tools included in responses are increasing the money supply, raising or lowering the discount rate, or providing supplemental loans. These tools have basic similarities, the most fundamental of which is that responses will seek to increase liquidity. But, given changes in economic practices and monetary systems over time, the specifics of how that is done will change. This dissertation will not evaluate the economic tools employed historically, but consider instead the actor that is providing these tools.

International relations scholars have different goals. They wish to examine the results that economic policies have on the political and economic well being of states that have been subjected to these policies. The concern is less about specific economic tools, such raising or lowering interest rates, and more about the power structures that make these decisions and the resulting effects on the politics or population of choosing a given response. There is also a preoccupation in IR scholarship with the role of institutions and organizations in the economic system. Unlike liberal economists, many IPE scholars are focused on management and intermediation in financial markets. As suggested, this scholarship has recently coalesced around the endeavor of explaining and defining the (re)creation of the international financial architecture and particularly the NIFA debates.

This line of inquiry will understand responses first through the identification of the response actor. Or simply, what political or economic actor plays the primary role in stabilizing the crisis situation and providing the oft-necessary systemic liquidity? Just as response tools have consistencies across time, it seems likely that the response actor will also be consistent over time. Most importantly, the actor will require the capacity to respond to the given crisis situation. It will need the economic resources and/or the political authority to mobilize a response. If the political or economic capacity is lacking, it is likely that the response will be inadequate and the crisis will be extended, deepen or perhaps spread to other states. By looking at the response actor, the goal is to evaluate which institutions have developed to respond to financial crises.

Has the Method of Responding Changed Over Time?

The second research question that I will explore is whether the methods of responding to crises have changed over time. Are institutions created to remedy crisis, or do existing institutions get new powers from government to address crises? In addition, what are the differences between institutions that responded early in the period and later? Evaluating actors over time will shed light on these questions and help to understand if response institutions are changing or evolving.[286] The goal will be to determine what actor in the domestic or international system provides the primary response to alleviate crisis conditions. Two issues will be examined: first, the specific characteristics of the actor and second, the primacy of a specific actor within the response system.

In terms of characteristics, actors and institutions will be defined by two criteria, which can be represented as points along two spectrums. The first is the level at which the response actor is established. Is the response actor primarily a domestic, regional or global institution? The level of operation will probably be correlated with the capacity of the actor. Domestic actors, such as national or central banks are defined as institutions that have a domestic function and presence. These would likely have a lower capacity to respond to a crisis than a transnational or multinational actor, such as an international banking syndicate or international financial institution. Regional actors or institutions are defined as having a membership that spans a geographical area. It is assumed that they will have more capacity than domestic actors to deal with crises that emerge outside a state, but are limited in terms of being able to respond within a specific region. Global

[286] One assumption of this study is that individuals do not have the capacity to intervene in a financial crisis. This is not to suggest that an individual is unable to exercise an enormous amount of power in the response system, but if an individual does exercise power that he or she will be working through some kind of institution (e.g. a bank, government or banking syndicate) to provide a response.

actors or institutions suggest a widespread membership, scope and capacity.[287] These are mostly characterized as institutions with a multilateral membership representing multiple states and regions and with the ability to respond to crises that are either large in geographical scope, or happen in diverse geographical locations. In addition, global actors suggest institutions that are likely to possess a larger economic capacity or political capability than regional or domestic actors.

The second set of characteristics address the balance between what can be termed the locus of control. I represent this distinction by a public/private continuum. The private end of the continuum suggests an institution motivated by and in pursuit of profit with little concern about the economic or political stability of the system within which it operates. The other end of the continuum, called public, represents an institution that has no profit motive, and is constituted with the goal of providing stability, management or regulation over some system or political economic unit. Public institutions are generally constituted or chartered by a government, or a collection of governments.[288] For example, a bank, constituted as an economic firm seeking profits, would be a private institution. A central bank however, chartered by a state and constituted to manage and supervise both private banks and the state economic system would be a public actor. A

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[287] It is possible that some domestic actor can have global capacity to address a financial crisis. The two institutions that come to mind are the United States Federal Reserve Bank and the Bank of England.

[288] Public institutions may have boards that are either independent of governmental control or are directly controlled by political actors (e.g. the early establishment of the Bank of France). Therefore, boards may act with either or both economic motives or political motives, but public institutions act with motives that are consistent with increasing power or wealth of the state, not of individuals.

multinational corporation creating or selling goods or services for profit would be constituted by individuals seeking economic gain and thus be a private institution, even though it operated transnationally. International financial institutions that have a regulatory, supervisory or liquidity providing purpose, such as the International Monetary Fund, but provide these services with no profit motive would be considered public institutions. The few middle points on the continuum represent mixed motive institutions or organizations. Such institutions may be chartered by the state and provide some functions of stability, regulation or even provide liquidity, but they also seek profits and to maximize economic gains for the owners or shareholders. Often banks that were either chartered by the state or somehow privileged by the crown, were forced by the government to provide both stabilization and liquidity functions for the state, but still operated at least in part for profit.[289] These represent best example of this kind of institution. For lack of a better name, these institutions can be called quasi-public, since they possess some public and some private functions.

Response actors will be represented on both continuums and possess some combination of these characteristics. This study will seek to identify the specific characteristics of the primary response actor and evaluate if these characteristics change over time. In order to evaluate the nature and characteristics of a response actor, it is important to briefly discuss what a response consists of and particularly what a primary response actor does.

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[289] These banks were often chartered during or prior to the nineteenth century. None of these institutions exist in 2003

A response is a purposeful action to stop the crisis or improve crisis conditions. Most often a response takes the form of providing liquidity.[290] While many actors can provide a crisis response, a primary response actor is the institution that takes the lead in seeking to alleviate the crisis. I assume that crises will generate many responses from a varied number of actors, but that one actor will take the lead, assume or be given the largest responsibility or be the most successful in providing liquidity.

The last point that needs to be addressed as part of this research question is the issue of historicizing financial crisis and response. I ask if the method of response changes over time. This question can only be answered by evaluating a series of crises that occur over a long period. Only by historicizing the problem of crisis and crisis response, can I evaluate whether the response actor has indeed changed, understand in terms of which criteria the response actor has changed, and begin to assess what may contribute to the change in response.

While financial crises are observable back as far as the thirteenth century, this dissertation will begin the study of crisis in 1800. There are four reasons for beginning at that date. First, the nineteenth century is an excellent time for the study of financial crisis response since crises emerge with great frequency at approximately ten-year intervals. Before 1800 crises are more sporadic in nature. Second, by 1800 the modern global economy and modern financial system are more developed and entrenched. The gold standard is becoming the central financial system and states are tied to each other through

[290] Note that liquidity can be provided through many actual economic tools such as loans, printing money, or creating new forms of credit.

this financial mechanism. Prior to 1800 researchers must deal with financial systems which are often diverse incomparable and bear less resemblance to the modern economy. Moreover, elements of interstate and global finance are still in the formative stages. Third, as one goes further back in time, one encounters greater difficulty finding information regarding crises. Most reliable financial periodicals do not begin their publication until some time in the nineteenth century making earlier trade and financial information impossible to systematically track. Last, and most importantly, international institutions begin to emerge in the nineteenth century. Murphy argues that they emerge as early as the mid-1800s but that negotiations to create institutions began in years or decades prior.[291] Since this dissertation is interested in the role of institutions, and particularly international institutions, beginning at a time prior to the genesis in international finance is helpful for looking at the conditions from which financial institutions emerged. The turn of the nineteenth century provides a starting point where the sweep of historical development in crisis response is taken into account so that the evolution of response actors can be better understood. For these four reasons this study begins looking at crisis cases beginning in 1800.

## If Change in the Response Actor Has Occurred, What Drives this Change?

If change has occurred in crisis response, to what can one attribute that change? This final research question speaks to the reasons that crisis response has changed over

[291] Craig N. Murphy, *International Organization and Industrial Change: Global Governance since 1850* (London: Polity Press, 1994).

time and is the next logical step in understanding crisis response. It is also the most difficult question to answer since crises take place in complex financial systems where it is hard to isolate specific variables. Thus, in answering this question, I will rely on economic trends and patterns that suggest what drives change. Relying on trends will provide an answer to this question consistent with the goal of the dissertation, which is to understand the broad patterns in crisis response. I will be focused on identifying trends in global capital and investment and how those trends affect response institution success.

It is necessary to discuss a few of my assumptions regarding the global financial system. Financial systems exist to redistribute capital to where it will earn the greatest returns. The better the system for redistribution is organized, the more capital moves from where it is not immediately needed to where returns are better. Institutions are vital to the movement of capital and can provide stable environments for investments to flourish.[292] If financial systems are operating effectively, the result is an increase in global financial interactions between individuals, firms and markets. Simply, an effective global financial system leads to increasing depth, breadth, and range of investment over extended periods, even if there are lulls or declines in the short term.

My assumption is that financial systems emerge to allow for the extension of finance in proportion to the existing system. Norms, rules and institutions are sufficient to keep the system functioning in a given context, and perhaps well beyond, but they are not of unlimited capacity. At a given rate of increase in the level of interaction, the institutions may prove inadequate and financial expansion and/or interaction may stress

[292] For example, legal systems are needed to regulate and enforce property rights.

the system. When the system is stressed, there is a more permissive environment for crisis. Our concerns about crisis response are largely absent when a financial system is functioning well even if it is expanding beyond the ability of institutions to manage. Only when crises emerge do we consider the responses and realize that institutions may be inadequate for the new environment of financial interactions. Therefore, moments of crisis also become moments of institutional change and innovation.

Financial interactions do not increase at some regular or constant rate. Although the secular trend is one of expansion, this expansion is uneven. I suggest that the times of rapid expansion are especially important. When financial systems experience significant bursts of activity that increase and intensify cross border interactions, crisis is more likely and flaws in responses are more probable. This is the case because crises are more able to spread through investment channels. Responses are likely to lag behind the changes in crises. Thus, response systems are more likely to feel strained, fail or be replaced when a burst of financial interactions draw markets closer together creating new financial conditions for crisis that require new duties and responsibilities for response actors.

In order to investigate what drives change in response, I will focus on understanding the dynamics of the global financial system throughout each time period and prior to each crisis. Though this will only allow for an understanding of broad trends in response change, it will permit me to answer general questions regarding the reasons that response actors change.

This study finds that responses change for crises that happen after periods of accelerated and significant financial expansion. This trend is named the global integrative dynamic (GID) and is identified as a process by which there are deepening ties between markets in the global economy. This project concludes that this process accompanies changes in the response system. Crises after significant financial expansion overwhelm response institutions and force institutional changes. However, this project will merely propose and suggest the existence of the GID based on general trends, but will leave the further detailed empirical development of this dynamic to later studies.

Answering the three research questions posed above will provide a much better picture of crisis response and further our understanding of the actors and institutions that try to alleviate serious problems in the global economy. An historical understanding of crisis response actors is a significant contribution to the literature because it will provide a basis from which to evaluate past, present and future crisis response and particularly what role institutions may play in the NIFA. To answer these questions effectively, this study proposes a conceptual model that has been derived from the last two centuries of financial crisis. But before explaining the model it is important to understand the theoretical tradition from which this model emerged.

## The Kindleberger/Minsky Model

Susan Strange once noted when discussing international finance literature that, "there is no conventional wisdom. Each individual can be his/her own pundit."[293] This is a fitting description of the literature, which directly and indirectly discusses the phenomenon of a financial crisis and response from various perspectives, many of which

[293] Strange, *Mad Money*, 18.

are ultimately contradictory. To examine the nature and evolution of financial crisis response, it is necessary to elucidate a path through the vast literature that exists in order and make some statements regarding the specific theoretical history from which this project will be based

Economists and those who study crisis from an international relations perspective tend to see financial crises somewhat differently. Liberal economists privilege explanations that center on crises as anomalous to the economic system and caused by misled governmental policies. This theme is certainly prevalent in the literature, particularly in the latest round scholarship dealing with the Asian Crisis which tends to treat crisis as a failure of domestic policy. This is also the perspective of the monetarist school which understands international linkages and propagation of crisis as the expansion of poor economic policies.

A few lesser-known economists, such as Minsky, see crises quite differently. He argues that they are endemic to a capitalist system. They are not irrational; they are not solely the result of poor domestic policies but are instead part and parcel of the financial system. One will recall that Minsky's financial instability hypothesis argues that capitalist finance happens rationally within a cyclical and speculative context.[294] This creates periods of instability where crises emerge. Crises are consequently a part of the capitalist mode of accumulation and therefore a systemic characteristic.[295] The business

[294] Minsky, "The Financial-Instability Hypothesis: Capitalist Processes and the Behavior of the Economy.", Minsky, *John Maynard Keynes*, 129.

[295] Minsky, "The Financial-Instability Hypothesis: Capitalist Processes and the Behavior of the Economy," 16.

cycle authors embrace this thinking. Most notably, Charles Kindleberger argues that crisis is part of the topography of global finance.

Kindleberger believes that financial crises are a "hardy perennial" that have endured through time and his main goal in understanding crisis is to attempt to discern any existing patterns. My goal is similar, with the exception that I am attempting to discern themes regarding response. Following Minsky's arguments about speculative cycles and the traditional theories of booms and busts, Kindleberger builds a model that discusses crises emerging in a series of stages.[296] This model is the basis from which I draw my understanding of the emergence of crisis and thus it is important to discuss in more detail. I believe crises are more then just the result of poor domestic policies, though policies and domestic irregularities can certainly contribute. Crises are a result of complex global processes and emerge within the context of an expanding global economy.

Kindleberger's model borrows heavily from Minsky's understanding of crisis but he elaborates beyond Minsky's argument. Kindleberger suggests that crises emerge and are resolved in a series of six stages.[297] First, there is an external shock or <u>displacement</u> that alters the market and creates a boom. For Kindleberger, displacements are not as grand as the industrial revolution but rather smaller events like acts of parliament that provided capital issues to increase railroad mileage. The importance of a displacement is

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[296] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*

[297] Ibid. Although the entire book is an expansion of his model, chapter 2 is the most concise discussion of most of the stages.

that it creates some conditions that change market expectations to being more favorable for investment. At some point this displacement triggers an expansion of credit and money. An expansion of credit and money is suggestive of a period of growth in three dimensions. First, size defined as how much money and credit is available. This is Kindleberger's most important variable: more actors get access to capital because it is plentiful and cheap.[298] Second, there is a growth in scope. This indicates that the locations that money goes expand. In other words, as this expansion accelerates, individuals and firms begin to search for investment opportunities, sometimes domestic, but often as Kindleberger shows, these are international. Third, Kindleberger alludes to, but does not directly address the issue of interconnection or density of financial networks. As the size and scope of credit and money expands, markets become more interconnected through the spread of investment both domestically and abroad. This variable is central to a political understanding of crisis and my model.

Kindleberger describes the next stage as euphoria, where plentiful capital not only begins looking for more profitable outlets but concerns about risk decline. While speculation usually begins on solid investments, both domestically and internationally, the longer the euphoric period goes on, and the longer credit and access to capital continues to expand, the more risky the investments become. Kindleberger notes that eventually, "speculation tends to become detached from really valuable objects and turns

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[298] By "cheap," or "cheap money" it is suggestive that the criteria for borrowing is desirable. For example, the interest rate or loan terms may be particularly attractive.

to delusive ones."[299] So investments on solid assets such as real estate or factories turns to investments on portfolio assets such as securities or even weirder, more ephemeral prestige goods such as tulip bulbs. The mood turns to be one of getting rich quick, many people are sucked into the excitement and often lose sight of how the process of economic returns on investments work. This is the classic bubble economy or the condition of "overtrading" commonly discussed in the economic literature.[300] Kindleberger argues that this euphoria is often spread beyond domestic markets through international capital linkages or even psychological connections.[301]

As credit becomes "overextended," meaning beyond the level at which firms and individuals are able to cover their liabilities, a period of <u>distress</u> sets in. This stage really represents the first sense of problems to come. There may be indications that prices are leveling off, but the main characteristics of the distress is the realization in some segment of the population that the market is fragile. The fear is self-reinforcing, but not yet realized. At this point "insiders," or those more educated on market behavior, begin to remove their investments and seek liquidity. Since the market is still mostly in a euphoric period, there is no shortage of those willing to buy out the assets insiders are able to sell.

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[299] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 16.

[300] For a discussion on bubbles see, Robert Flood and Peter Garber, *Speculative Bubbles, Speculative Attacks, and Policy Switching* (Cambridge, MA: MIT Press, 1994).

[301] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 16.

At this point Kindleberger suggests that there is usually an event that changes expectations such as the failure of a specific firm or a bank. The distress, coupled with this event causes the next stage, or what he terms a revulsion. Revulsions are the point in his model where the expectation that the euphoria will continue disappears. This change in expectations is followed by a drastic change in actions. Investors begin getting out of their investments and move to liquid assets, often at an alarming rate, and banks begin to reconsider their lending practices. Revulsions create the necessary environment for a crisis to emerge. The fear builds, the market becomes fragile and a mass movement out of objects of speculation gains momentum. The last stage, the crisis, takes place when prices fall in an accelerating spiral. Selling begets more selling and everybody tries to get out before the door closes. The crisis can combine features of a crash, crudely defined as a collapse in prices, and a panic, a fear based reaction.

Kindleberger examines his model over the commonly accepted list of crises that occur between 1618 and 1997. He concludes that his model, while unable to predict the specifics of a situation like what action will cause a displacement or what the object of speculation will be, provides us with a sketch of the general anatomy of financial crisis. He even suggests that there may be a seventh stage of contagion, where the crisis is propagated across sectors domestically or internationally.[302]

In terms of response, Kindleberger identifies three possible scenarios. The first is a market response where the market is allowed time to regroup without any external intervention. While this has happened historically, it is rare and often the recovery is

[302] Ibid., chapters 6 and 7.

long and difficult.[303] Second, Kindleberger identifies the role of a domestic lender of last resort. As the discussed in chapter one, the lender of last resort concept is hundreds of years old, dating back to Henry Thornton and Walter Bagehot and usually defined as a financial agent providing liquidity at a time when market actors are unwilling to do so because of the enormous amount of risk involved.[304] Third, Kindleberger discussed the role of an international lender of last resort, which he defined as an actor that exists outside the domestic market that was experiencing the crisis, but one that provides necessary liquidity to address the conditions in the crisis economy.[305] While he identifies the importance of a response,[306] response is not included in his model.

Kindleberger identifies what I think are very central dynamics in the crisis process. The most intriguing for the political scientist is that some change in expectations, perhaps brought on by a non-economic event, such as war or a new law can cause a displacement or revulsion to emerge. Therefore, some political actor can start the process. My study is focused on the actions of political actors to remedy the crisis. I suggest that it is often a political actor, specifically an institution designed with some

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[303] Ibid., chapter 9. Kindleberger also discusses methods that can be employed to help the market workout such as stalling or declaring a bank holiday.

[304] For the beginning discussions of this concept see Bagehot, *Lombard Street*. Thornton, *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*.

[305] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, chapter 11.

[306] In fact, Kindleberger noted the lack of a sufficient lender of last resort during the 1930s was a significant contributing factor to the length and severity of the Great Depression. See Kindleberger, *The World in Depression 1929-1939*.

combination of political and economic authority, that becomes the agent to remedy the crisis. This project therefore begins where Kindleberger's model ends.

The Kindleberger/Minsky model is the foundation of this dissertation for several reasons. First, the basic assumption of this line of inquiry is that crises emerge as a result of pressures that generate within the global economy, not as an anomaly or because of specifically errant domestic policies. Second, Kindleberger's model identifies expansion, consisting of three components (size, scope and density) as integral to causing the crisis. I will demonstrate how expansion in the global economy conditions response and particularly the nature of the response actor. As global economic connections expand, the nature of the crisis changes and this necessitates a change in the response actor. I further agree with Kindleberger's intent to show how financial crises have much in common, but for the purpose of this dissertation, his model addresses questions that only start to examine the response process.

## A Model of Crisis Response

The Kindleberger-Minsky model suggests that crises have in common some basic characteristics that can be identified over history. If there is some regularity to the ways in which crises emerge, it is reasonable to suggest that there may exist some pattern or regularities in crisis response. Since financial crises are frequent occurrences, they provide scholars with a large sample from which to observe patterns and draw conclusions regarding how they have been addressed.

The Kindleberger model suggests financial crises are born in each era from many of the same problems. While objects of speculation may change, from tulips to real estate, or from real estate to derivatives, the pattern of crisis is relatively stable. A change in expectations starts the cycle of expansion and another change in expectations reverses the expansion, creates a contraction and thus, a crisis. My model begins where Kindleberger's leaves off by identifying several stages of response that are suggested by examining historical cases of crisis.

Since the ramifications of serious financial crisis can be detrimental to the prosperity and economic stability of the business community, a state economy, or even the entire financial system,[307] crises elicit responses. The first stage of the model may be referred to as <u>response</u>. This is the first thing that happen after a crisis emerges. It will be recalled that by response I mean some actor within the system will emerge to provide liquidity or the necessary tools that will alleviate or better the crisis conditions. Responses can come from a variety of actors who have some stake in resolution. Both public and private actors could contribute to a response. Private actors include banks, banking consortiums, very powerful firms, or some entity that finds it necessary to alleviate crisis conditions in order to salvage their own profits, market share, or power. Domestic public actors can include a government agency or department, such as the treasury department where political goals are the defining characteristic of the actor, or a government chartered, privileged or central bank, where the defining characteristic of the

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[307] This, of course would be the case when the state in crisis was the primary economic actor in the financial system.

response actor is economic financing or economic stabilization. International actors include domestic actors of another state intervening to respond to a crisis or offer assistance, or institutions that have a larger membership and are chartered with the intent of providing some management, oversight or stability for the global economic system.

The most important characteristic that these institutions share in their role in the response system is that they are actors that control the tools that help end or reduce the ferocity of the immediate crisis. These institutions are perhaps created to serve other purposes, but can be altered and given powers to address crisis conditions. In fact, one would expect to see response institutions getting some benefits or powers from the state either during or after the crisis period. It is also likely that when a crisis emerges several actors will attempt to respond. Of these, some will be more successful than others due to their capacity and perhaps due to the authority or powers given to them by the state. Crises can force moments of institutional innovation as states and private actors attempt to deal with a difficult problem and fragile system. This innovation is represented in two ways; either existing institutions are refined to better respond or new institutions supplant the existing ones. Depending on the circumstances, innovation can require either vesting more power in existing institutions or the outright creation of new ones.

When they are successful, the response actors who managed the last crisis or stabilized the economy increase their primacy and importance in the response system. This leads to the second stage of <u>reliance</u>, where an institution becomes the expected responding actor when another crisis emerges. This can happen automatically as the institution retains the abilities and capacity to respond that it acquired gotten during the crisis. But it is also likely that institutional selection can be more directed and the characteristics that made the institution more integral to the response system are both recognized and expanded after the incident. In some cases, a new institution is created since the crisis exposed the problems in existing response actors that caused existing actors to become delegitimized. Often the state permits, forces or even creates an institution to act as the crisis manager. The important result of successfully handling a crisis is the longevity that an institution gets in the system.

Over time the reliance on specific institutions deepens and response duties are codified in the actors that have shown the ability to be successful in previous crises. Reliance is also indicated in the dissemination of an institution. This suggests that a successful domestic crisis response architecture may be replicated in states that do not possess such a system or institution, especially when it is recognized that another state has avoided or weathered a crisis more easily. Response systems are created because there is a codification of and reliance on specific institutions. This reliance assumes that further crises will be averted or better managed because there are more adequate institutions vested with better-suited crisis managing powers.

Unfortunately, the ability for actors to remain successful in crisis response is hampered by the tendency of financial interactions to grow over time. This stage is called expansion and is the phase that seems to drive change in the response system. Even though institutions are created with the appropriate powers and capacity to address crisis, crises tend to change over time. They become bigger because the financial system expands along three criteria: size, scope and density. Size is an expansion in the amount of capital and credit within the economic system. Scope is the inclusion of more states interacting in the global economy. Last, density suggests that the interactions between states and economic entities are more frequent and that the economies of these states are thus more connected to the economies of other states.

I suggest that an expansive phase, which I term the global integrative dynamic, will draw states closer together through greater networks of investment. Responses must be able to deal with the new environment for crisis. If they are unable to do so, the crisis conditions will not be alleviated and the problem will deepen. This will put enormous strains on the response system that has been institutionalized. When the response system fails a search for new mechanisms and actors will eventually begin. In fact, during periods of greatest crisis, when the global integrative dynamic outpaces institutional development, one would expect many actors to attempt a response, but none to be successful. If an actor emerges as successful, they will supplant older failed response mechanisms and perhaps change the primary method of response. Thus, subsequent sets of crises generate more rounds of mechanisms, institutions and actors to alleviate the crisis. As time goes on, crisis response requires actors who are capable of dealing with the larger and more complex economic systems.

The above discussion identifies several stages of response that are indicated in the model. Simply, a crisis causes a response (response stage), when the response actor is successful it is entrenched in the system and relied on (reliance stage) for future crises. This continues until the point where an expansion, indicated by an increase in the size, scope and density of a financial system, causes crises to outpace the design and capacity of the primary response system (expansion phase). In other words, the response system lags behind the pressures of the global political economy. Because of this the old system becomes overwhelmed, problematic or even delegitimized, and is either relegated to a secondary role in crisis response, or less likely, completely loses relevance in the system.

Three aspects of this model need to be better explained. First, since the model suggests that there is a general pattern in crisis response that is tied crises becoming bigger events, it is important to understand this process. This is what I term the global integrative dynamic (GID). This dynamic is defined as a process by which there are deepening ties between markets in the global economy. The GID is meant to identify an on-going process of global integration.

As this process continues, a more complex financial environment is created. In each period I examine there is a rationale behind the growth in financial interactions. In the nineteenth century, the integrative dynamic is commonly called industrialization and is expressed as a period where innovations in transportation, communications and mechanization drove global investment. In the interwar period this process is often ignored, but the integrative dynamic is expressed through reparations and loan networks. In the post-war period, the integrative dynamic is seen in a widening of investment to the developing world. Last, in the current period the integrative dynamic has garnered the name "globalization." While this is a highly disputed term, it generally refers to an expansion and deepening of financial, political and social interactions driven by the widespread acceptance of global capitalism and technological innovation. Each of these processes share the characteristic that they integrate financial systems. The GID is a general term used to name the existence of this dynamic across time, regardless of the specific nature of the integration.

The second important aspect of the model is that change in crisis response can happen either slow and evolutionary, or it can happen suddenly. One can identify crises that overwhelm or strain the response system to such a point that it fails. These crises are most important for the model since they are the moments when the search for new response mechanisms and new financial architectures are most pronounced. I identify these crises as "key crises." They are central for understanding the evolution of responses because they are moments where the primary response actor truly changes. Each chapter of this dissertation identifies a key crisis. In the period from 1800 through 1997, I identify three key crises: the crisis of 1873, the *Credit Anstalt* Crisis of 1931 and the debt crisis that began in 1982.

Last, this model indicates a two-part process in the ever-evolving system of crisis response. The "response" and "reliance" stages suggest that there is a process of response creation. The "expansion" stage and the existence of a key crisis form the other part of the process where the primary response system becomes delegitimized. In the creation phase, the primary response actor is able, or mostly able, to provide a response consistent with the crisis and innovation "tweaks" the response mechanism. In the delegitimization phase, the primary response actor is less able to provide an adequate response. The actor comes under scrutiny most notably in domestic or international political forums and is criticized for its inability to do better. Subsequent crises continue to challenge the capacity of the primary response actor until the primary actor moves from the center stage to a supportive role in the response system.

This model was derived from a careful investigation of financial crises since 1800. Most of this dissertation will elucidate the derivation of this model by demonstrating the characteristics of each financial crisis and show how a pattern in crisis response is observable.

## How this Study Will Proceed

The goal of this dissertation is to understand the trends of crisis response through history. It builds on the use of historical analysis seen in the work of Friedman and Schwartz, Kindleberger and many IPE scholars.[308] It will consider the broad trends of crisis response by examining a large sample of financial crises instead of providing a deep analysis of any one crisis. Through this historical analysis this dissertation will show how international responses have evolved over approximately the last 200 years. Besides building on a strong tradition of many economists and IPE scholars, an important method in social science research. In a widely cited article, Alexander George elaborated on the value of case studies for political science research. He argued that a method of structured focused comparison could be both methodologically sound and provide valuable theoretical insight if cases were chosen inductively and compared

[308] For example see Helleiner, "When Finance Was the Servant: International Capital Movements in the Bretton Woods Order.", Pauly, *Who Elected the Bankers? Surveillance and Control in the World Economy*.

systematically.[309] Thus, case selection must be based on a carefully defined class of events and comparison must be consistent across cases.

Since the definition of financial crisis is somewhat disputed, the choice of crises will rely on the commonly accepted crisis periods from 1800 until 1997. While it is in doubt whether some of these cases are specific types of crisis,[310] they all meet the criteria set out by the Eichengreen and Portes definition in that they are disturbances in financial markets, accompanied by falling asset prices and debtor or intermediary insolvency, and the problems spread throughout the domestic or international markets disrupting capital allocation both home and abroad.[311] In total between 1800 and 1997 there are 28 periods of financial crisis identified in the literature.[312] This project will discuss each one of these crises and look at the response actors in each case.

Each case will be examined systematically and particular attention will be paid to three different variables. First, what is the level of economic activity in the time period

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[309] Alexander George, "Case Studies and Theory Development: The Method of Structured, Focused Comparison," in *Diplomacy: New Approaches in History, Theory, and Policy*, ed. Paul Gorden Lauren (New York: The Free Press, 1979).

[310] For example, Schwartz argues that there hasn't been a financial crisis since 1873 in Great Britain. She bases this statement on her specific distinction between real and pseudo crises and lack of a true bank run in Great Britain since 1873. While it may be disputed whether an event is a "panic," "crisis" or "pseudo-crisis" there is no dispute that there have been financial events that resemble the definition of crisis that this study employs. See Schwartz, "Real and Pseudo-Financial Crises."

[311] Eichengreen and Portes, "The Anatomy of Financial Crises," 10-11.

[312] Some of these are individual financial events, some are a series of events happening in a short time period. The dissertation will consider each of these crises but some will be grouped into periods because of the very close connections between them.

immediately prior to the crisis? I will specifically identify trends in capital and credit in the domestic or global economy. That is, whether there seems to be an expansion or contraction of capital and credit near the crisis period. The amount of capital and credit are indicative of the amount of cross-border investment and thus, indicative of whether the global economy is expanding and becoming more interconnected and whether the global integrative dynamic is accelerating. An examination of the primary response actor will yield two variables that are characteristics of the response actor. The second variable is level of establishment or understanding where the response actor falls on the public/private characteristics scale. The third variable is locus of control, measuring the response actor characteristics on the domestic/regional/multilateral scale.

Understanding the actor-type variables will help me answer the first and second research questions: Have responses changed? And how have they changed? Understanding the level of integration will help me explain what may be causing the change in response actor over time. It will be demonstrated that change in financial crisis response is generally driven by the expansion in the global economy along three criteria: size, scope and density. As expansion accelerates, it is likely that the nature of the crisis will expand beyond the capacity of the primary response actor and thus force an institutional change in the response system.

The next three chapters examine each crisis period in detail. We will see that response systems include a mixed bag of private, quasi-private and public institutions. These institutions codify over time, and show directionality in the kind of actor that responds to crisis. Actors move in level of establishment from private to public actors, and in locus of control from domestic, to regional, to global actors.

Chapter 3

# THE LONG NINETEENTH CENTURY

Financial crises are a prevalent throughout the nineteenth century happening approximately every eight to ten years. Significant changes in domestic and the international economy can be partially blamed for their frequency since some of the most dramatic changes in economic interactions took place at this time. By the middle of the century states were significantly linked through trade, international investment and finance and crises were often transmitted from one state to another because of these linkages. By the end of the century financial networks were global and tightly interconnected.

The nineteenth century financial community was aware of the far reaching damage financial crises could cause, therefore measures were often taken to quickly resolve a domestic crisis or to secure domestic markets from crises in neighboring countries. As a result, during this century the crisis response system evolves considerably, and a large number of response actors and institutions address crises. Actors with greater ability, legitimacy and resources are created or given greater powers through legislative acts to intervene in jittery and unstable markets. But, by the end of the century one institution, the central bank, emerges as the primary response actor.

The first "central" bank was created in England in 1694 with the charter of the Bank of England. The powers of the Bank of England significantly evolved over the next two centuries until a modern central bank, with the powers we now associate with that institution, was finally formed.[313] Crises were formative experiences for the Bank of England because its powers and duties were expanded after nearly every crisis that England endured. By the end of the century, the Bank's ability to mitigate crises helped spread the idea of central banking and these institutions became desired by other states. Because of its success, the Bank of England was used as a template for creating central banks all over the continent and eventually all over the world. By 1900 all of Europe and most core countries had created central banks. While a few stragglers remained, notably the United States, this institution became widely regarded as a necessary component of the domestic financial system.

This chapter examines financial crises and international responses during the "long" nineteenth century. It will do so by looking in detail at each crisis from 1800 until 1914. Most every crisis evolves in a manner consistent with Kindleberger's hypothesis – there is first an expansion in credit and capital, then a contraction,[314] and last there is a response to quell the crisis. My analysis will identify the characteristics of the expansion, contraction, and most importantly it will identify the response and what actor provided the necessary economic tools to alleviate the crisis situation. Sometimes these response

[313] These powers are usually considered to be control of the discount rate, monopoly over note issue and facilities to act as a domestic lender of last resort.

[314] The contraction phase is of course synonymous with "crisis."

tools are successful; sometimes they are less so. When the responses are successful, the institutions providing them are strengthened and given more political legitimacy to respond to subsequent crises.

In this time period, the first crisis response system is gradually coming into focus. Early in the century a host of actors are involved in the response process. These include governments, private banks and private banking syndicates. By mid-century, the nascent elements of modern central banking powers are created in the Bank of England. As crises continue, the powers of the Bank of England to address crisis are expanded. In the crises of 1873 and 1890, the Bank of England is able to mount a successful response that mostly safeguarded the British market from the crisis, exemplifying how effective the central bank could be for addressing crises.

A two-tiered response system emerges. States with central banks rely on these actors to address crises, and seem to weather the problems well. States without central banks, or without properly equipped central banks suffer longer and more severely. The crisis of 1873 is presented as the key crisis of the period because states with modern central banks escape the devastation of the first truly international financial crisis. Unfortunately, there are few of these banks in existence in 1873, but the success of the Bank of England at mitigating crisis conditions leads to this response system being replicated throughout Europe and the core countries in the final quarter of the nineteenth century. This task is complete at the beginning of the twentieth century when the United States creates the Federal Reserve System. There is strong evidence that the creation of the Federal Reserve System was heavily influenced by the problematic private responses to the crisis of 1907.[315]

Nineteenth century crises are in and of themselves interesting events. Early in the century it is clear that crises are not easily contained within domestic borders and that crises can transmit through investment channels disrupting several economies at one time. But crisis response is mostly a domestic event. There is some cross border bilateral assistance and financial institutions act differently domestically when a crisis affects a neighboring country, but these actions are the exception, not the rule. Crises are widely seen as events that require the response of domestic institutions and actors. This also changes over the course of the century. As investment linkages become more dense and as aggregate capital and credit amounts grow, crises become more international and savvy response institutions act bilaterally as well as domestically.

The central goal of this chapter is to demonstrate the long creation period of the domestic central bank as a crisis response actor. By the 1920s, the central bank is a firmly established domestic institution and the powers of crisis response are fully vested in core country central banks.[316] The period in question, which I have termed the "Long Nineteenth Century," considers crisis up to and including the crisis of 1914. The crisis of 1914 is the break point for several reasons. First, the creation phase of the central bank responses system seems complete by 1914 because the final core country, the United

[315] O.M.W. Sprague, *History of Crises under the National Banking System* (New York: August M. Kelley, 1910; reprint, 1968).

[316] It should be noted that due to cultural and historical difference between countries, the composition of central banking functions do vary among these institutions.

States, adopts a central bank. Second, the crisis precedes a World War, after which there is a significantly different financial environment and the expansion and integration of the nineteenth century is interrupted by this event. The financial system changes considerably in the period following the War, therefore, early twentieth-century crises (1907 and 1914) hold more in common with their nineteenth-century relatives than the subsequent twentieth-century crises.

This chapter will proceed in three sections. First, it begins with a brief introduction to the nineteenth-century global economy. Considerable changes in global finance, particularly the expansion of financial interactions between states and the global increase in capital, are defining characteristics of this time period. Investment and capital movements suggest a global integrative dynamic spurred on by the global spread of industry. This chapter will then look into each crisis or crisis period examining the expansion that helped create the crisis, the reasons for the contraction, and the mechanisms and institutions providing the responses. The point of examining each crisis in detail is to evaluate the nature of the response actor. By doing this, the chapter sketches out two dynamics. The first of which is an examination of the expansion of investment and finance in the periods prior to each crisis. The role of expansion within each period contributes to the overall description of global economic changes in the nineteenth century. The second dynamic investigated is the change of response actor from crisis to crisis. Finally, the third section of this chapter attempts to draw together the disparate cases that make up the nineteenth century and suggests the reliance and proliferation of a specific response actor.

In terms of the dissertation model, this chapter shows a crisis-by-crisis evolution of the response system. The system progresses from a mixed actor system, not clearly privileging one actor but relying on private banking syndicates and a variety of response actors, toward relying on the creation of quasi-public and public domestic actors in the form of central banks. The key crisis of 1873 identifies the inability of a variety of actors to address the crisis in many countries, and the success of the central bank's handling the crisis in England. From 1873 until 1914 most core countries adopt central banks with power sufficient to provide emergency liquidity during a financial crisis.

## The Nineteenth-Century Economy

### Industrialization: The Global Integrative Dynamic

The nineteenth century saw many changes in the global economy. The world experienced an impressive growth in international trade and advances in both domestic and international finance. Both trends emerged as a result of advances in technology, communications, transportation and mechanization; the process commonly referred to as industrialization. As the global economy grew more interdependent, it would often experience growing pains. In the nineteenth century financial crises are prevalent.[317]

[317] Charles Poor Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises. 3rd Ed.* (New York: John Wiley and Sons, 1996), 105-208. The issue of the Eurocentrism of the data set needs to be addressed briefly. The dissertation relies on Kindleberger's identification of international financial crises. Kindleberger's data set is based mostly on European crises. There are two reasons for this. First, the nineteenth century global economy was predominately steered by European economic interests. Thus, European crises are more salient for understanding financial crises in this period. Second, the data for non-European economies is less reliable than it is for European

The first seventy-five years of the nineteenth century the global economy expands at a constant rate, experiencing a very significant burst in capital movements starting in 1870.[318] This expansion is followed by a depression, most significantly felt in the United States. Investment is curtailed globally at first, it recovers slowly in the last 25 years of the century and expands dramatically in the first decade of the twentieth century.

The advancement of the British economy was the driving force of economic growth in this period. By 1750 Britain was already a highly commercialized society and the biggest market in Europe.[319] British textiles were in high demand abroad and the export of cotton and wool cloth greatly expanded the economy. With the growth in demand for textiles came a desire to produce them more efficiently and this drove technological innovations in the textile industry. The advances did not stop there. Soon mechanization spread to other manufacturing industries such as iron and steel production and eventually to other geographical locations.[320]

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states. It would be an error not to recognize the limitations of Kindleberger's dataset and the model that I derive due to the emphasis on European cases. Experiences from independent economies in Asia, particularly Japan and China, are necessary for a more complete picture. However, given the importance and centrality of Europe in the global economy, the Eurocentrism of both Kindleberger's cases and my model are justified at this early stage of scholarship.

[318] Arthur I. Bloomfield, *Patterns of Fluctuation in International Investment before 1914, Princeton Studies in International Finance, No. 21* (Princeton, NJ: International Finance Section, Department of Economics Princeton University, 1968), 8-9.

[319] Thomas D. Larison and David Skidmore, *International Political Economy: The Struggle for Power and Wealth*, 2nd ed. (New York: Harcort Brace College Publishers, 1997), 40.

[320] Rondo Cameron, *A Concise Economic History of the World* (Oxford: Oxford University Press, 1989), 195-200.

The technological advances of the nineteenth century were quite impressive. Advances in transportation complimented those in manufacturing because the steam engine was common to both sectors. Railroads spread throughout Europe, Asia and North America, making transportation easier and attracting enormous amounts of investment capital to this sector. Water transportation was facilitated by extensive canal construction and the refinement of steam power.[321] Changes in communications would follow, and by halfway through the century there would be the international expansion of the telegraph and the invention of the telephone. These changes in transportation and communication would greatly enhance cross border financial flows and particularly brought long-term capital to "newer" markets in North America that held the prospects for expanded demand and industrial creation.[322]

Industrialization was not the only innovation. Fearing the decline of the agricultural sector and facing falling export prices, Britain also led the way in creating a liberalized trading order by repealing the Corn Laws in 1846. This changed the nature of the international trading system, increased economic linkages and ushered in a period of free trade throughout Europe and the world. The financial sector also experienced drastic changes. By the end of the nineteenth century there was a near universal acceptance of the gold standard, banking networks were more integrated both domestically and internationally, prominent, state privileged banks were slowly developing modern central

[321] E.R. McCartney, *Crisis of 1873* (Minneapolis, MN: Burgess Publishing, 1935).

[322] Bloomfield, *Patterns of Fluctuation in International Investment before 1914*, 5.

banking functions, and foreign investment soared to unprecedented levels, covering much of the globe.[323]

Prior to 1914 portfolio investment was a more significant component of capital movements than foreign direct investment and bond transactions were the biggest portion of capital movements. These bonds were primarily issued to increase infrastructure and funded projects such as railroad construction, utilities and public works–necessary components of industrializing countries.[324] Bonds were both issued as government bonds and private bonds, but usually the private bonds carried government guarantees.[325] Thus the role of governments promoting capital imports and increasing the desirability of capital flows was significant; however, most of the financing came from private sources.[326]

The growth of foreign investment is one of the most important developments for understanding financial crises of this period. The nineteenth century was a time of great expansion that led to the industrial development of Europe and North America. The complex industrial, transportation and communications advances of the era created a need for financial services and institutions. In addition, global industrial development also

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[323] James Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 2nd ed. (New York: Harvester Wheatsheaf, 1995), 120.

[324] Bloomfield, *Patterns of Fluctuation in International Investment before 1914*, 4.

[325] For example, private railroad company bonds had significant government subsidies and land grants tied to them. In that way, these bonds carried certain government guarantees even though they were issued by private companies.

[326] Bloomfield, *Patterns of Fluctuation in International Investment before 1914*, 4.

generated vast amounts of wealth. Wealth generated by industrial development often looked for more profitable investments and much of it ended up invested in foreign markets, particularly the developing countries of North America (Canada, United States) because these markets provided the hope of higher returns than could be realized domestically.

The export of capital in the nineteenth century reached unprecedented levels. While the aggregate measurement of global capital movements are lacking for the nineteenth century, particularly before the 1860s, the overall trend is clearly expansionary with contractions occurring after significant financial crises.[327] England and France led the world in capital exports. It is estimated Great Britain accounted for about 40% of total foreign investment, investing approximately $20 billion in foreign ventures. France neared $10 billion by the beginning of the twentieth century.[328] The institutions to manage this high flow of capital developed with the increasing rate of investment. Financial innovations such as joint-stock companies[329] limited liability companies and

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[327] See Ibid., 8-9, Suter, *Debt Cycles in the World Economy: Foreign Loans, Financial Crises, and Debt Settlements, 1820-1990*, 49, for more detailed statistics regarding these trends.

[328] Cameron, *A Concise Economic History of the World*, 285.

[329] Joint stock companies actually developed several hundred years prior to the nineteenth century. They were also heavily controlled by domestic legislation because they were considered responsible for creating "bubbles" that would eventually "pop" and cause widespread economic problems. In the nineteenth century, the restrictions on joint-stock companies were relaxed in countries across Europe and a resurgence of this financial agent provided significant impetus for investment. See Charles Poor Kindleberger, *A Financial History of Western Europe*, 2nd ed. (Oxford: Oxford University Press: 1993), 190-207.

central banking helped facilitate the flow of capital. Some of these institutions were also responsible for more risky investment ventures as not all companies were created on the most stable foundations. The vast increase in the amount of investment, individuals hoping to get higher returns, and an increase in the number of investment agents, produced an environment where crises were able to flourish. The changes and expansion in credit and capital will be elaborated on in the discussions of the individual crises that follow, but the general trend for this period is that international connections began to truly draw states into an interdependent global economy that more closely resembles the modern political economy. While evidence of interlinkages between states exist for centuries prior the nineteenth century. The combination of expansion in investment, trade, industrial capacity and communications worked together to make a far more interdependent global economy.

## Financial Crises in the Long Nineteenth Century

The following section chronicles the crises of the long nineteenth century. In each crisis three dynamics that will be discussed. First, I will elaborate on the expansion of capital and credit prior to the crisis. Consistent with some of the economic crisis literature, particular the Kindleberger/Minsky model, this expansion is part of the crisis cycle. Second, I will discuss the reversal of this expansion by examining the trigger and contraction of the economic system. This is the actual acute phase of the crisis when markets fall into panic and often require some sort of liquidity to be calmed. This phase is central for understanding the third dynamic, the response. As the crisis unfolds, actors will provide the necessary tools to alleviate the crisis conditions. Identifying response actors and demonstrating that actors change is central to the thesis discussed here.

Early in the century, crises are prevalent but responses are *ad hoc* and come from many actors. By mid-century the codification of the central bank is more observable, as is its role in crisis response. By the end of the century, the central bank is the primary response actor and states that have central bank responses endure crises better than those without. This leads to a wider adoption of central banks by the last decades of the nineteenth century and into the twentieth century, therefore the creation of a response system is observable. This chapter will demonstrate case by case how the central bank got these duties and expanded these duties after each crisis.

### The Crisis of 1810

Context. As a by-product of the domestically integrated and sophisticated state of the British economy, by 1800 the most notable cases of crisis are in the British system. In order to fully understand the crisis of 1810, it is important to briefly examine the final crises of the 1700s. At the end of the eighteenth century England experienced several serious financial crises that created the credit and currency circumstances that would become important contributing factors to the first crisis of the nineteenth century. In addition, these eighteenth-century crises established response tools that would be used in later crisis periods. One serious problem at this time was the British "country banking" system. Country banks were banks located outside the city limits and legal jurisdiction of London. The distinction is important because country banks were not subject to the same laws that limited note issue in London. This meant that country banks had the ability to expand the money supply and at times when currency issue from London was constrained, these banks stepped up to fill the gap and expanded available credit.[330] The problem was that many times country banks issued notes that had questionable assets backing them and the British credit system fell into crisis several times after 1750 due to country bank failures.[331] Thus, because of the country banking system, there was little governmental control over the money supply and the credit system in the late 1700s.

In 1797 the conditions in England were ripe for a financial crisis. Napoleon was advancing throughout Europe and threatening to expand his campaign into British territory. To fend off the attacks, the British were in need of funds since the government was sending vast sums of gold to subsidize continental governments in their fight against Napoleon. These sums amounted to over £25 million between 1793-1795. All of these funds were coming from the Bank of England, which as the major commercial bank in England was also trying to provide for business needs and meet demand from both London and country banks. As a result of trying to fund both business activities and provide money for the government to send abroad, Bank of England specie reserves dropped considerably and the Bank considered suspending payments. With reserves near bankruptcy levels and the prospect of a French invasion, the Bank of England abandoned convertibility of the pound and Parliament passed the Bank Restriction Act in 1797. This

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[330] Ibid., 81.

[331] A Andreades, *History of the Bank of England*, 2nd, Translation ed. (London: P.S. King., 1924), 172.

Act took London banks off a specie standard and permitted the use of an inconvertible paper currency throughout the country.[332] This measure successfully protected the small amount of specie left in the Bank of England but changed the currency system by de-coupling note issue from reserve specie. This act allowed the Bank of England to manage note issue in London.

As the nineteenth century opened, the Bank of England's coffers were filling with gold again. The Bank Restriction Act was still in place and there was no connection between specie and notes. Thus, country banks were still able to issue currency and the Bank of England controlled issue in London. The Bank Restriction Act of 1797 would be one of the primary engines of capital expansion and a main cause of the crisis of 1810.

<u>Expansion</u>. Although the Bank Restriction Act was to expire only a few months after its passage (June 24, 1797), cash (i.e. specie) payments were not fully resumed in England for over 20 years. At first the inconvertibility of the British Pound eased the burden on the Bank of England's reserves caused by the demands of war because it had the effect of allowing the government to borrow excessively to defeat Napoleon. But inconvertibility caused its own problems. In the late 1700s political problems had closed most European and European colonial ports to English goods. The English responded by closing their ports to Spanish, Italian and French goods. When France invaded Portugal and Spain, their colonies became effectively independent and this opened up these formerly closed markets to the English. By 1808, the opening of these markets and the

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[332] Ibid., 187-202.

new outlets for English goods caused massive speculation and a boom in the creation of joint-stock companies in England. These companies drove a wave of investment in all sorts of undertakings, from breweries to canals.[333]

The speculation became global in scope and after the defeat of the Portuguese, British investment flowed to newly opened South American ports. The Bank of England responded to the boom by expanding note issue; thus, encouraging further speculation. This expansion of notes from the Bank of England led to a similar expansion from the country banks and an exponential increase in the number of country banks. Since there was no link between specie and notes, there was nothing to stop any of these agents from expanding their issues, but in retrospect, Clapham blamed the speculative mania on this rapid expansion and particularly on the country banks for fueling the mania.[334]

Trigger and Dynamics of Contraction. Due to the ease of obtaining credit, it soon became apparent that English merchants had accumulated more liabilities than they could possibly cover. Prices began to fall and Napoleon's armies were making it increasingly difficult to conduct business overseas. At the same time a report was issued by the Bullion Committee, a government appointed committee to examine the simultaneous falling price of the British Pound relative to gold and the falling rate of foreign exchange.[335] The Bullion Report made the connection between the increase in un-backed

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[333] Ibid.

[334] John Clapham, *The Bank of England: A History*, vol. II (London: Cambridge University Press, 1944), 21.

[335] Andreades, *History of the Bank of England*.

note issue by the Bank of England and the fall in the price of the pound relative to gold. It suggested returning to a specie standard. The speculative wave hit its peak just as the Committee's report was to be circulated. Immediately there was a series of bank failures and many respected financial houses closed.[336]

Response. While the validity of the Bullion Report was still being considered, the crisis raged on; prices fell, bankruptcies were widespread and the government took action. It responded by issuing £6 million in Exchequer Bills in April 1811. Exchequer Bills are a short term lending device where the government issues marketable securities to firms with collateral. The goal in 1811 was to relieve the distress of exporters and manufacturers unable to sell their goods because of the barriers erected by Napoleon's armies.[337] The use of Exchequer Bills was a common solution to crises in the late eighteenth century. In the crises of 1793, 1797 and 1799,[338] the issuance of such bills successfully calmed the markets. It was therefore reasonable to assume that the issuance of Exchequer Bills would once again ease the crisis.

Unfortunately, the issue of £6 million Exchequer Bills in 1811 made credit even easier to obtain, exacerbated the devalued currency problem and a serious depression settled in. Clapham notes, "Few years were bleaker than 1812." England was at war and naval blockades were crippling British industry, Luddites were smashing their machines,

[336] Clapham, *The Bank of England: A History*, 29.

[337] Ibid., 33, Kindleberger, *A Financial History of Western Europe*, 143.

[338] The 1799 crisis took place in Hamburg that spilled over into Liverpool.

prices were stagnant and there was a shortage of food.[339] Napoleon's defeat at Waterloo would stop the serious decline. By 1816 the economy showed signs of improvement and the Bank of England would finally be in a position to resume some cash payments.[340] This partial resumption seemed to be the turning point of recovery. But problems persisted as full convertibility was postponed several times. The Bank of England continually faced dwindling reserves and in 1818-1819 England experienced a serious drain of capital because of the continued postponement of full convertibility.

The solution to the crisis of 1810 would be for Parliament to increase the amount of issue in the system through Exchequer Bills, just as had been tried successfully in 1793, 1797 and 1799. But this would not work because in 1811, because the British Pound was unbacked. The economy would ultimately not recover and would instead face a persistently devalued currency through 1821.[341] Even though harvests rebounded and the war ended, capital would continue to drain from the country until the 1797 Bank Restriction was repealed and full convertibility was resumed in 1821.

The Crisis of 1819

Expansion. In 1819, while England was experiencing capital flight due to its currency policy, across the ocean, the United States would experience its first major economic crisis as a result of financing the War of 1812. This second crisis of the

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[339] Clapham, *The Bank of England: A History*, 35.

[340] Andreades, *History of the Bank of England*, 238.

[341] Ibid., 242.

nineteenth century was the result of the problems with a highly inflated paper currency. Heavy government borrowing to finance the war led to the sale of treasury bonds. Because of their legal tender status, these treasury bonds became a popular reserve asset for banks and by 1816 treasury notes made up 75% of all bank reserves.[342] An expansion of money and credit was the result. This, combined with the war boom, pushed prices up and the market price of specie grew beyond the legally fixed mint prices of gold and silver. Banks sold their specie reserves to make profits and specie was drawn out of the country toward higher rates of return and away from highly inflated paper currency.

Trigger and Dynamics of Contraction. In 1817 note issue was high and this fueled the economy, but specie was scarce. The Treasury Department finally ordered the return of notes, contracting the money supply and resulting in a contraction in credit and lending. The Second Bank of the United States pursued a policy that tried to compensate for the reduction in the money supply caused by the removal of treasury notes. It quickly overextended itself by paying out specie for state bank notes while still guaranteeing its own notes with specie. It became pinched for specie, having $2.3 million on hand to cover $22.3 million in liabilities.[343] Since the Bank's charter required specie payments for its notes upon demand, it needed to import over $7 million to meet the demand of state banks and government bond issues coming due. But the Second Bank was fighting

[342] Richard Timberlake, *The Origins of Central Banking in the United States* (Cambridge, MA: Harvard University Press, 1978), 13-18.

[343] L.M. Schur, "The Second Bank of the United States and the Inflation after the War of 1812," *Journal of Political Economy* 68 (1960): 130.

a losing battle and no matter how much specie was imported, it quickly left the country.[344] The Second Bank was forced to contract lending in the summer of 1818 and the crisis ensued. The final result was that many state banks, unable to meet their liabilities were forced to close. Credit had dried up, bankruptcies were widespread and unemployment high. The Second Bank of the United States tried to stop the contraction of credit by discounting state bank notes, but it was unable to do this for long. When its capacity diminished the U.S. economy was thrown into a depression that lasted until 1821.

Response. Kindleberger notes that treasury specie deposits to state banks and to the Second Bank were used to respond to the crisis that developed in 1818-1819.[345] These deposits do not seem to have had any real effect in curbing the crisis and most specie left the country to pay off foreign investment in bonds or to buy food because of several bad harvests. Likewise, the borrowing of specie from abroad by the Second Bank also did little to help the specie reserve situation.[346] In both the U.S. crisis of 1818 and the earlier English crisis of 1810, the governments act as the lenders of last resort by trying to provide either sufficient liquidity through Exchequer Bills or the necessary specie reserves to curb the crises. Despite government intervention, these policies did not

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[344] Ibid.

[345] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 206.

[346] Meil Skaggs, "The Crisis of 1819," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 125.

halt either crisis and it was not until 1821 that both Europe and the United States would begin to recover from their serious depressions. It is important to note in both situations the problem appears to be the chosen economic tool. Providing liquidity in both of these cases had no effect because the currency's relationship to gold fueled capital flight and speculation. Both the U.S. Treasury and the Parliament appeared to be institutions that had the legitimacy and capacity to better manage these crises.

The Crisis of 1825

Expansion. The third noteworthy financial crisis in the early nineteenth century came in 1825 in England. The recovery in 1821 led to a widespread feeling of optimism and a speculative boom began in 1824. The Resumption Act boosted the pound and there were indications that the economy was fine; harvests were good, interest rates were low and the Bank of England was well stocked with bullion. But England lacked investment vehicles and this drove capital toward new markets in South America.

In 1824, England recognized Mexico's and other South American states' independence from Spain. Investment flooded into mining ventures in these new locations because margin requirements[347] were only 5%.[348] In addition, the Bank of

[347] Margin requirements are defined as the amount in money that a customer must deposit with a broker as provision against the loss on a transaction or account. With 5% margin requirements, one would only have to put down 5% of their investment in cash and the securities were used as collateral for the remainder of the amount. The rest would be owed to the broker but not required to make the initial purchase. The problem is if the securities became worthless, one would still owe the 95% of the price of the securities but not have the collateral to pay.

England helped fuel the expansion by lowering interest rates on two bond issues. In effect, this increased liquidity. Investors who were unhappy about the low rate of return on public securities, cashed them in and turned to more risky ventures in search of greater returns.[349] The speculation seemed to reach most people, even those of modest means, and it is estimated that one-third of the wealth of England was tied up in speculative ventures, invested in commodities and newly created companies.[350] Prices for commodities such as cotton doubled and tripled in just a few months during the boom period, but the revulsion would soon set in.

Trigger and Dynamics of Contraction. The contraction in credit seems to have come from the Bank of England. With speculation out of control, the press and public were convinced that a panic was not far off. In response the Bank of England tightened note issue. It did this with the specific purpose of "letting those bank houses with imprudent speculations fail."[351] The Bank's action had that exact result and the first bank failures began. Then prices began falling, payments on securities stopped, and the Bank of England was forced to reverse its position and provide liquidity by increasing its note issue. This quickly drove the Bank's specie reserves, which had been at an all time high

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[348] Michael Haupert, "The Panic of 1825," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 512.

[349] Andreades, *History of the Bank of England*, 249.

[350] Ibid., 250.

[351] Haupert, "The Panic of 1825," 512.

of £14.2 million, to a low level of £1.2 million by December 1825. The crisis hit the end of November 1825 and a general run on banks to convert notes to specie occurred until mid December.

After starting the contraction, the Bank of England then took a long time to re-raise its rate but it was forced to take action again and cut note issue by December to safeguard against losing more of its reserves. The Bank's late response further exacerbated the situation; tightening money only worsened the condition. London merchants immediately petitioned the Government for loans in the form of Exchequer Bills, arguing that this action was successful in the panic of 1793 and would alleviate the panic that was occurring.[352] It is important to note that issuing Exchequer Bill was the common response, though not always successful it was a quick way to provide liquidity during a crisis. This time however, the government refused to use Exchequer Bills. Lord Liverpool, the Chancellor of the Exchequer, threatened resignation if the measure was employed,[353] arguing that it was not the government's job to rescue the market from excessive and unwise speculation.[354]

Essentially the crisis was created by contractionary policies in the Bank of England that were meant to bankrupt competitors who were caught up in unwise investments. It is important to remember that at this time the Bank of England was still

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[352] Ibid.

[353] Clapham, *The Bank of England: A History*, 108.

[354] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 130.

operating as a private for profit institution, and its role in addressing the crisis was at first self-motivated – it rose and lowered interest rates and note issue based on its own profit motivations, not based on what was best for the British economy.

Response. With the government refusing to act and the crisis not abating, the job of stopping the crisis fell to a very reluctant Bank of England. The Bank was neither in a position nor was it anxious to expand lending, considering its reserves had dropped to near £1 million. The Bank was forced to seek help from abroad or face suspension of payments.[355] It purchased gold from the Bank of France and shipped silver for payment.[356] It also reissued one- and two-pound notes that had been left over from the Restriction Act.[357] Even though it was near suspension of payments, the Bank of England made every effort possible to lend to everyone who needed money and successfully acted as a lender of last resort.[358] But the crisis, bank closures and bankruptcies continued well into 1826 and a real recovery did not begin until 1830. The

[355] Haupert, "The Panic of 1825," 512. Suspension of payments means that a bank would stop accepting bills of exchange or notes of issue in return for payment or discount. This payment, especially for notes was usually in specie, but for bills of exchange, it could be in either specie or bank notes. Suspension of payments stops business transactions. Suspension of convertibility is similar but refers to breaking the tie between circulating currency and specie. Bills of exchange would still be discounted or paid, but would not be paid with specie. Thus after suspending convertibility, business activity could still continue, but was no longer gold or silver backed.

[356] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 166.

[357] Andreades, *History of the Bank of England*, 252.

[358] Bagehot, *Lombard Street*, 192.

government, while abdicating responsibility for providing liquidity during the crisis, did start proceedings to change the English system of private banking. The Bank of England and many of the country banks were widely seen by the government as responsible for the crisis. The Bank Act of 1826 tried to remedy the problem by removing some of the monopoly power that the Bank of England had over joint-stock banking.[359]

The crisis of 1825 shows an important development in crisis response. The government was reluctant to bail out the failing banks and merchants in England. While many authors cite the strong ideological standing of Lord Liverpool as the reason for this,[360] Bagehot notes that the government was aware its intervention would not be sufficient. Although liquidity was needed, the issue of Exchequer Bills would not alleviate the situation and would instead put greater pressure on the Bank of England to convert them to gold. It would also ultimately tie the credibility of government issued Exchequer Bills to the Bank's willingness and ability to cash them.[361] The Bank therefore, had to be involved in the response. Interestingly, the banking legislation of 1826 can be interpreted as the government taking power away from the Bank of England by restricting joint-stock banking. So, while the Bank was primary in this particular response, the government reasserted its power through legislation after the crisis.

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[359] Andreades, *History of the Bank of England*, 253-5.

[360] Ibid., 263, Clapham, *The Bank of England: A History*.

[361] Bagehot, *Lombard Street*, 192.

In England, the complex relationship between the Bank of England and the Exchequer[362] would continue to be worked out in the decades to come. But in terms of crisis response, the actions in 1825 point to a system of various or "mixed" response actors. The government, which had been central to responses in the earlier crises, even though many of those responses failed, was suddenly and purposefully silent in this instance. This opened space for another actor to emerge and quell the crisis, and forced the Bank of England into the role of lender of last resort. In terms of the crisis response system the response seems mixed with both the government and Bank of England involved. The mantel had not yet been passed from the government to the Bank, in fact the 1826 legislation looked as though the government attempted to reassert its role in the response system.

Linkages Abroad. Within a few months, England's speculative mania spread to France. The French experienced a similar decline in interest rates and this made investors hungry for greater returns. A speculation in canal building and especially in cotton emerged, similar to what had occurred just a few years earlier in England. Just as the speculation spread from England to France, so did the panic. It caused disruptions across the continent culminating in the failure of several textile firms in France and a panic in Paris in January 1828.[363] This crisis was treated in an *ad hoc* fashion. At first it

[362] It should be noted the that British Exchequer is similar to the U.S. Treasury Department.

[363] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 114.

seemed that no assistance would come. The French government did not get involved and the Bank of France refused to discount Alsatian bonds to help the failing textile firms. This exacerbated the situation and caused the crisis to spread to Paris.

Within a few weeks, a response emerged from a group of Basel Banks and a syndicate of Paris bankers. This response was highly selective, they secured some merchants and allowed others to fail, but it generally restored confidence and the panic passed.[364] Late in the process, the Bank of France became involved by securing some merchants. This crisis is a relatively minor one in French financial history and it is difficult to determine what important lessons are learned from the responses. The Bank of France was quicker to help out in crises during the Napoleonic War years but was hesitant during this crisis.[365] It seems the crisis of 1828 in France only identifies the unsettled nature of French crisis response. Unlike England, where a privileged bank of the crown (the Bank of England) and the government had been established in the response system, in France private banking networks intervened in the system when no governmental support seemed forthcoming.

The Crisis of 1836-1839

Expansion. In the crisis that struck England, the United States, France and Belgium between 1836 and 1839, international linkages through foreign investments allowed the crisis to cross state boundaries. After the economic disruptions caused by the

[364] Ibid., 135-6.

[365] Kindleberger, *A Financial History of Western Europe*, 105.

problems in 1825 and 1828, good harvests and lower interest rates sent capital in search of high returns and into speculative ventures.[366] Capital flooded into cotton, railroads, banking ventures and foreign investments and the United States became a primary recipient of investment capital from England and the Continent.

There were several events that dramatically increased the amount of liquidity in the U.S. economy and attracted specie from abroad. First, land sales doubled the federal government's revenues and the budget surplus was passed down to states and municipalities increasing local liquidity. At the same time the government chose to devalue American gold coins by lowering their mint value.[367] This measure increased gold and silver imports as investors sought profit from arbitrage. The result was that an unprecedented amount of capital entered the United States.

Between January and November 1836, the Bank of England lost £5 million, sending much of it to the United States for investments in railroads. As specie drained out of England, the Bank of England found its liabilities nearly six times its reserves. In response, it raised the discount rate to stop the drain of gold. As a further measure, the Bank of England also refused to discount bills on American securities. Discounting bills was a common method of short-term financing that functioned something like a promissory note. A financial institution would lend a certain amount of money to a supplier or other agent in return for a promise or "bill," to pay once the goods or

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[366] Andreades, *History of the Bank of England*, 263.

[367] Richard Timberlake, "The Panic of 1837," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 515.

securities in question were sold. Banks would buy the bill for less than the sum payable in the future (the practice of "discounting") and that difference was essentially interest on the loaned money. The Bank of England refusing to discount bills on American securities meant that those holding the securities were unable to sell them. This dealt a fatal blow to these American investments and returned gold and investment capital back to England. The Bank of England also drew £800,000 in bills on Paris, meaning that it essentially borrowed this amount from financiers and banks in Paris. Although this helped the Bank of England rebuild its reserves, it also tightened credit and this action led to a panic in the country banks. By the beginning of 1837, the panic had spread to London where American banking houses were in need of assistance because they were unable to meet their demands or cover their liabilities. The Bank of England provided this assistance and successfully averted a crash in London. With the discount rate high, gold began flowing back into England.[368]

Trigger and Dynamics of Contraction. It looked as thought the crisis would be averted. Gold continued toward London and the reserves seemed secure, but globally the panic was just settling in. Securing Bank of England reserves contracted global credit, and the repercussions of this act were felt severely in several states. By the end of 1838, the Bank of Belgium was forced to suspend payments and close for eventual reorganization. In France, there was a collapse of commercial credit and a wave of

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[368] Andreades, *History of the Bank of England*, 266.

bankruptcies.[369] The Bank of France appealed to the Bank of England for support to guard itself against a run.[370] In the United States, after a time of high liquidity, the contraction would be most difficult. The American Treasury tried to alleviate the problems by moving more money from the federal government to state banks. This action failed because of the decentralized nature of the banking system, a condition caused by the failure of the Second Bank to get re-chartered, and because of the time lag for this policy to work. Without the necessary liquidity there was a specie shortage and this forced U.S. banks to suspend payments by May 1837.[371]

Response. Response to the widespread crisis would again come from the Bank of England since gold in London was plentiful. Feeling its coffers full, the Bank of England assisted the United States directly by sending £1 million in bullion to private banks in the United States to help with the currency problem.[372] It is interesting to note that this assistance came directly from the Bank of England, not the usual gold dealers.[373] For France and Belgium, their respective governments intervened to assist their banks, unsuccessfully in the case of Belgium where the central bank fell into crisis and needed

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[369] Clapham, *The Bank of England: A History*, 166.

[370] Andreades, *History of the Bank of England*, 267.

[371] Timberlake, *The Origins of Central Banking in the United States*.

[372] Andreades, *History of the Bank of England*, 267.

[373] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 167.

to be restructured. The Bank of England also loosened global credit by dropping the discount rate to 3.5%. This alleviated the problem of tight credit globally but caused gold to again drain out of England, and mostly back to the United States.[374] As a result, the United States recovered from the panic of 1837 quickly. The deflation of the U.S. economy was mild and short-lived.[375] In England, the drain would not be stopped so quickly. The Bank's lag in raising the discount rate brought with it near bankruptcy. To avoid that, the Bank of England appealed to the Bank of France (through the Rothschild financial house) to secure £2 million, and £900,000 from the Bank of Hamburg.[376]

The crisis of 1836-1838 shows how interconnected the world had become through the expansion of international credit and finance during the first few decades of the nineteenth century. Crises, though rarely solely domestic events, took on more international importance and prominent banks made up the primary response system. In particular, Bank of England policies would affect global credit, as its discount policies became central to the global credit markets. It would also fall upon the Bank of England to alleviate the crisis, though in various countries responses came from specific governmental efforts and specific banks to secure domestic markets. These responses varied from country to country, depending on the financial infrastructure of those facing crisis. In some cases, a primary bank, such as the Bank of England or Bank of France would try to alleviate the crisis. In other cases, when there was no primary bank,

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[374] Andreades, *History of the Bank of England*, 267.

[375] Ibid. Peter Temin, *The Jacksonian Economy* (New York: Norton, 1969), 120.

[376] Kindleberger, *A Financial History of Western Europe*, 276.

individual bankers attempted to secure the system as seen in the American case where private banks with ties to England received assistance from the Bank of England. When the primary global financial actor, the Bank of England, ran into problems it would find assistance from capable foreign banks and secure that assistance through private financiers such as it did through the Rothschild house.

The response system for financial crises at this time was clearly underdeveloped and shows how a mix of actors was called upon for response, including governments, primary banks, and private banks. In states with primary banks, defined as privileged banks but still without modern central banking functions, the response system was caught between the public and private sectors, causing the responding actors (banks) to keep an eye on private investment as well as public good. In states without a primary bank, private banking networks were forced to alleviate the crisis and tapped into the larger international financial system to do so. Governments had a smaller role responding to the crisis in states with more highly developed primary banks, but in states without primary banks, governments still played an important role.

In England, the public private issue would begin to be resolved after this crisis when legislation restricted the private interests of the Bank of England. It is in this era that the term "central bank" would be coined.[377] Throughout the remainder of the century, primary banks in several countries began to take on modern central banking functions such as monopoly over note issue, control of the discount rate and lender of last resort functions. England would be the first to begin codifying the principle of central

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[377] Clapham, *The Bank of England: A History*, 133, f2.

banking in the Bank Charter Act of 1844. This legislation, also known as Peel's Act, was heavily influenced and inspired by the crises of 1825 and 1839, and by the persistent monetary instability since the resumption of convertibility in 1821.[378] Through this act the British Parliament sought to constrain Bank of England policies in order to prevent further crises, but the result was actually to give the Bank of England more modern central banking functions.

The Bank Charter Act separated the Bank of England into a note issue department and a banking department. The note issue department was constrained regarding the amount of notes in circulation. The banking department would be allowed to operate as any other private bank. This was supposed to prevent, or at least moderate financial crises by legally mandating the amount of issue, and constraining credit in order to curtail wild speculation.[379] While there would be another financial crisis in just a few years, and arguably this piece of legislation caused subsequent crises, it is important to note that the Bank Charter Act was a large step toward the creation of a full-fledged central bank. In addition, the Bank Charter Act officially put the Bank of England into the position of domestic crisis manager. This role was further established by the financial crisis of 1847.

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[378] David Glasner, "The Bank Charter Act of 1844," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 32.

[379] David Glasner, Charles Goodhart, and Charles Santoni, "The Bank of England," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 36.

The Crisis of 1847

Expansion. The reasons for the crisis in 1847 were quite straightforward: "corn and railways; these were at the back of the crisis of 1847 – corn and railways."[380] The immediate problem was that there were poor harvests. The failure of the potato crop caused widespread famine and death in Ireland and the massive importation of foreign grains by the English. Thus, there was a great demand for gold.[381] Besides passing the Bank Charter Act in 1844 the British government also passed the Railway Act. This Act allowed railway companies to buy the land for rights of way and authorized the construction of 9000 miles of rail lines.[382] Railway construction was in the hands of private enterprise, but this legislation opened the door for the extensive construction that followed. Private banks responded by making money available for these investments and a railway mania was the result. This had the effect of "locking up" much of England's savings and capital in long-term construction projects both at home and abroad. With reserves leaving the Bank of England at an alarming rate, the Bank raised the discount rate, temporarily curbing the flow. But in the fall of 1847, the panic was growing and a serious problem with the Bank Charter Act would be revealed.

It was believed that more tightly tying note issue to the amount of gold would allow the Bank to respond more quickly in the case of a developing financial crisis. Thus, the Bank would be able to protect its reserves before it was on the brink of

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[380] Clapham, *The Bank of England: A History*, 199.

[381] Andreades, *History of the Bank of England*, 332.

[382] Cameron, *A Concise Economic History of the World*.

bankruptcy as was the case in 1838. Ironically, in the crisis of 1847 it was fear that the limits created by the Bank Charter Act would constrain liquidity that exacerbated an already serious situation. To resolve the crisis the Bank had to choose between protecting the legislated limits of the Bank Charter Act or discounting freely, endangering its own reserves but keeping the British economy from a greater panic.

Dynamics of Contraction. The crisis began in April and the Bank of England responded by raising the discount rate and restricting the range of bills that it would accept for discount.[383] The Bank essentially tightened credit. This reversed the outflow of gold and temporarily calmed the brewing crisis. By the fall of 1847 the crisis returned when because of a good harvest the price of grain was very low. Merchants who had speculated on grain took great losses and the financial agents backing them failed when the merchants liquidated their investments. Again there was an outflow of gold, and confidence in the economy and credit had disappeared.

Response. Even though the economy struggled, confidence remained high in the Bank of England. It raised the discount rate and restricted bill acceptances, but continued to discount. The Bank can be said to have lent freely. Even though its own coffers were growing bare, the Bank acted all along to secure the British economy. When it became questionable whether it could do that without breaking the legislated limits, the

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[383] David Glasner, "The Crisis of 1847," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 126.

government issued a Bill of Indemnity to assure the Bank would continue to protect the economy.[384] That Bill quieted the market because it removed doubt that the Bank of England would discount bills and lend to firms in trouble. The Bank Charter Act was not intended by its authors to create a central bank, but the crisis of 1847 helped the Bank move into that role and the subsequent crises of 1857 and 1866 would further cement its position and increased its role as a public actor.[385]

Linkages Abroad. On the Continent, especially in France, the situation was similar and the crisis would hit just months after the panic subsided in London. Poor harvests and railway, land and construction speculation caused reserves to dwindle across the continent. In France speculation in the 1840s was rampant and it was caused in no small part by the decentralization of banks with note issue powers. These banks increased liquidity to fuel investment. When the crisis spread to the Continent, the Bank of France was forced to borrow 25 million francs from the Bank of England in order to stop the drain of reserves.[386] This loan only postponed the inevitable. The high level of speculative finance combined with new political instability in France and the German States added to the spreading crisis. Eventually, several prominent banks in Cologne and the Bank of France would be forced to suspend payments and switch to inconvertible

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384 Clapham, *The Bank of England: A History*, 209.

385 Glasner, "The Bank Charter Act of 1844," 32.

386 Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 167.

note issue.[387] In Belgium, the crisis would cause the downfall of the *Société Général de Belgique*, Belgium's *ad hoc* primary bank created after the crisis of 1838.[388] Business and banking failures would be felt throughout the Continent and this prompted the governments of each state to get involved in response.

In France, there would be an increase in the Bank of France's power. In Belgium, after the downfall of the *Société Général de Belgique*, the government would restructure their primary bank into the Bank of Belgium and make it the sole note issuer. In the German States, particularly Prussia, joint-stock companies were established. The lack of constructive responses to the crisis of 1848 led to these innovations, but they did little to actually solve the crisis, and a lingering downturn persisted for years.

In France the crisis resulted in more power for the Bank of France. As in England prior to the Bank Charter Act, the French government expanded note issue to several branch banks in France. This expansion was viewed as a reason for the crisis of 1848 because the branch banks overissued notes and expanded credit. To resolve the crisis, the Bank of France, with government authorization, forcibly absorbed the branch banks and extend its monopoly of note issue throughout France.[389] 1848 was a turning point for France. Politically, there was a revolution that made way for a series of new financial

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[387] Rondo Cameron, "France 1800-1870," in *Banking in the Early Stages of Industrialization: A Study in Comparative Economic History*, ed. Rondo Cameron, et al. (New York: Oxford University Press, 1967), 125, Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 117.

[388] Cameron, "France 1800-1870," 138-40.

[389] Ibid., 105.

innovations, and economically, the crisis provided room for the government to establish *comptoirs d'escompte.* These were banks that operated as intermediaries between the Bank of France and merchants.[390] The establishment of these banks further empowered the Bank of France by making more financial activity pass through its channels. Slowly, the Bank of France was becoming the center of the French economy. But a strong counterweight was also established in this period–the joint-stock deposit bank. Although only a handful of these banks existed, they would become central to French foreign investment in the following decade.[391] The Bank of France emerged from the crisis stronger than ever, and although it was forced to abandon gold for an inconvertible note issue, it received high praise from the government for addressing the financial crisis of 1848. It discounted many bills and provided skillful rescue operations. As a reward, the government allowed the Bank of France to further entrenched its privileged position.[392]

By 1848 responses to financial crisis were still not clearly established, but nascent central banks were taking over more responsibility. The Bank of England was more quickly assuming central banking functions than were other primary banks in Europe. The Bank Act of 1844 primarily facilitated the advancement of central banking in England. While it was not intended to create a central bank, that is ultimately what this act accomplished. Thus, when the crisis developed in England, the Bank took the lead to secure the economy. The role of the Bank of England in a crisis was supported by the

[390] Ibid., 107.

[391] Ibid., 108.

[392] Kindleberger, *A Financial History of Western Europe*, 108-10.

government who issued the Act of Indemnity to assure that it would be able to continue in its lending to firms in trouble. The Bank of England was not forced to suspend payments, although it is unclear how long it could have held off bankruptcy if the Act of Indemnity had not eased the panic.[393] By issuing the Act of Indemnity, the government made a clear statement about the Bank of England's role in stabilizing the economy and took pressure off the for-profit banking department. Yet, while the role of the Bank of England in a crisis was expanding, its role in securing English firms was far from settled.

Internationally, the Bank of England would also assist the French in securing their reserves. This would ultimately not stop the Bank of France from suspending payments and switching to an inconvertible currency, but the cross border interactions between primary or nascent central banks was further established by these transactions. Little help was available for Belgium and the German States on the domestic or international fronts. After riding out the crisis, France, Belgium and the German States all restructured their banking systems. France allowed more power to the Bank of France, giving it a note issue monopoly. The government of Belgium took the opportunity created by the crisis of 1848 to establish a central bank with a note issue monopoly.[394] The German states adopted joint stock companies since the political decentralization in the future Germany made establishing a central bank difficult until the end of the century. The movement

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[393] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*

[394] Charles Goodhart, *The Evolution of Central Banks* (Cambridge: The MIT Press, 1988), 146.

toward a central bank was well underway and as a result of these innovations the Bank of Prussia highly resembled a central bank by the 1860s.[395]

## The Crisis of 1857

Expansion and Dynamics of Contraction. The European crisis in 1847-1848 was followed by several sluggish years, but things were turning manic in the United States. The discovery of gold in California expanded the credit base in the United States and sparked widespread investment in railroad stocks and land speculation.[396] These conditions were accompanied by an expansion in American banking and a subsequent abuse of credit by both new and established banks to provide the funds for speculation. An asset market revulsion followed, evidenced by a drop in land values and the price of railroad securities.[397] One of the casualties of this revulsion was the Ohio Life Insurance and Trust Company. Ohio Life was heavily invested in railroads, and when several began experiencing declining share prices, Ohio Life was forced to suspend payments. This firm's failure has been credited with sparking the panic.[398]

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[395] Richard Tilly, "Germany 1815-1870," in *Banking in the Early Stages of Industrialization: A Study in Comparative Economic History*, ed. Rondo Cameron, et al. (New York: Oxford University Press, 1967), 158.

[396] Andreades, *History of the Bank of England*, 345-8.

[397] Charles Calomiris and Larry Schweikart, "The Panic of 1857: Origins, Transmission and Containment," *Journal of Economic History* 51 (1991): 811.

[398] Hugh Rockoff, "The Crisis of 1857," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland Publishing, 1997), 129.

Calomiris and Schweikart see the failure of Ohio Life as causing only a minor shock.[399] But this minor shock, coupled with falling stock prices, destroyed confidence in banks and led many depositors to convert their banknotes into specie. Banks were forced to contract credit since they were losing reserves and this caused more financial houses to liquidate. With the demand for specie high, banks experienced a drain on their reserves to the point where many were forced to suspend payments. The panic spread from the major eastern cities of Washington, Philadelphia and Baltimore to New York, and from New York to the rest of the country because of the role New York banks played as reserve banks. From August through October banks continued to suspend payments.

Response. The response to this crisis in the United States is interesting because it represents the manner in which a state without a central, or even a primary bank responds to a spreading financial decline. After Jackson vetoed the re-charter of the Second Bank of the United States in 1832, an independent Treasury assumed a quasi-central banking role and acted as the bank of issue.[400] But the treasury resisted developing other central banking functions. Specifically, the treasury resisted the lender of last resort function. Secretary of the Treasury Howell Cobb adamantly refused to provide relief to the commercial community. Cobb went so far as to argue that providing relief was not the

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[399] Calomiris and Schweikart, "The Panic of 1857: Origins, Transmission and Containment."

[400] Timberlake, *The Origins of Central Banking in the United States*, 72.

role of government.[401] In addition, the treasury did not act as a clearinghouse for other banks. The New York banks, the largest in the country, fulfilled this essential banking role. As a response to the crisis, the U.S. Treasury tried to compensate for the tightened money conditions by purchasing government bonds, but this had little effect and its actions were insufficient to make a difference.[402]

The failed treasury response opened space for other actors to respond, but these measures were slow in coming. When Ohio Life failed the New York banks immediately attempted to secure their funding and individual positions. They refused to grant new loans to the financial houses and banks that were in trouble. While this action secured their short-term position, it deepened the crisis. When the New York banks failed to respond to this crisis it left the system open for regional and state responses. In some regions, small independent rural banks predominated and these regions suffered the deepest problems. In other regions where the structure of the banking system was more coordinated, citywide, state or regional responses emerged. The New York system rebounded when they began coordinated efforts between the country and city banks in New York state.[403] Calomiris and Schweikart show that because responses were state or regionally based, some parts of the country fared better than other parts when the

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[401] Ibid., 82.

[402] Rockoff, "The Crisis of 1857," 129.

[403] Calomiris and Schweikart, "The Panic of 1857: Origins, Transmission and Containment.", Rockoff, "The Crisis of 1857."

financial storm hit.[404] Moreover, because there was an *ad hoc* domestic system mostly based on private banks, the recovery would have been even slower if it had not been for continued California gold discoveries replacing reserves and thereby calming public fears.[405]

Linkages Abroad. The crisis broke out almost at the same time in England and on the Continent. The English held nearly £80 million in American stocks and many private joint-stock banks were heavily tied to U.S. railroad speculation. A decline in these stock prices meant widespread suspension of payments and bank failures.[406] Even the biggest houses in London, Scotland and Ireland lost gold at an accelerated rate and were forced to either suspended payments or completely lose their reserves.[407] The Bank of England responded to the crisis by securing and discounting bills for most of London. But the Bank was not well positioned to keep the banking system on solid footing and its reserves were not sufficient for England to weather the panic.[408] The Bank considered joint action with the Bank of France to respond to the crisis but nothing came of this.[409] Given the

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404 Calomiris and Schweikart, "The Panic of 1857: Origins, Transmission and Containment."

405 Rockoff, "The Crisis of 1857."

406 Clapham, *The Bank of England: A History*, 226.

407 Ibid., 232.

408 Rockoff, "The Crisis of 1857," 131.

409 Clapham, *The Bank of England: A History*, 229.

Bank of England's low level of reserves, assistance for faltering English, Scottish and Irish banks and firms did not come cheap. The Bank raised the discount rate to 10% for the first time in its history to secure what was left in its coffers. In addition, the limits of the Bank Charter Act of 1844 needed to be exceeded and another Act of Indemnity was necessary from Parliament. This did not provide the magic bullet as it had in 1847, but within a few weeks the panic began to calm.[410]

The Bank only reluctantly assumed the role of lender of last resort and its actions leading up to the Indemnity Act were more uneven in 1857 than they were in 1847. In 1847 the Bank only somewhat restricted the bills it discounted, but in 1857, the restrictions were far greater. Banks throughout London, Scotland and Ireland appealed to the Bank of England for assistance in securing their liabilities, but there were no guarantees for these financial institutions and it was unclear which banks the Bank of England would choose to assist.[411] The role of the Bank of England in response to this financial crisis was thus a little shakier than it had been ten years prior. As a result, there was much criticism of the Bank's policies and an inquiry by Parliament into the its handling of the crisis.

Paris felt the effects of the crisis shortly after England. In France, the early 1850s proved to be a time when French investment and credit expanded dramatically. This increase was spurred by the creation of the *Crédit Mobilier* in 1853, which within three years would export capital and became heavily invested throughout Europe, notably in

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[410] Andreades, *History of the Bank of England*, 350.

[411] Clapham, *The Bank of England: A History*, 228.

Germany, Belgium, Switzerland and Holland.[412] The crisis in 1857 did not seem to have a great effect on France. It did slow investment for a handful of years and France, as the rest of Europe, experienced a brief but deep recession.[413]

However, the response by the Bank of France to the crisis had lasting significance as it changed the methods the Bank used to deal with crisis. When the panic set in, the Bank of France requested a suspension of cash payments and thus convertibility. The government refused and the Bank of France resorted to limiting the amount of bills it was prepared to discount.[414] Thus, the Bank of France was forced to respond to the crisis by providing at least minimal assistance to the commercial community and by working aggressively to maintain convertibility of the franc. It did this in two ways: first, the Bank purchased over 750 million francs of gold between 1856 and 1857 to stop the drain of gold and maintain convertibility; second, the Bank of France renegotiated its charter ten years prior to its expiration and in the process gained more control over the discount rate.[415] Prior to 1857 usury laws kept the Bank of France rate legally below 6% and usually below 4%. With the French government's desire to avoid inconvertibility, the crisis presented the opportunity to abolish the usury laws. Ultimately this gave the Bank of France more ability to protect its reserves through manipulating the discount rate,

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412 Rondo Cameron, *France and the Economic Development of Europe 1800-1914: Conquests of Peace and Seeds of War* (Princeton, NJ: Princeton University Press, 1961), 160-65.

413 Ibid., 171.

414 Vera Smith, *The Rationale of Central Banking* (London: P.S. Kind and Son, 1936), 32.

415 Kindleberger, *A Financial History of Western Europe*, 112.

something it had not been able to do previously.[416] These actions, purchasing gold and placing more discretion over the discount rate in the hands of the Bank of France, were effective in keeping the franc convertible while allowing the Bank of France to protect its reserves and increase its duties and powers.

In the German states, Hamburg experienced a serious revulsion in 1857 because of its investment ties to the British and the United States. By November, the crisis claimed several banks and threatened more. Hamburg did not have a primary bank at this time and because of this, response to the crisis came from a group of merchants and smaller banks. Their first move was to create the *Garantie-Diskontverein*, a discount guarantee association to assist merchants. But three days after its creation it had run out of reserves.

The merchants then appealed to the Parliament for assistance. Parliament created liquidity by issuing bonds to merchants in distress. This also did little to alleviate the situation and for all practical purposes, business in Hamburg ceased. The merchants again appealed to Parliament asking for the creation of a state bank to discount bills that were being refused elsewhere. Parliament rejected this idea and suggested the creation of an unbacked paper currency, but as significant forces did not want to abandon silver, the Senate rejected this proposal as well. Finally, the government agreed to the creation of a State Loan Institute, which would guarantee merchants through government bond issue and also from borrowing silver abroad. However, given the condition of the rest of

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[416] Goodhart, *The Evolution of Central Banks*, 119, Smith, *The Rationale of Central Banking*, 32.

Europe and the high business failure rate in Hamburg, most countries refused assistance. Vienna finally assisted, shipping 10 million *marks banko* to Hamburg and the crisis subsided once the train carrying the silver reached the city.[417] Neither the State Loan Institute nor the *Garantie-Diskontverein* would develop more fully after the crisis, but both would provide central banking functions necessary to stabilize the economy until the crisis subsided and business could resume.

The response in Hamburg was similar to that in the United States. Lacking a primary bank made it much more difficult for a response framework to be implemented. Thus the crisis had more immediately devastating effects and responses were cobbled together by various actors in the system: merchants in the case of Hamburg, various state banks in the case of the United States.

What we see in the response system of 1857 are several important developments. First, in England the Bank of England both protected the economy and saved its reserves. It acted as a quasi or "reluctant" lender of last resort and provided central banking functions, but there was more uncertainty regarding which firms would be assisted. One would have to argue it acted only partially with regard to the official definition of last resort lending, which is to lend freely at a high rate. As in 1847, the intervention of Parliament with another Indemnity Act helped ease the crisis and calm the financial community by assuring the Bank of England would indeed act to calm the panic. In states where there was a more decentralized banking system, such as the German states

[417] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 136-8 and 67-8.

and the United States, responses came from a patchwork of sources including the government, merchants and the private banking community.

In most countries central banking was underdeveloped and would continue to be for decades. In these cases some *ad hoc* measure needed to arise in order to address the crisis. These measures, whatever form they took, provided the functions of a central bank. In countries with a tradition of having a dominant or primary bank, the crises would push more responsibility and power toward these institutions. History demonstrates that the powers of the Bank of England and the Bank of France were extended after every financial crisis up until 1857. This tradition continued in France in 1857. Even though the crisis was not as devastating in France, the Bank of France's power over the discount rate increased. In England, the crisis of 1857 would not increase the Bank of England's power; however, the crisis identified a growing problem in the Bank's function. Andreades notes that in an inquiry following the crisis, it was concluded that the expansion of credit during the years prior to 1857 complicated the situation.[418] Following the crisis, English bankers would question the Bank of England's role and reliability in discounting bills and the Bank would respond by promoting a new policy; that bankers needed to stock their own reserves and rely less on the Bank of England.[419] The Bank of England thus went on record that it would resist its role as lender of last resort that had been steadily established since early in the century. Both

[418] Andreades, *History of the Bank of England.*

[419] Clapham, *The Bank of England: A History*, 238-41.

Europe and the United States recovered from the crisis in 1857 relatively quickly, but another crisis in 1864-1868 would cause major disruptions in England and France.

## The Crises of 1864-1868

Expansion. Recovery from the crisis in 1857 was evidenced by two sets of indicators in Europe. First, the Bank of England dropped its discount rate quickly and to a low level shortly after the panic, indicating that the Bank was no longer afraid of losing reserves. Second, French international investment once again became strong. By 1859 the *Crédit Mobilier* would reemerge as a major force in international finance and continue to promote joint-stock banking throughout Europe.[420] As in the early 1850s in France, an expansion in credit was the result of the creation of joint-stock companies throughout Europe. The creation of these joint-stock companies was assisted by governmental acts that limited liability. By 1855 the British began granting special charters that allowed companies to have limited liability and in 1862 a comprehensive law made limited liability generally available. This legislation allowed companies to be formed with a limited risk of failure and liability tied only to initial investment.[421] With risk lowered and profits apparently unlimited, a boom in the creation of these companies followed.

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[420] Cameron, *France and the Economic Development of Europe 1800-1914: Conquests of Peace and Seeds of War*, 171.

[421] Andreades, *History of the Bank of England*, 355.

Things were not as good in the United States. While the country recovered from 1857 relatively quickly, there was the looming fear of war. The Civil War had international effects and caused an influx of gold into Europe from those fearing the inconvertible currency that was used in the United States. This capital would add to the already expanding credit base spurred by the greater incorporation of limited liability and joint-stock companies. Furthermore, the war seriously disrupted the cotton market. The crisis which began in 1864 is linked to all of the above events.

Trigger and Dynamics of Contraction. Disruptions across the Continent began in 1864 as a result of the collapse of the cotton market. Although Europe was in something of a panic for nearly two years, the crisis was not really serious in any city until 1866 when it hit in London, but France experienced a disruption in 1864. As in 1857 the Bank of France was eager to respond by issuing inconvertible notes. The government instead forced the Bank of France to act in the public interest and refused to allow it to suspend convertibility. Using the only other tool it seemed to have available, the Bank of France responded by raising the bank rate to 8 per cent while lending freely.[422] The commercial community harshly criticized this action and Isaac Pereire of the *Crédit Mobilier* led three hundred angry merchants in demanding an enquiry.[423] The enquiry examined whether the Bank's note issue monopoly and its power to manipulate the discount rate

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[422] R.G. Hawtrey, *Currency and Credit* (New York: Longmans, Green and Co., 1923), 154.

[423] Smith, *The Rationale of Central Banking*, 34-5.

should be removed. Finding no wrongdoing, it preserved the note issue monopoly and the Bank's greater control over the discount rate. But many ministers also concluded that much had been given to the Bank of France as the primary bank of the French government; therefore, the Bank had certain responsibilities that it too quickly wanted to abandon. Among those responsibilities was crisis intervention to forestall commercial ruin. The Bank was expected to act for the public good. The enquiry also praised the French government for forcing the Bank of France to maintain convertibility and calm the business community.[424]

Response. This is an interesting chapter in the history of central banking in France. The response to the crisis of 1864, along with the enquiry that followed had the effect of consolidating more central banking functions in the institution of the Bank of France. These functions included crisis response. The 1864 crisis in France halted the expansion of credit that preceded it and in the aftermath, the crisis depressed the French economy for several years. Toward the end of the 1860s, the depressed economy would cause some notable financial failures including the *Crédit Mobilier*.

Linkages Abroad. Before claiming more victims in France, the crisis would affect England. Much like the credit expansion in France prior to 1864, in England there was a boom in the creation of limited liability companies accompanied by some shady methods of financing. This boom continued even while credit contracted elsewhere. Hundreds of

[424] Kindleberger, *A Financial History of Western Europe*, 112.

millions of pounds were invested during the early 1860s, mostly in speculative capital ventures involving British railroad expansion. These securities continued to sell even as commodity prices dropped globally.[425] England experienced what Kindleberger calls two "critical moments" in 1864, but did not experience the real crisis until 1866 when Overend, Gurney and Co., one of the largest British discount companies failed and brought with it a number of other important banks and financial houses.[426]

The failure of Overend, Gurney and Co. in the fall of 1866 is an influential event in British economic history. Overend, Gurney and Co. was born out of Overend and Gurney, one of the most respected, profitable and largest firms in England. At times Overend and Gurney rivaled the size and power of the Bank of England, and in 1857 it moved against the Bank of England by orchestrating a mass note withdrawal threatening the Bank's reserves.[427] By 1860, Overend and Gurney was invested in highly speculative ventures and discounting questionable bills. Questions about its business practices were circulating in the business community when Overend and Gurney decided sell shares as a limited liability company; renamed Overend, Gurney and Co. Shares of this new

[425] Hawtrey, *Currency and Credit*, 154.

[426] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 90.

[427] Roy A. Batchelor, "The Avoidance of Catastrophe: Two Nineteenth-Century Banking Crises," in *Financial Crises and the World Banking System*, ed. Forrest Capie and Geoffrey E. Wood (New York: St. Martin's Press, 1985), 45.

company with a respected past and highly recognized name, sold well despite Walter Bagehot's warnings in *The Economist*.[428]

By 1866 the markets in England were tense. England had already experienced some minor disruptions in 1864 and crisis of 1864 was about to have its "violent and inevitable completion" in 1866.[429] The Bank responded to the unsettled atmosphere by raising the discount rate during the first few months of the year and there were minor failures of less reputable companies and bill brokers throughout the winter. Some of these firms had connections to Overend, Gurney and Co.. By May 1866 Overend, Gurney and Co. was on the brink of failure. An effort to recover £60,000 in railway securities had failed and Overend, Gurney and Co. appealed to the Bank of England for assistance. The Bank refused. The next day Overend, Gurney and Co. failed with liabilities of over £18 million.[430] The situation in London was serious. "Panic, true panic, came with unexpected speed and violence...and touched the remotest corners of the Kingdom."[431] The Bank of England responded by rendering unprecedented levels of assistance in loans and discounts, raised its rate to 10% and received its third Act of Indemnity to break the legislated limits of The Bank Charter Act of 1844.[432] The panic

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[428] Clapham, *The Bank of England: A History*, 260.

[429] Andreades, *History of the Bank of England*, 357.

[430] Ibid., 368.

[431] Clapham, *The Bank of England: A History*, 263.

[432] Richard Grossman, "Overend, Gurney Crisis," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 503.

subsided after the Act of Indemnity was granted but the bank rate remained 10% until August and there were over 180 bankruptcies between May and August.[433]

The actions of the Bank of England in 1866 have been highly disputed. While the Bank did respond by providing an unprecedented level of assistance, discounting over £12 million in a five-day period, several authors argue that failing to secure Overend, Gurney and Co. and other significant members of the British financial community indicates that the Bank did not act as a lender of last resort.[434] The failure of Overend, Gurney and Co. sparked a decline in confidence that was evidenced through the panic. Slow action by the Bank of England then caused the panic to grow. Many accounts of the crisis describe the public and merchants as being unsure which firms were sound and which were unsound and there was genuinely a fear that London Banks and finance houses would suspend payments.[435] Schwartz argues that the Bank not lending freely and hesitating in its response increased the seriousness of the crisis.[436] Recovery would take months, mostly because confidence in London was lost. Even with the Bank of England's discount rate at 10% and France's rate at between 4 and 5%, little gold was attracted from France to England and continental investors remained suspect of British

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433 Clapham, *The Bank of England: A History*, 270.

434 Batchelor, "The Avoidance of Catastrophe: Two Nineteenth-Century Banking Crises.", Grossman, "Overend, Gurney Crisis."

435 *The Economist*, 19 May 1866.

436 Schwartz, "Real and Pseudo-Financial Crises," 17.

markets.[437] The Bank's role was henceforth changed due to the crisis of 1866. After hesitating, it did act to secure the commercial community and discounted heavily. The Bank had assumed the lender of last resort role at a point in the crisis where it was too late to calm the markets, but from that moment onward it was "understood that it [the Bank of England] would support the rest of the financial community at such times of extreme distress."[438]

In France, a brief reprise of the crisis would be felt with the failure of the *Crédit Mobilier* in 1867. In the aftermath of the crisis of 1864, the French economy entered a period of stagnation. This stagnation reached the vast empire of the Pereires family and threatened the *Crédit Mobilier*. One of the land development companies tied to the *Crédit Mobilier*, the *Compagnie Immobilière*, was near failure and the *Crédit Mobilier* pumped millions of francs into this company to save it from ruin.[439] By spring 1867 both the *Crédit Mobilier* and *Immobilière* were near bankruptcy. The Pereires approached the Bank of France for a loan of 75 million francs. Remembering the years of years of rivalry between the Bank of France and the Pereires, the loan was declined and the *Crédit Mobilier* was liquidated.[440] While the failure of the *Crédit Mobilier* was not directly tied

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[437] Hawtrey, *Currency and Credit*, 154-5.

[438] Batchelor, "The Avoidance of Catastrophe: Two Nineteenth-Century Banking Crises," 49.

[439] Cameron, *France and the Economic Development of Europe 1800-1914: Conquests of Peace and Seeds of War*, 192.

[440] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 151.

to an acute crisis, but to the downturn after the crisis of 1864, the refusal of the Bank of France to discount the *Crédit Mobilier*'s paper was a refusal by the Bank of France to act as a lender of last resort for a major French firm. This did not have the same effect as it did when the Bank of England refused to secure Overend, Gurney and Co. because the *Crédit Mobilier* was liquidated more slowly and in a calmer environment, but this episode identifies that the Bank of France was not fully accepting of its lender of last resort functions.

Response Summary. The crises of 1864-1868 are some of the most notable crises to have affected England and France and the lessons learned from this time period greatly influenced the future of crisis response. For France, the 1864 crisis institutionalized the Bank of France's role in the crisis response system. The government advocated the Bank of France's power to raise and lower the discount rate and insisted that it act in the public interest by maintaining convertibility and securing the commercial community. However, as indicated by the later refusal to aid the *Crédit Mobilier*, the Bank of France had not fully accepted this role and would not do so for nearly another twenty years.

In England, the Bank of England was transformed by the Overend, Gurney and Co. crisis. By rejecting its role as the lender of last resort early in the crisis, the crisis became more severe. Much would be written about the Bank of England's role in the 1866 crisis. Walter Bagehot is perhaps the single most influential person to have drawn attention to the Bank's actions. Bagehot, by the late 1850s was the editor of *The Economist* and highly respected throughout the financial community. He was the first speaker to address the enquiry into the Bank of France's actions in 1864 and a vocal critic of the Bank of England's policy in 1866. In 1873 Bagehot published his famous *Lombard Street*. In this book, he has been credited with elaborating on the concept of lender of last resort. He argued that although the existence of a central bank in England was an unnatural occurrence, that since the Bank of England did exist, it should actively respond to crisis situations by securing commercial activity through free lending. Bagehot used the crisis of 1866 to exemplify what was wrong with the English response system. He proposed a different future and a more certain role for the Bank of England in a crisis.

The ideas Bagehot presents are ones that were prevalent following the failure of Overend, Gurney and Co. and would have an interesting effect on future crisis response in England. As Hawtrey explains, the result would be quite simple, "since then the responsibilities of the Banking Department [of the Bank of England] as the lender of last resort have been unequivocally recognized."[441] The crisis gave the Bank of England the responsibility for free lending in the time of a crisis, further institutionalizing crisis response in the hands of the central bank. In 1873 and 1890, the Bank of England, having developed central banking functions, would successfully keep England from experiencing the serious effects of financial crises.

The Overend, Gurney and Co. crisis also suggests two issues in crisis response. The first is whether the role of Overend, Gurney and Co. as a competitor of the Bank of England played a part in the decision to not support this firm when it was failing. If this

[441] Hawtrey, *The Art of Central Banking*, 126.

was a factor then it signaled a problem for the Bank of England being able to act as a lender of last resort given its strong private banking sector. The second issue is whether Overend, Gurney and Co. was simply too irresponsible in its investment to be saved. If this was the case, then the Bank acted to prevent moral hazard by not lending to Overend, Gurney and Co. and was correct in letting this firm fail. Neither of these arguments were accepted by the main critics of the day, particularly Bagehot. He argued that the Bank of England had a responsibility regardless of either condition to safeguard the British economy.[442] For the purposes of the present study, the crises of 1864-1868 exemplify the tension between public response systems and private response systems.

The Crisis of 1873 - The Key Crisis

One of the most famous crises of the nineteenth century is the crisis of 1873; in fact, it has been identified as "the first significant international [financial] crisis".[443] During the nineteenth century, international financial linkages had been growing throughout Europe and the world. This trend is evident from the preceding discussions of crises, since crises begin to jump state borders more frequently as the century unfolds. By 1873, these financial linkages played a significant role in the transmission of crisis from one country to the next. In addition, the crisis of 1873 is a significant event for the crisis response system because it identifies an important pattern in crisis response. The patchwork of response actors is culled considerably in some countries, but in others *ad*

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[442] Bagehot, *Lombard Street.*

[443] McCartney, *Crisis of 1873*, 85.

*hoc* systems continue to address crises. The central bank moves into a primary role in crisis response, but the absence of a central bank in some countries causes devastation as other actors are unable to respond to the widespread crisis that emerges. The optimism of the 1870s ended with the crisis of 1873, which precipitated a fall in world prices[444] and a recession that lasted twenty-three years until 1896.[445] This crisis therefore signals a failure of the *ad hoc* response system and also the emergence and widespread adoption of central banking to address crises.

Expansion. The crisis was preceded by a time of extensive global economic expansion. Clapham notes that the years between the Overend, Gurney and Co. crisis and the crisis of 1873, "look like a gigantic hinge on which the history of the later nineteenth century turns."[446] Investment and prosperity around the world increased dramatically. Ocean telegraph cables heightened the pace of international finance to a feverish level bringing British and German capital exports to their highest levels.[447] Between 1870 and 1874 British foreign investment averaged approximately £61 million

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[444] There were some interruptions in falling prices, but the overall trend was downward.

[445] Clapham, *The Bank of England: A History*.

[446] Ibid., 271.

[447] Ibid., 170, Leland Jenks, *The Migrations of British Capital to 1875* (London: Nelson, 1927; reprint, 1963).

annually and the discount rate remained below 5% allowing for a constant supply of credit.[448]

As Europe and the United States recovered from the Franco-Prussian War and the U.S. Civil War, both regions experienced dramatic booms in construction and development. Globally, this boom was fed by the 5 billion-franc indemnity that France paid Prussia after the war. Complete reparations were made within two years of the war's end and this dramatic capital expansion triggered an era of speculation that started in Germany but quickly spread across Europe. Global trade also expanded as a result of further innovations in transportation and communication and exceptional agricultural harvests in central Europe and the United States.

The history of the crisis of 1873 is extensive since it was felt throughout most of the world, but German capital was pivotal to the emergence of the crisis. As a result of the massive capital infusion, the German states became quickly caught up in a speculative mania that expanded the number of joint-stock companies and banks. Both of these institutions funneled domestic capital into industrial endeavors such as steel, railroads and construction and also invested heavily abroad. Clapham captures the mood in Germany, "Germany, half-dunk with victory, gorged with French millions...was lurching into every sort of enterprise, honest, on the honesty margin or simply fraudulent."[449] German investment was especially heavy in Austria-Hungary and the United States.

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[448] Herbert Feis, *Europe the World's Banker 1870-1914: An Account of European Foreign Investment and the Connection of World Finance with Diplomacy before the War* (New Haven, CT: Yale University Press, 1930), 11.

[449] Clapham, *The Bank of England: A History*, 292.

Trigger and Dynamics of Contraction. The acute phase of the crisis began in Vienna, May 9, 1873 when the Vienna Bourse collapsed. Before long the panic had spread to Germany, Switzerland, Italy, Holland and Belgium. The constriction of credit in Germany seriously impacted the American market. Germans had been heavily invested in American railroads, and capital inflow for these investments was nearly $1 billion between 1865 and 1873.[450] When the depression in Europe contracted new capital flows to U.S. railroad securities, the railroad companies and financial agents linked with railroad securities were suddenly unable to pay on the investments.

By the middle of September of 1873 the credit squeeze was serious in the United States, and confidence in railway securities had evaporated, as the unwise financial practices of the financial agents selling railroad securities became public. These events brought down several prominent financial agents and banks and the resulting effect on Wall Street was disastrous. There was a rush to sell, but there were no buyers. As a result the Stock Exchange experienced great turmoil and was forced to close for ten days. The U.S. economy was the most seriously affected by the crisis and suffered deflationary pressure for the remainder of the 1870s. By the end of the year the crisis returned to Europe affecting Vienna again, and adding Russia to the list of casualties. Interestingly,

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[450] McCartney, *Crisis of 1873*.

although France and England were highly involved in the global economy through investment, their economies were the least disrupted by this international crisis.[451]

Response. In central Europe, responses to the crisis came from the banking community. In Austria, the government and the two largest financial institutions, the Austrian National Bank and *Creditanstalt* cobbled together a 20 million gulden fund to respond. This proved insufficient and Austria experienced deflation and liquidation throughout the rest of the decade.[452] The Austrian National Bank was a for-profit bank with a special relationship to the government but did not posses central banking functions such as a legal monopoly over note issue.[453] The government's desire to have a primary bank with more ability to deal with crisis caused the Austrian National Bank to be reorganized after the crisis into the new Austro-Hungarian Bank with control over more central banking functions than its predecessor.[454]

German responses were less coordinated because of the decentralized political nature of the German states. There were nearly 40 banks of issue in the German states and none but the Bank of Prussia were of considerable size.[455] In addition, the banks in

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[451] David Glasner, "The Crisis of 1873," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 132.

[452] Kindleberger, *A Financial History of Western Europe*, 274.

[453] Goodhart, *The Evolution of Central Banks*, 140.

[454] Ibid., 141.

[455] Charles Poor Kindleberger, "The Panic of 1873," in *Historical Economics: Art or Science*, ed. Charles Poor Kindleberger (New York: Harvester Wheatsheaf, 1990), 319.

Germany had very little experience using central banking functions such as manipulation of the discount rate. Many banks did not have adequate reserve requirements, and when the crisis hit, there was no central bank to turn to and no bank to provide clearing functions.[456] The banking communities in the German states cobbled together funds to help the commercial community, but again, this response was insufficient. There was a high level of commercial failure and a lingering depression for the rest of the 1870s.

After the crisis, the unification of Germany created the opportunity to establish the *Reichsbank*. This bank would be modeled after the Bank of England's 1844 Bank Charter Act and the *Reichsbank* was given central banking functions.[457] In other states throughout Europe, the use of primary banks or commercial banking networks was a common response for the crisis of 1873 but Kindleberger characterizes these efforts as feeble attempts of domestic banks acting as lender of last resort.[458] These banks did not possess the power of a real central bank, and thus they lacked he tools necessary to secure failing markets.

Responses to the crisis in the United States came first from a reluctant U.S. Treasury, which reissued retired greenbacks to provide liquidity. But this effort had hardly any effect in relieving the crisis and little of this money ended up in commercial

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[456] Smith, *The Rationale of Central Banking*, 59.

[457] Goodhart, *The Evolution of Central Banks*, 105-11.

[458] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 206.

circles.[459] The Secretary of the Treasury was strongly urged to intervene to relieve the crisis, but further help from the government was not forthcoming.[460] Crisis response thus fell to the major banks in New York City. Many New York banks suspended payments but these were relatively short-lived suspensions and the New York City banking community quickly worked to address the crisis.[461] The New York Clearinghouse Association, a grouping of the largest banks in the city, issued $26 million in certificates to aid the financial community. These certificates functioned as currency during the suspension period.[462] The Association further pooled their legal tender and created a common fund for the mutual aid and protection of Association members.[463] By September 25, 1873, the New York Banks further secured what would amount to $15 million in gold from the Bank of England and several other major banks in Europe.[464] Lacking even a primary bank, the commercial banking network was called upon to address the crisis and in New York City the Clearinghouse Association was effective in providing liquidity and discounting bills. Other parts of the country that did not have the banking infrastructure to withstand the crisis did not fare nearly as well.

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[459] McCartney, *Crisis of 1873*, 93.

[460] Sprague, *History of Crises under the National Banking System*, 41.

[461] Smith, *The Rationale of Central Banking*, 141.

[462] Glasner, "The Crisis of 1873," 133.

[463] McCartney, *Crisis of 1873*, 92.

[464] Schwartz, "Real and Pseudo-Financial Crises," 14, Sprague, *History of Crises under the National Banking System*, 58.

In England and France the crisis had only minor effects. France's economy was entirely exhausted after the war and heavy reparations. The speculation wave never hit the French economy and they were mostly spared from the crisis that raced through the rest of Europe. In England, given the heavy involvement of the British in foreign investment, especially American investment, it would seem that the crisis would have a serious effect, but it did not. The Bank of England can be credited with helping the British system to avoid crisis. It was vigilant raising the discount rate to protect its reserves and the banking system. In only a few weeks in 1873, it raised the rate a record 24 times. The Bank of England also lent freely at increasingly higher rates. These actions allowed England to avoid many of the problems experienced in the rest of Europe. England experienced no major failures or downturns, and although the markets were nervous, the crisis passed without many problems.[465]

The crisis of 1873 was most seriously felt in those countries that were unable to mount a significant response. In Austria-Hungary and Germany, the banking system was too underdeveloped to deal with the crash after the massive wave of speculation. Both of these states received "feeble" help from underdeveloped state banks but experienced serious recessions after the crisis. The United States also had trouble responding to the pressures brought upon its system in the crisis of 1873. The United States lacked the institutional framework to address a crisis. However, the New York banking community worked hard to resolve the crisis when the Treasury abdicated responsibility for

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[465] Kindleberger, "The Panic of 1873," 313.

assistance. This response would ease the acute panic, but the result of the crisis would be lingering depression and stagnant business conditions.

In England and France two dynamics made this crisis less severe. First, neither country seemed as tied up in the speculation. This makes sense in France, since after paying the indemnity foreign investments were curtailed. But England was heavily invested around the world. In fact there was more foreign capital commitments by 1874 than there were at any other time previously. Still, the crisis pressures passed England. Second, unlike the rest of Europe, in England, the British financial community did not lose confidence in the Bank of England. Even though the bank rate neared panic levels in September when the crisis hit the United States, the situation never came close to a crisis. Schwartz notes that the underlying situation was similar in 1873 as it was in 1866, but that there was less fear of undependable behavior from the Bank of England.[406] The crisis response system, embodied in the Bank of England garnered more confidence from the banking community because it acted immediately in a lender of last resort function.

The Key Crisis. I have identified the crisis of 1873 as the key crisis in the long nineteenth century. It will be recalled that a key crisis is a crisis where the response system fails. Throughout the nineteenth century, the response system can be said to be one of mixed actors providing *ad hoc* solutions to crises. One of the most common responses came from private banks and private banking syndicates. These banks

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[406] Schwartz, "Real and Pseudo-Financial Crises," 18.

provided the necessary liquidity and economic tools to alleviate crises since they usually had the resources to calm domestic markets.

But the increase in global capital and the increase in linkages through investment channels put a greater pressure on private banks. As markets around the world fell into crisis in 1873, private banks did not have the tools necessary to prevent or adequately safeguard domestic markets from the onslaught. Specifically, the inability to manipulate the discount rate and control the money supply hindered these banks from acting effectively.

The British model of central banking was very effective protecting the English system. By manipulating the discount rate and acting as a domestic lender of last resort, the Bank of England forestalled the crisis in England. This is a particularly interesting occurrence since compared to other states the British had the most capital in foreign markets, particularly in railroad stocks. Prior to and during the crisis of 1873, private banking systems were still important actors for resolving a crisis in most of the world, and they did help calm the crisis, but in the aftermath of the crisis central banks would emerge in all of the larger states of Europe.

The failure of response system was further indicated by the difficulties that Germany, Austria Hungary and the United States experienced recovering from the crisis. Between 1873 and 1896 the global economy fell into a deep depression, considered second severest in the history of the international economy.[467] Prices declined, global

[467] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 86.

investment was curtailed and global trade became extraordinarily protectionist.[408] Britain felt the strain from the depression too, but experienced it much later (in the early 1880s) and to a lesser degree than the rest of the world. However, in Germany, Austria-Hungary and the United States, the difficulty recovering from the crisis of 1873 plunged these economies into instability that would last, barely interrupted, for over two decades. The central bank was a well-suited institution for addressing the financial crises of the day and this institution spread throughout Europe. Many European states would reform their primary banks to mimic the capabilities of the Bank of England.[409] In addition to providing the necessary tools to stabilize the domestic economy, this institutional innovation also created the potential for coordinated efforts that could better manage international capital flows. While multilateral cooperation between central banks would still take time to evolve, the proliferation of the institution allowed an environment where these linkages could emerge.

A pattern in the response system is clearly emerging. Those state that had created an institution to adequately address crisis suffered less severely than those who relied on cobbled together responses. The remaining crises of this period demonstrate the differences between states with and without central banks to mount responses and

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[408] Ibid.

[409] Some European examples should be noted. The Reichsbank was founded in 1883 with full central banking capacities. The Swiss National Bank was given power over note issue in 1891, but officially chartered as a central bank in 1905. The Swedish Riksbank was given central banking functions in 1897. The Austro-Hungarian Bank received legislative authority to become a central bank in 1878. For a more complete discussion of the evolution of central banks and central banking functions in the later part of the nineteenth century see Goodhart, *The Evolution of Central Banks*.

continue to show the development of this domestic based response system. None of these crises would cause the dramatic global dislocation that the crisis of 1873 did, nor would another institution be identified as having the benefits of the central bank in terms of response.

The Crisis of 1890-1893

Expansion. The crisis of 1890 principally involved only two countries, England and Argentina and it reinforces the ability of a central bank to forestall a crisis and remedy the problem quickly. In the latter part of the 1880s, the British economy experienced a boom. There was yet another increase in joint-stock companies and great speculation in overseas ventures. British capital flowed to South, Central and North America, and especially Argentina. Argentina seemed like a good investment risk and many Europeans got caught up in the speculative mania in Argentina, but none were so heavily invested as the British. The country had vast natural resources and an abundance of land. This confidence in Argentine resources led to speculation in land mortgage bonds, natural resource stocks (i.e. mining, water companies) and railroads. The capital flowing into Argentina expanded the Argentine infrastructure and the government increased indebtedness to continue this expansion.[470]

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[470] W. Jett Lauck, *The Causes of the Panic of 1893* (Boston: Houghton, Mifflin and Co., 1907), 35-46.

Trigger and Dynamics of Contraction. The investments in Argentina looked stable until political problems began to mount. The country was highly in debt, branch banks were increasing liquidity with unbacked notes and it looked as though the government was going to be overthrown. This environment made speculative ventures look more insecure. The indication that things were truly problematic came when the Argentine government announced it was unable to make interest payments on their bonds.[471] British investors and financial houses tried to escape Argentine holdings, but did so much later than other Europeans who had been invested, and too late for the financial houses to find someone willing to purchase Argentine securities. The financial agents were thus left with worthless Argentine paper. Investors made excessive demands on financial houses in London and many found it difficult to cover their investments and faced bankruptcy. The biggest problem was with the House of Barings, which admitted to the Bank of England that it was illiquid in the fall of 1890. This announcement was shocking as the House of Barings, like Overend, Gurney and Co. was one of the oldest, largest and most respected financial houses in London.[472]

Response. Remembering the 1866 crisis and perhaps having learned from its failure to act to secure Overend, Gurney and Co., the Bank of England chose to cover Barings' losses. It did so with its own resources and by asking eleven private banks to

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[471] Batchelor, "The Avoidance of Catastrophe: Two Nineteenth-Century Banking Crises," 53.

[472] Unlike Overend, Gurney and Co. which tried to put the Bank of England out of business, the House of Barings was not considered a threat by the Bank.

contribute to a fund to secure Barings. The Bank also received help from abroad. It secured gold from the Bank of France in the event that its reserves dropped and it asked Russia not to withdraw £2.4 million from its account. Through these actions, the Bank of England guaranteed Barings' liabilities. The Bank of England acted most clearly as a lender of last resort and because of its quick and decisive action, the crisis was short-lived and caused only a brief flurry of activity in London. The British response system was perhaps at its best during the Barings crisis and England successfully and almost completely avoided a potentially devastating financial panic.

Linkages Abroad. The United States was briefly affected by the Barings crisis since investment to the United States was curtailed as British investors brought their money home in the aftermath of the crisis.[473] This was a short-term dip in the American market, but a more serious crisis was on its way. A confidence crisis in American investments began in 1891 when the *Economist* notes that the British were nervous about U.S. investments.[474] The problem was that the Treasury insisted on purchasing silver to keep it from devaluing relative to gold. Unfortunately, most of the world had abandoned silver in favor of gold and it looked as though the price of silver would continue to decline. British investors began liquidating U.S. holdings in order to assure they would escape before gold payments were stopped. The *Financial Chronicle* sums up the situation: "It is...the lack of confidence in our [monetary] policy that is causing Europe to

[473] Lauck, *The Causes of the Panic of 1893*, 75.

[474] *The Economist*, 26 December 1891.

feel our financial instability. No more foreign capital comes to the United States and as fast as Europeans can dislodge their holdings in America, they take their money away."[475] Foreign credit dried up and as a result of capital flight the U.S. currency depreciated. The U.S. Treasury intervened to prop up the currency by offering gold reserves. But this had little effect as the gold reserves released quickly left the country or were hoarded by domestic banks.

The British press and economic journals implored the United States to abandon their silver policy before it caused an international crisis, but the United States refused.[476] It was clear that no assistance from the prominent European central banks would be forthcoming unless the United States abandoned its policy. The United States decided to take the matter to the International Monetary Conference (IMC). The IMC was actually a series of conferences between European states and the United States that tried to coordinate the currencies of Europe. The United States organized a meeting in 1892 with the intent of addressing the economic problems it was experiencing because of the decline in silver prices. The American belief was that England, because it was heavily tied to U.S. investments, would be forced to accept the wider use of silver in order to prevent economic problems at home. The United States also believed that by calling an International Monetary Conference it would get support from some of Europe for this

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[475] As quoted in *The Economist*, 17 December 1892.

[476] T Lloyd, "The Silver Question in America," *The Economic Journal* 1 (1891).

policy.[477] This would not end up being the case. Europe did not budge on the use of silver. The American delegation left the Conference and within a year faced a serious crisis at home.

The crisis was caused by the Treasury Secretary Foster suggesting that Treasury Notes would not be guaranteed in gold but in silver. Markets, which were already cautious and suspicious of the American silver policy crashed. Foreign and domestic investors, concerned about gold payments, dumped stocks on the exchange causing a sharp decline in April and May of 1893. There were domestic bank runs, a lack of credit and increased interest rates.[478] Foreign capital continued to leave and foreign credit was unavailable. The response to this crisis was similar to parliament's action in granting the Acts of Indemnity for the Bank of England. The U.S. Congress moved quickly to repeal the Sherman Act, which was the legislation that required the United States to purchase silver. After this action the "silver question" was settled and confidence returned quickly to American investments.

The responses to the crises in 1890-1893 represent the difference between tools that had developed in the United States and England. In England, the Bank of England took an active role in the response by securing the liabilities of a firm that could have caused another serious financial panic. The Bank of England had become a true central bank by 1890 and responded as lender of last resort. Though still not fully a public

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[477] Henry Russell, *International Monetary Conferences: Their Purposes, Character and Results* (New York: Arno Press, 1898; reprint, 1974), 380.

[478] Lauck, *The Causes of the Panic of 1893*, 97-109.

institution, the Bank of England responded far more as a public agent than as a private one. As a result, the failure of Barings was not as severe as it could have been and the British economy recovered quickly. The British economy would not face another major crisis until World War I. The 1893 crisis in the United States was also calmed quickly, but in this case it was the action of the U.S. Congress repealing the Treasury requirement to buy silver that solved the crisis. The United States recovered quickly from the 1893 crisis but experienced a significant crisis in 1907 that would make the United States follow Europe's institutional lead and create a central bank.

## The Crisis of 1907

The period from 1873 until 1896 is considered to be one of the most significant international downturns. While there were speculative peaks during this period, the global economic trends indicate that prices declined steadily in most of the world for over 20 years.[479] The downturn ended by 1897, and in the subsequent decade the global economy began a great expansion.[480] The crisis of 1907 happens in the middle of this great expansion. While the crisis of 1873 is considered the first significant international financial crisis, by 1907 crises are commonly international events.

This section will demonstrate how widespread the financial linkages had become by considering this crisis in some detail. In this environment, the response system

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[479] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 156.

[480] Johnson, "The Crisis and Panic of 1907," 455.

continues to evolve and the pattern of states with central banks managing the crisis better than those without is clearly supported. The crisis of 1907 was also a significant event because forced the creation of the American central bank. It is possible to see the role that crisis and cross border financial linkages played in creating American institutional responses.

Expansion. The reason for the turnaround that ended the 1890s depression was the increase in the world's supply of gold. Significant discoveries in Witwatersrand (South Africa), Alaska, Colorado and Australia, nearly doubled the world's supply of gold available for monetary use. The increase resulted in an expansion of credit, it stimulated production, and prices increased dramatically, growing by 40% in ten years.[481] New capital flowed into railroad stocks, industrial plants, real estate, mining ventures and various other commercial endeavors causing the stock markets in many countries to reach unprecedented highs. But these investments would have the effect of reducing floating capital since they required long-term commitments.

As the expansion continued, investors became restless and dissatisfied with the low rates of return on railroad and industrial stocks and turned to speculative investments that promised higher rates of return but brought more risks.[482] The economic prosperity of this period was most noticeable in the United States, but it was not confined there. The expansion was clearly global in nature. Canada and Europe experienced dramatic

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[481] Ibid.

[482] Ibid.: 458.

growth and capital flowed steadily from Europe to South America. In Asia, the Japanese victory over Russia caused an enormous expansion the Japanese economy and gold discoveries in Africa and Australia contributed to growth there. Overall the picture at the beginning of the nineteenth century was one of expanding trade, expanding capital and widening development.

Trigger and Dynamics of Contraction. By 1905 there were noticeable signs that the boom was coming to an end. Even with the gold discoveries, capital markets were quickly becoming exhausted by several wars, industrial capital requirements and increasing speculation. As industry expanded, securities were issued at an unprecedented rate; this coupled with the rise in prices led to a scarcity of uncommitted capital.[483] By the fall of 1906 the Bank of England was concerned about its dwindling gold reserves as an enormous amount of capital was leaving the United Kingdom for American investments and speculation. Moreover, in the banking community there was increasing talk about Bank of England reserves being insufficient to withstand a crisis given the growing amount of business activity.[484] Credit was already tightening globally, but since most investment funneled through London, Bank of England action to raise the discount rate would have an immediate and serious global effect on credit. In the fall, the Bank of England, influenced by the drain of gold and criticism from bankers about its insufficient

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[483] Ibid.: 461. Alexander D. Noyes, "A Year after the Panic of 1907," *Quarterly Journal of Economics* 23, no. 2 (1909): 194.

[484] Clapham, *The Bank of England: A History*, 388.

amount of reserves, felt it necessary to stop the pressure on its gold reserve. It raised the discount rate to 6%, as high as it had been since the Baring Crisis of 1890.[485] By early 1907 global markets reacted to the even greater scarcity of credit. However, in London, the magic of discount rate manipulation worked and within three months the Bank of England had attracted £4 million of its reserves back to its coffers.[486]

Money markets were tight throughout the fall of 1906 and this put immense pressure on business interests as firms were not able to sell the securities they had marketed. The rise in the Bank of England discount rate was the straw that broke the camel's back. In January 1907 the American stock exchange buckled under this pressure and experienced a rapid decline that continued until March. This "silent panic" was characterized by investors trying to unload securities and sell newly issued securities, but few had the capital to purchase them.[487] The decline of the U.S. stock exchange had global repercussions and the readjustment affected foreign and domestic commercial activity. In January of 1907, the Egyptian market began to feel the credit strain. Journalists were quick to tie Egyptian problems to the drop in cotton prices and the New York stock market collapse. Falling cotton prices meant that a major Egyptian crop was not drawing the revenue expected and the New York decline resulted in skittishness throughout European financial centers that spilled over to the Egyptian market.[488] By

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[485] Ibid., 379-83. Noyes, "A Year after the Panic of 1907," 197.

[486] Clapham, *The Bank of England: A History*, 389.

[487] Johnson, "The Crisis and Panic of 1907," 462.

[488] *The Economist*, 23 March 1907, 504.

spring, the Egyptian economy was not just feeling the credit strain but in the middle of an acute panic resulting from the credit contraction. The Alexandria correspondent to the *Economist* described the panic conditions well; "Piles of shares were waiting to be sold though the market was so satiated with paper that the offer of threescore shares in any security sent down quotations whole points."[489] Several smaller financial houses failed and suspended payments. Since money became so dear, a hoarding panic followed and was only relieved by the shipment of $3 million in gold from London.[490] This response did not however, stop the long-term crisis situation. Egyptian banks continued to feel the strain. For several months they experienced runs and throughout the summer many banks were forced to suspend payments.

In Asia, the Japanese market also fell into a crisis period in early 1907. Prior to 1868, the *Tokugawa* period isolated Japan through restrictions on foreign contact and trade,[491] but the *Meiji Restoration* changed the nature of Japanese society, economy and government. The decentralized *Tokugawa* system was replaced with the centralized political and economic system of the *Meiji* codified by the 1889 constitution. One of the most significant consequences of the *Meiji Restoration* was a boom in economic development in Japan. Domestically Japan began to industrialize, and internationally, foreign trade doubled in the decade following the Restoration and continued expanding

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[489] Ibid., 721.

[490] Noyes, "A Year after the Panic of 1907," 203.

[491] William Wirt Lockwood, *The Economic Development of Japan: Growth and Structural Change* (Princeton: Princeton University Press, 1968), 6.

from there. Trade increased, especially with the west, and the Japanese became heavily reliant on British exports.[492]

Financially, the Japanese banking and credit system began to take shape in the 1880s with the creation of a handful of special government sponsored banks including a bank to facilitate foreign exchange and a central bank. These reforms created a more western Japanese banking system culminating with the creation of The Bank of Japan in 1882, which performed normal central banking functions. Changes in trade and finance increased both Japanese international interactions and domestic industrial and economic growth. This expansion was furthered by two significant wars. Victory in the Sino-Japanese War in 1895 gave Japan a £38 million indemnity that allowed the Japanese economy to move to the western gold standard in 1897. The victory over China also gave the Japanese political prestige and these changes brought the Japanese system further into the western economic system, allowing the Japanese to gain more access to western credit markets.[493]

Most of the industrial expansion in Japan to this point had been financed internally through taxation and public borrowing, but access to western credit facilities allowed the Japanese economy to finance the Russo- Japanese war through heavy foreign borrowing. The victory over Russia in 1905 caused another great domestic industrial expansion in Japan. Construction in the transportation and manufacturing sectors boomed and the Japanese continued to borrow heavily from abroad to finance this

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[492] Ibid.

[493] Ibid., 253.

development. The access to foreign credit caused an orgy of speculation, which was checked by the tightening of credit in 1907.[494] Clapham notes the connections between London and Tokyo were becoming extensive because the Japanese had borrowed nearly £100 million from London.[495]

When credit tightened in the fall of 1906 because of the rising Bank of England discount rate, less capital was available in Japan. The Japanese experienced a financial crisis in May serious enough to cause many banks to suspend payments[496] and the Bank of Japan was forced to contract domestic credit by raising its discount rate. The crisis, however, did not seem to have long term effects in Japan and beyond the Bank of Japan raising its discount rate, the responses are not significant. More than in other countries at the time, the crisis simply seemed to check Japanese expansion and speculative investment. The most interesting point of the 1907 crisis regarding Japan is that the global contraction of credit actually had an effect on Japan, indicating the connection of the Japanese economy with the rest of the world.

The crisis hit Italy in the spring of the 1907. Early in the twentieth century Italy experienced a great movement toward industrialization, but did not attract a large amount of capital from the rest of Europe. Only during times of capital abundance did Europeans choose to speculate on the Italian market and when any problems were felt in money markets in the rest of Europe, Italy was one of the first markets where Europeans

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[494] Clapham, *The Bank of England: A History*, 390.

[495] Ibid., 379.

[496] Noyes, "A Year after the Panic of 1907," 203.

divested. As Europe faced tight money markets in 1906, securities fell in prices and discount rates on the continent were raised, Europeans predictably divested of Italian holdings. When monetary problems in Europe continued, prices on the Italian stock exchange began to spiral downward. This caused domestic investment to leave the Italian stock market, exacerbating the problem. As a result the *Banca d'Italia*, Italy's largest bank and *de facto* central bank, raised its discount rate. Credit (commercial) banks, which had been lending at unprecedented rates, limited credit and called in loans. But fear led depositors to remove their deposits and these banks faced the possibility of runs as their reserves declined. The *Banca d'Italia*, with the help of a transfer from the Italian Treasury, provided cash liquidity to the many banks, which were on the verge of failing. The crisis soon passed and the *Banca d'Italia* received praise for its actions as lender of last resort and keeping Italian banks from resorting to large-scale suspension of payments. Prior to the crisis, the *Banca d'Italia* was the biggest bank in Italy, but many banks shared the functions of central banking. However, because of its actions and coordination of events with other banks and the Italian Treasury, the *Banca d'Italia* stepped up into the role of central bank after the crisis and was granted powers by the legislature to make this role official.[497]

These spring panics were an indication of the widespread effects of the credit contraction, but the crisis had not yet run its course. There were indications globally that

[497] Franco Bonelli, "The 1907 Financial Crisis in Italy: A Peculiar Case of the Lender of Last Resort in Action," in *Financial Crises: Theory, History and Policy*, ed. Charles Poor Kindleberger and Jean-Pierre Laffargue (Cambridge: Cambridge University Press, 1982), 51-63.

the situation was still unsettled. The American stock market continued to be unstable through the summer, but the real panic in the United States would not hit until fall. European states began experiencing panics in late summer. Many European stock exchanges were in turmoil, firms failed and exchanges turned against many countries causing gold to leave. This further disrupted credit markets. Several states used their central banks to check the flow of gold leaving their markets under crisis conditions. The German response is typical of the wider responses in Europe. By late October the *Reichsbank* raised its discount rate to 7½%, the highest rate the bank had ever seen. To a large degree this response worked and brought gold back the bank, although the *Reichsbank* was soundly criticized for raising the rate since its gold reserves were so high and a lower rate would have aided global credit considerably.[498] Gold did drain from the Germany to the United States through November, but the overall amounts were low and the *Reichsbank* did not come close to needing to suspend payments and as the global exchanges moved toward equilibrium, business conditions in Germany improved rapidly. Crisis conditions generally abated in a similar way throughout Europe as central banks responded to the tight credit conditions.

While European central banks dealt with the crisis effectively, 1907 would prove to be a most difficult year for the United States. As noted, the market decline lasted through the spring. This event was significant because the fall in the price of American securities was felt across the globe, fear spread to other countries, and markets were destabilized internationally. This was only the overture of "one of the sharpest

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downturns in economic activity in the history of the United States."[499] The reasons for the severity of the crisis in the United States are varied, but many contemporaries blamed it on the lack of an American central bank, which they saw as necessary to calm markets and provide liquidity in the face of economic turmoil.[500] By late summer the economy was again on the verge of crisis. In August, the stock exchange experienced another rapid decline and in early fall, the country began its seasonal credit contraction due to the movement of crops. These events left the United States primed for the most serious episode of the financial crisis in the fall of 1907.

The fall crisis has been blamed on several domestic problems including capital flight due to President Roosevelt's attack on great corporations, specifically railroad companies and Standard Oil, reckless banking practices in New York City and domestic currency laws.[501] Although many scholars have considered the crisis of 1907 solely an American domestic problem, the coincidence of crisis around the globe makes this perspective questionable. Noyes and Johnson present compelling evidence that the U.S. crisis, though exacerbated by domestic problems, was actually the result of an international credit contraction that began in the fall of 1906, just prior to the large

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[499] Goodhart, *The Evolution of Central Banks*, 134.

[500] Charles A. Conant, "The Financial Situation III: The Lessons of the Panic," *The North American Review* 187, no. 627 (1908), Sprague, *History of Crises under the National Banking System*.

[501] Charles B. MacDonald, "The Financial Situation IV: Our Present Crisis," *The North American Review* 187, no. 627 (1908): 187-92.

decline in the U.S. stock market in 1907.[502] The extensive global investment and available credit in the early twentieth century had inflated prices, caused questionable businesses to gain investors, and sunk capital in projects that required a continued supply of capital.[503] As credit became tight, businesses were unable to find investors and meet their capital demands. The system was ripe for a revulsion and the specific trigger event in the United States seems to be the impropriety of several New York Bankers who speculated illegally on the copper market. Unfortunately, they speculated in the wrong direction and the copper market declined.[504] The Mercantile National Bank failed due to its role in these investments and this highlighted both a problematic national policy for bank reserves and a distrust of certain bankers.

Clearing houses in New York easily covered the deposits of the Mercantile National Bank, but the panic was just beginning. A week later, trust companies in New York also started failing. This compounded the banking problem. First, because trust companies were growing in size and deposits, making them larger than many banks. Second, trust companies were beyond the scope of national regulations for gold reserves and not within the clearing house system, therefore there were few instruments available to deal with the failure of these institutions.[505] The failure of several major trust

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[502] Johnson, "The Crisis and Panic of 1907.", Noyes, "A Year after the Panic of 1907."

[503] Noyes, "A Year after the Panic of 1907," 198.

[504] O.M.W. Sprague, "The American Crisis of 1907," *The Economic Journal* 18, no. 71 (1908): 357.

[505] Ibid.: 360.

companies in New York led to fear across the country regarding the safety of all bank deposits. Bank runs spread quickly and individuals as well as banks hoarded money. City banks, which held reserves for most country and interior banks, faced the greatest amount of pressure and loss of reserves. By the start of November, less than two weeks after the crisis began, most banks in the United States had restricted or suspended cash payments, though the level of restriction or suspension varied by region.[506] As with many crises the solution was to find liquidity or credit in order for firms to meet their obligations and continue business. For banks the challenge was to secure gold in order to meet the demands of business and individuals.

Liquidity came through three different actors during the crisis of 1907 and this constituted the response. First, the U.S. Treasury responded by increasing deposits into many reserve banks in an effort to secure their ability to continue payments. Between October 19 and October 31, $36 million was transferred from the U.S. Treasury to the banking system to strengthen reserves, but this was not nearly enough restore confidence.[507] In order to keep from suspending payments, banks then tried to secure more reserves from Europe, but unlike previous crises, "gold was not secured to any considerable extent by means of borrowing in the London market."[508] Gold was instead imported through the normal trade patterns, in exchange for surplus goods. Imports dropped in 1907 and exports increased considerably in order to bring the needed gold to

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[506] Sprague, *History of Crises under the National Banking System*, 286.

[507] Ibid., 262.

[508] Ibid., 283.

New York where it was then channeled to interior banks. This measure helped some domestically, but had repercussions internationally.

Domestically, the gold reserves increased but the effect was not immediate since it took several weeks to ship the necessary gold and banks needed to make payments immediately. The lag in receiving the gold forced New York banks to create another response.

Internationally, the export of nearly $100 million in European gold had a great impact on the British and German markets as both the Bank of England and the *Reichsbank* were forced to raise their discount rates. In London, where most U.S. firms held accounts, the threat to British reserves came from states drawing down London balances by acquiring credit in London to pay American accounts. Without raising the discount rate, London would have faced considerable losses to other countries.[509] The London rate had to be prohibitively high to prevent this, and in early November the rate reached 7%, a rate that had not been seen since the crisis of 1873. The rate would not go below 7% until well into January 1908.

The final response to the crisis came from the New York City banking community and was led by J.P. Morgan. These banks issued clearinghouse certificates as an emergency substitute for currency.[510] These certificates allowed banks to meet their accounts with other financial institutions and effectively created an inconvertible

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509 Ibid., 284.

510 Goodhart, *The Evolution of Central Banks*, 134-5.

currency, but one managed by private means not by the U.S. government.[511] It was hoped that freeing up this cash would allow banks to respond to public needs and thwart any panic or bank runs, but even with the infusion of liquidity, banks continued to suspend payments to the public and they also attempted to use the clearing house certificates to settle accounts with the public as well as other financial institutions. The American Correspondent to *The London Economist* recounts the incident of people never having a bank account receiving clearinghouse certificates as payment for services.[512] Needless to say, while this emergency currency provided much needed liquidity, it did not calm public fears. In addition, the measure effectively placed control of a money supply in the hands of private bankers. This spurred a major debate about the American currency system, which echoed through the halls of Congress, the press and the academy.

Improvements only began with the receipt of imported gold, but business was sluggish well into 1908, and in the banking community, a full resumption of payments did not happen until January 1908. The responses to the crisis were problematic. There were two actors involved in the response. First, private banks, who created an inconvertible currency that only partially addressed the problem. Second, the treasury which at first did not supply enough notes to address the problem and then tried to aid banks by issuing bonds, which were ineffective because no one had the cash to purchase

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[511] William B Ridgely, "The Financial Situation Ii: The Nation's Currency and Banking System," *The North American Review* 187, no. 627 (1908). and *Economist*, Nov 16, 1907, p. 1964

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them.[513] What actually turned the tide in the crisis was securing gold from abroad through trade. While this took time it worked, and the crisis passed, but criticism abounded. Without the luck of a good harvest and the demand for U.S. goods, the ability to address a crisis could not be guaranteed. The problems with the American crisis response system were thus evident, and the solution began to be a topic for discussion: "Somewhere in the banking system of a country there should be a reserve of lending power and it should be found in its central money market."[514]

Response. The common perception of the crisis of 1907 being a solely American incident caused by problematic banking laws does not seem to be accurate when one examines the widespread global disturbances that developed throughout that year. The analysis presented by Noyes and by Johnson suggests that the crisis was an international phenomenon caused by a global credit contraction. This seems to be a more accurate analysis.[515] Once beset with a crisis, states were faced with trying to remedy the problems within their markets. An examination of responses indicates that in most European countries, and in Japan the central bank was employed to provide the liquidity needed to avoid a statewide suspension of payments and the threat of inconvertibility.

During a crisis, central banks provide liquidity by securing reserves that financial actors can draw upon. The central bank may lend at a high rate, but it secures the

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513 Sprague, *History of Crises under the National Banking System*, 317.

514 Ibid., 319.

515 Noyes, "A Year after the Panic of 1907." Johnson, "The Crisis and Panic of 1907."

resources to be able to continue to lend at all; that is, central banks work to provide the resources so that banks can maintain payments into cash (government backed notes or specie, preferably gold at this time). By doing this, banks are acting in the Bagehotian capacity as lender of last resort. Central banks acting in this capacity can be seen in Germany and Japan and though not as evident, even in Italy.[516]

In the United States, there was no central bank, thus there was no central reserve to guarantee payments in either government notes or gold. Because of this American notes and gold were hoarded and liquidity severely constrained, so much so that business transactions all but stopped. The crisis response consisted of an *ad hoc* private banking response and a minimal governmental effort through the U.S. Treasury. These actions were somewhat effective, but the real savior was the strength of American manufacturing and trade, which finally brought the necessary gold to alleviate the crisis.

Consistent with the advanced nature of their banking systems, both England and France only minimally felt the crisis of 1907. In London, Clapham notes, "the year 1907 was one of uncommon international difficulty. [T]he Bank came through it in such fashion as to leave no troubled memories in the minds of men who were at the time in its service."[517] Bankruptcy figures in London were actually lower in 1907 and 1908 than they were in 1905 and 1906, evidence that the international crisis did not cause much disruption in there.[518] The Bank of England concerned about its reserves in late 1906

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[516] Though not discussed specifically this was also the response in the Netherlands.

[517] Clapham, *The Bank of England: A History*, 391.

[518] Ibid., 393.

raised the discount rate, tightened global credit and actually caused the crisis, but by early 1907, the Bank was in a better position, more confident about its reserves and relaxed its rate. While the crisis spread throughout Europe, Africa, Asia, Latin America and North America, the Bank of England maintained a low discount rate and only began raising it after the demand for gold in the United States peaked in late October 1907, again to protect its reserves. In France the crisis was a non-issue. "France notoriously passed through the panic period more completely unscathed than any other nation."[519]

By 1907, the central bank had become both the actor that preventively staved off a crisis and the one that would lead the response as the domestic lender of last resort. States without central banks lacked the institutional capacity, and often the ready resources to effectively deal with a crisis and were forced to resort to using inconvertible currencies to provide liquidity because there was no central reserve available. In the United States one can see the reliance on private actors to remedy the crisis. This may have worked, but it also presented problems because private actions by definition were pursued with intention of seeking profit and not securing the financial system. Thus, private actors could not be relied upon during the next crisis period even though a response system coalesced in the previous crisis. Because of this, debate in the United States would be focused on reforming the currency system through the creation of a new banking institution.

> While the general causes which are responsible for the crisis of 1907 have been recounted above, there still remains one point of fundamental importance. If we compare our economic history with that of Europe, we

[519] Noyes, "A Year after the Panic of 1907," 298.

observe that acute financial crises have there almost passed away. England has had no severe convulsion since 1866, and in France and Germany also the disturbances are more and more assuming the form of periodic industrial depressions rather than of acute financial crisis…the responsibility for the continuance in this country of a phenomenon which is in large measure vanishing elsewhere rests beyond all peradventure of doubt on the inadequacy of our currency system.[520]

After 1907, praise abounded in the academy and in Congress for the European banking systems that helped them avoid the crisis experienced in the United States. Central banks were described as, "stand[ing] like a Gibraltar amidst the waves of financial turmoil."[521] In Congress the Aldrich-Vreeland Act was introduced. This created the National Monetary Commission[522] to consider the establishment of an institution that could, "mobilize and centralize reserves [and] in a period of distress the central bank should follow the Bagehot principle of extending credit liberally to everyone whose solvency and condition entitles him to receive it. At the same time, it should keep its discount rate high to encourage gold inflow."[523] The policy and academic debates were cognizant of the workings of foreign institutions that prevented the serious crisis that the United States had experienced and provided certain means to escape a crisis. By 1913, the Federal Reserve System was created to act as the American central bank.

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[520] Seligman, "The Crisis of 1907 in the Light of History," xxv.

[521] Conant, "The Financial Situation III: The Lessons of the Panic," 182.

[522] It should be noted that a majority of the MNCs work consisted of researching central banks around the world in order to present a thorough report of their operations to Congress.

[523] Timberlake, *The Origins of Central Banking in the United States*, 189.

The crisis response system was at this time designed country by country even though there was a great deal of convergence in terms of the type of institution that had been created. Most central banks had become public institutions to avoid the problems that private for profit institutions would encounter when trying to address a crisis. There were international linkages between these institutions as resources flowed from one state to another to address the crises, but coordinated efforts to prevent and address crises were immature. Crises, however, are clearly becoming increasingly international phenomena as global financial linkages grew and crises more easily jumped borders. [524]

## The Crisis of 1914

The Missing Expansion. Following the crisis of 1907, policy and intellectual debates in the United States consolidated around the need for a central bank to avert problems the financial community faced during a crisis.[525] By 1913, the opposition to creating a central banking system was defeated and Congress passed the Glass-Owen Act authorizing the creation of the Federal Reserve System.[526] Across the Atlantic, the necessity for the Bank of England to protect its reserves in the early 1900s led to its

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[524] Johnson, "The Crisis and Panic of 1907.", Noyes, "A Year after the Panic of 1907."

[525] *The Currency Problem and the Present Financial Situation: A Series of Addresses Delivered at Columbia University 1907-1908*, James Livingston, *Origins of the Federal Reserve System: Money, Class and Corporate Capitalism 1890-1913* (Ithaca, NY: Cornell University Press, 1986), 172.

[526] It is interesting to note that the name of the American central bank, the Federal Reserve, derived from the problems with banking reserves in 1907 that ultimately consolidated the desire for a central bank and pushed Congress to create a system that secured a truly "federal reserve."

raising the discount rate and constricting global credit. This fueled banking policy debates in England, which were focused on the adequacy of the Bank of England's gold reserves. Many of London's most important bankers were concerned that even though England had escaped relatively unscathed from the crisis in 1907, that the reserves were too low to withstand an external drain.[527] While reserves had grown by over 40% in the years since 1893, the volume of trade and banking had increased over 100% during the same time.[528]

It was widely believed that the United States economy suffered more severely in 1907 because it lacked a lender of last resort. This concerned British bankers because considering the Bank's "puny gold stock and her inflexible note issue...[bankers] had begun to believe that they had no effective lender of last resort either," especially if the Bank of England faced an external drain of gold.[529] Thus the debate over gold reserves was renewed with new fervor, and bankers began to convene the "Gold Committee" to determine a way to get the Bank of England to raise its gold reserves so that it could stave off an external drain and secure business needs domestically.

The intellectual and policy debates at the time were thus focused domestically in the United States, and internationally in the United Kingdom. The United States was

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[527] Teresa Seabourne, "The Summer of 1914," in *Financial Crises and the World Banking System*, ed. Forrest Capie and Geoffrey E. Wood (New York: St. Martin's Press, 1985), 80.

[528] Ibid., footnote 12.

[529] One will recall that the Bank of England did face this external drain in 1907 when pressure to settle American accounts drew gold overseas. Marcello de Cecco, *The International Gold Standard: Money and Empire* (New York: St. Martin's, 1984), 132.

formulating a way to secure domestic banks should a crisis hit and that solution would be a public Federal Reserve System.[530] The United Kingdom was trying to figure out how to secure itself against an external drain of gold, which was a potential problem based on the extensive linkages the London financial community had abroad. These debates show how divergent concerns were in each country when the crisis of 1914 hit and foreshadow the manner in which the institutions in both the United States and England would respond.

The crisis of 1914 is somewhat unique because its genesis grew out of the increasingly hostile European political environment, thus there was no expansion of credit as is usually identified prior to a financial crisis. In fact, Kindleberger excludes the 1914 crisis from his typology because of the unique political circumstances that caused the credit contraction.[531] The 1914 crisis is important for the purposes of this study because even as its genesis was unique, the responses were quite familiar. Central banking was in full operation globally and central banks acted to contain and end the crisis. However, the outcome of most responses is difficult to determine since the realities of war considerably changed the economic goals of most states in the world from business and economic prosperity to war financing.

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[530] A private central bank was also considered. The Aldrich-Vreeland Act of 1908 created essentially a central bank controlled by Wall Street (private bankers), but backed by Washington. By 1913 a change in administrations and political climate also changed the nature of the bank to a public regional banking system. See Livingston, *Origins of the Federal Reserve System: Money, Class and Corporate Capitalism 1890-1913*, 181-2, Robert Sobel, *Panic on Wall Street: A History of America's Financial Disasters* (New York: Macmillan, 1968), 324-5.

[531] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*

Trigger and Dynamics of Contraction. Although there was no preceding expansion, a credit contraction happened suddenly across Europe in the summer of 1914. The tensions between Austria and Serbia at the end of June, punctuated by the Austrian Archduke's assassination, brought the fear of war closer. By the middle of July the political powder keg was also becoming a financial one. Fear spread quickly through all European and the New York stock markets as war became more certain. All markets experienced heavy selling as individuals tried to turn their securities into liquid assets that would be safer in wartime. Most European stock markets felt the strain of heavy selling and the steady dramatic decline in security prices accompanied by the skyrocketing price of gold. By July 28 the stock exchanges in Vienna, Budapest, Brussels, Madrid and Toronto were closed; the Paris Bourse (*Parquet*) had suspended settlement. One day later, all bourses on the Continent were closed.[532] This brought heavier selling to the remaining open stock markets in London and New York as foreigners tried to secure sterling and gold in these markets.[533] On July 31 both New York and London closed. As with most stock market panics, the strain was also felt across banking communities and throughout the gold market. The breakdown was widespread. War conditions created a disastrous financial disruption.

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[532] "The General Situation," *The Commercial and Financial Chronicle*, 1 August 1914, 298, Sprague, "The Crisis of 1914 in the United States," 509.

[533] Seabourne, "The Summer of 1914," 88.

Across Europe central banks responded to the crisis as best they could. The frantic selling in the last week of July was an effort by all Europeans to secure gold or British Pounds. When the stock markets closed, there was pressure to raise official bank rates in an effort to keep Europeans from taking gold out of the central bank reserves. In addition, German, Russian and Austrian banks experienced heavy runs as the domestic population tried to withdraw their balances and foreign investors brought their balances home to avoid possible seizure.[534] Most states resorted to a moratorium on settlements of indebtedness and suspended gold payments.[535] These actions prevented gold from leaving the reserves and being hoarded by the domestic population or from going abroad as remittances for debt, therefore assuring that the war chests of European powers would be full. To supplement their reserves European countries also began making arrangements to secure credit lines abroad. While the immediate response is well documented, a further understanding of the responses is difficult because the goal changed quickly. As Europe began actually fighting, the concerns of the financial community took a backseat to war financing.

The situation in England has to be considered separately. The growth in international trade and credit had made London the world's creditor. As a result, the City's financial institutions could not insulate themselves from the financial breakdown.[536] The financial problems were felt most significantly through the remittance

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[534] "The General Situation," 299.

[535] "The General Situation," *The Commercial and Financial Chronicle*, 8 August 1914.

[536] Seabourne, "The Summer of 1914," 85.

system. As foreign stock markets closed and moratoriums became widespread, the ability of foreign debtors to pay their loan obligations to London was interrupted. London brokers, who had bought securities for foreigners with loans, expecting payment to be made before settlement day, were now in the position of not having money to pay off their loans because the foreign remittance system was inoperative. Banks called in their loans to brokers, who could not pay. The public, feeling the panic, went to banks to get their deposits, but banks, fearing for their reserves, hoarded their gold and paid in Bank of England notes instead. These notes were too large (£5) to conduct daily business so the public then went to the Bank of England and demanded gold for the Bank's notes. The Bank had to choose between paying gold or making their notes inconvertible. They paid gold and experienced a heavy drain of reserves. A considerable amount, £4 million left for France when the French withdrew their London deposits, but British banks caused the most dramatic loss.

To avoid losing their reserves British banks withdrew their cash balances in gold from the Bank. Over £10 million in Bank of England reserves went to domestic banks. Reserves at the Bank of England significantly dropped from 40% of liabilities to 14%.[537] The Bank of England raised its rate to 10% on August 1 to stop this drain. This was a dramatic move; the Bank increased the rate seven points in just three days, reaching the highest rate since the crisis of 1866.[538] The Bank's raising of the discount rate was usually used to draw international gold into the Bank of England's coffers. Now it had

[537] "The General Situation," 381.

[538] Seabourne, "The Summer of 1914."

the primarily domestic effect of keeping British bankers from emptying the Bank of England of its gold reserves.

In 1914 London suffered its first significant financial crisis since the breakdown in 1866. In both 1873 and 1907 Bank of England action spared the British from the crises that spread throughout the rest of the world; and in 1890 the Bank of England successfully staved off a national crisis by securing Baring's liabilities when it collapsed. In 1914 the situation was far more dire and the Bank of England came dangerously close to suspending convertibility.

London's international linkages complicated the situation. The Bank not only faced a threat from domestic sources but also feared an external drain of gold. The Pound Sterling had become the international currency of choice, so preferred that during the crisis many Europeans who sold their securities sought to hold sterling instead of their own currencies.[539] Fears that a hostile nation would use its holdings of bills to deplete the Bank's gold supply were widespread.[540] But there was great faith in the British control of international finance and Keynes argued that abandoning convertibility would have serious repercussions for London's future as the financial center of the world.[541] Still, bankers wanted convertibility suspended. They had been fearful for years that Bank of England gold reserves were too low—the main reason for establishing the Gold

[539] Ibid., 88.

[540] Forrest Capie and Geoffrey E. Wood, "The Crisis of 1914," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 137.

[541] John Maynard Keynes, "War and the Financial System, August, 1914," *The Economic Journal* 24, no. 95 (1914): 478.

Committee. When the crisis hit, they demanded that the Bank Act be suspended to provide domestic liquidity, and that convertibility be suspended to keep the Bank of England's gold reserves from leaving the country. This action was of course self serving: suspending convertibility would make reserves available only for the British banking community.[542]

The British response therefore had to be sensitive to both the international and domestic crisis situation. The most important issue was restoring credit to the system in order to save the domestic acceptance houses, and by association banks, from failing. The four main proposals considered were suspending the Bank Act of 1844, issuing small Bank of England notes, suspending specie payments (convertibility), and a moratorium on bills of exchange. With the exception of suspending convertibility these measures were all taken.[543] The suspension of the Bank Act and the issuance of small Bank of England notes effectively suspended domestic convertibility, because it increased liquidity, satiated the public's desire for notes, and eliminated their desire for gold. Internationally, not abandoning convertibility was a difficult step, but it turned out to be more difficult psychologically than practically. The world, save France, owed London remittances for loans, London did not owe the world, so after France drew gold out of London in the first week of the war, no significant external drain of gold occurred.

Maintaining convertibility was an important step for the Bank of England because it could have easily issued a general moratorium as most of Europe had. Instead the

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[542] Seabourne, "The Summer of 1914," 103.

[543] de Cecco, *The International Gold Standard: Money and Empire.*

Bank chose to allow foreign balances to be claimed in order to keep London's position as global banker secure. The measure worked and gold did not leave Bank of England coffers. Even with liquidity restored domestically, the inability of banks to make good on their obligations was serious and had to be addressed. To jumpstart the bill acceptance market, the government lifted the moratorium without jeopardizing discount house insolvency. It did this by guaranteeing the payments on bills of exchange at the Bank of England. This enabled the banks to turn their bills into money and thus created credit.[544] The measures had a positive effect on business activity but would come back to haunt the British economy through wartime inflation.[545]

In the United States the crisis was severe but short-lived. By November 1914, the demand for American goods abroad for fighting the war was so high that the U.S. economy prospered beyond belief. But the month of August would test the new central banking institutions that were in the process of being created in the United States. The crisis hit the United States at the same time it hit Europe and though the New York Stock Exchange stayed open until 31 August, it too would have to close in response to heavy selling and plummeting security prices. Banks immediately felt the strain because they were unable to conduct normal business to protect their reserves from being depleted.[546] Before significant bank runs occurred, the system that had been used in 1907 sprang into action. Banks cooperated through the issuance of clearing house certificates. While this

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[544] Seabourne, "The Summer of 1914," 106-9.

[545] Capie and Wood, "The Crisis of 1914," 137.

[546] Sprague, "The Crisis of 1914 in the United States," 514.

aided the banking system, the U.S. Treasury used another tool to provide the necessary credit in the form of emergency currency. The Aldrich-Vreeland Act, which established a privately controlled central bank in the United States was passed in 1908 and slated to remain on the books until the Federal Reserve System, created under the Glass-Owen Act in 1913 was up and running. The Aldrich-Vreeland Act permitted the Treasury to issue emergency notes that would be given to private banks in crisis periods to provide necessary liquidity.[547] The Treasury released this currency to the banks in early August and by late September over $325 million was in circulation.[548]

The emergency currency had the same effect as suspending the 1844 Bank Act in England; it permitted domestic liquidity and satiated the public's and banks' need for cash. It would not however, ease the problem of foreign debts. The Americans thus faced the same question as the British, whether to suspend convertibility internationally. Here the newly created Federal Reserve Board facilitated cooperation among the banks in central reserve cities. A gold pool of $100 million was created from individual bank contributions.[549] A percentage of the gold was immediately shipped to Ottawa to cover debts with Britain and deposited into the Bank of England's reserves.

By November the economic crisis seemed alleviated and due to the desirability of American exports, the United States was no long concerned about a foreign drain of gold. Though it would be another year before the Federal Reserve System fully came into

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547 Sobel, *Panic on Wall Street: A History of America's Financial Disasters*, 337.

548 Ibid.

549 Sprague, "The Crisis of 1914 in the United States," 530.

operation, the structure was in place so that crises would be addressed by a coordinated public system, not simply by the private banking community. Sprague spoke positively of the U.S. response in 1914 noting that, "In no former crisis was the aid rendered by the government so immediate and effective."[550] The Glass-Owen Act further institutionalized a federal reserve so that emergency private bank clearing-house certificates were not needed nor was trying to coordinate private banking actions to secure gold for international debts would be a thing of the past.

Response. The responses to the 1914 crisis were made at a time when political and economic instability was high due to the continuing tension and hostilities. It is therefore difficult to get a real picture of how the responses worked. What does emerge however, is the primary importance of the central bank as the responding actor. All across Europe the central banking tools that had been established throughout the nineteenth century were evolving and central banks worked to contain the effects of crisis. Just fifty years prior, these responses did not exist. The United States and British cases show most clearly the actions of central banks. In England the Bank of England addressed the lack of credit domestically through suspending the Bank Act and internationally by remaining on the gold standard. These actions indicate the power of the Bank of England as an international lender of last resort, a role that had developed through the increasing financial linkages between England and the rest of the world. Other countries in Europe were not able to address crises with such decisive action

[550] Ibid.

because of their position as debtors instead of creditors, but in all cases the central bank took necessary actions to secure the domestic economy. In the United States the response is indicative of the emerging central banking system that supplied liquidity to the domestic economy and coordinated private banking actions when dealing with foreign exchanges and indebtedness. The actual measures taken by the United States are, as in the case of England, indicative of the growing strength of the U.S. economy. Even though the United States was a debtor at the beginning of the war, by the end the United States would be the world's creditor.

There are actually two conclusions that can be drawn from the crisis of 1914. The first is that central banks performed their duties as would be expected and were the primary respondents in the crisis. In Europe, Britain and the United States these banks intervened to stabilize the domestic economy. Whether these actions were ultimately successful is hard to determine since the wartime conditions changed the focus of the economy.

## Crisis Response in the Long Nineteenth Century

This chapter has examined the incidence of crisis and the development of responses throughout the long nineteenth century. Several important dynamics can be observed in responses, and taken together these dynamics demonstrate how the response system evolved throughout this time period (see Table 3). In this period crises were considered mostly domestic events, therefore, the response system grew to privilege domestic response actors that took action on behalf of the state's economy. Global

Table 3.1: Overview of Financial Crises of the Nineteenth Century

| **Crisis Year(s)** | **1810** | **1819** | **1825-1828** | **1836-1838** | **1847-1848** | **1857** |
|---|---|---|---|---|---|---|
| **Countries Affected** | England | United States | England<br>France | England<br>United States<br>France | England<br>Europe | United States<br>England<br>France<br>Europe |
| | | | | | | |
| **Reason for Credit Expansion** | New Markets | Governmental Action (United States Treasury Bond Issue) | Governmental Action (Resumption Act)<br><br>New Markets | Governmental Actions (United States Treasury disbursement) | Government Action (The Railway Act) | Resource Strike<br><br>Governmental Action (Legislation regarding limited joint-stock banks) |
| **Reason for Credit Contraction** | Bullion Committee Report | Recall of Treasury Notes | Bank of England contraction of note issue | Bank of England raises discount rate causes global credit contraction | Decline in grain prices. | Asset market decline (Railroads) |
| **Crisis Response** | Exchequer Bills Issued | Treasury specie deposits | Reluctant Free Lending | Free lending; International Lending | Liquidity Provided; Free Lending; Bank Restructuring | Uneven Lending; |
| **Central Actor in Response** | Government | Government | Reluctant "Central" Bank (UK, France)<br><br>Private Bank Network (Fr) | Primary Bank (UK)<br>Government (United States)<br>Private Banks (Europe, United States) | Government (UK, France, Belgium)<br><br>Primary Bank (UK, France) | Primary Banks<br><br>Private Banks (Hamburg, United States) |

Table 3.1: Overview of Financial Crises of the Nineteenth Century (continued)

| **Crisis Year(s)** | **1864-1868** | **1873** | **1890-1893** | **1907** | **1914** |
|---|---|---|---|---|---|
| **Countries Affected** | France<br>England | Europe<br>United States | England<br>United States | Germany<br>United States<br>Netherlands<br>Egypt<br>Italy<br>Japan | Global |
| | | ***KEY CRISIS*** | | | |
| **Reason for Credit Expansion** | Governmental Action (Legislation regarding limited liability corps. and joint-stock banks) | Direct Capital Infusion (Reparations from Franco-Prussian War) | New Markets | Gold Discoveries in South Africa, Alaska etc. | No credit expansion |
| **Reason for Credit Contraction** | United States Civil War (collapse of cotton market) | Fall of Vienna Bourse<br>Railroad Stock Scandals | Foreign Market Malfeasance<br><br>Government Action (Sherman Bill) | Bank of England raises discount rate to stop gold from leaving to foreign investments especially United States | War<br>Assassination of Duke Ferdinand |
| **Crisis Response** | Uneven Lending;<br>Liquidity Guaranteed | Limited Discounting;<br>Clearinghouse certificates | Free lending (UK)<br><br>Repeal of Sherman Act | United States: creation of clearinghouse certificates<br>Other: liquidity instruments | UK: domestic liquidity, international convertibility<br>United States: Increase domestic money supply and gold pool |
| **Central Actor in Response** | Central Bank (UK, France);<br>Government (UK) | Central Bank (UK, FR);<br>Primary Banks (Austria, Germany);<br>Private Banks (United States, Austria, Germany) | Central Bank (UK);<br><br>Government (United States) | Central Banks;<br>Government (United States, Chile);<br>Private Bank Syndicate (United States) | Central Banks |

financial linkages caused crises to grow in size and required actors to have more capacity to respond. By 1857, it is clear that crises generated outside the borders of one's state could easily move through investment channels into one's state. The central bank became the privileged institution because of its ability to address crisis and because it was forced to safeguard the state economy, not its own financial position. Thus, a domestic based institution, with large financial capacity that operated in the public interest, were the necessary characteristics for a successful response institution. This section will elaborate on these conclusion

As the long nineteenth century unfolds the main trend in crisis response is that it becomes dominated by the domestic central bank. Throughout the period the success of this institution and the reliance on this institution deepens. Early crises in the period were remedied by a plethora of actors including individual private banks, governments, banking syndicates and what I have identified as primary banks.[551] These mixed actor responses were cobbled together when crises emerged and were successful providing necessary relief to firms and the economy in earlier crises. But this response system becomes problematic for three reasons. First, because it is *ad hoc* by nature, there is no coordinating authority and responses can fail to coalesce or fail to be adequate when key actors shirk their duties. Second, because it privileges private actors there is no guarantee

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[551] Primary banks are privileged banks of the crown or government that have a special relationship with the government and larger capacity than most other banks in the state. Many of these banks became central banks by the end of the century. The difference between primary and central banks is that central banks possess central banking functions (lender of last resort capacity, monopoly over note issue, control of discount rate) whereas primary banks do not.

that these institutions will act in the public good to respond unless it is in their own best interest. Third, these actors did not possess some of the most important tools for manipulating the money supply and the domestic economy. Governments were reluctant to grant such powers to private actors.[552]

By 1873 these problems are evident as states relying on these systems of mixed actors find it more difficult to respond to crises. In these states response tools are often not held by any single institution but diffused across public and private actors with different motivations and capacities, and this becomes problematic as crises become larger events. However, states that have consolidated these duties into an institution and empowered that institution to guard the economy from crisis fare better when a crisis emerges.

The evolution of the central bank is helped along by financial crisis. As new crises appear, primary banks are given more and more powers to address the crisis conditions, thus helping the institutional evolution of primary banks into central banks. Alternatively, central banks are created outright, with the necessary powers in the wake of a serious crisis. The problems of the mixed actor system are overcome because central banks are granted responsibility, authority, legitimacy and capacity by legislative acts. In

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[552] It is interesting to note that governments could have chosen to keep these duties in their treasury departments instead of creating a semi-autonomous financial actor, or vesting a semi-autonomous financial actor with these powers. Clearly, most governments would have had the capacity. I believe this scenario did not emerge because these governments were economically liberal (as was the tenor of the global economy) and believed in less direct control over economic interests. In addition, business communities were more in favor of an actor that was financial in nature and detached from political control.

addition, governments squelch their private for-profit motivations. The success that these institutions have addressing crisis creates a dynamic that increases their powers and capabilities in the after math of crisis, and creates a reliance on these institutions subsequent crises. The central bank becomes increasingly primary in the response system and since it is successful, the institution spreads throughout Europe and last to the United States. Crisis plays a vital role in the development of central banking and the spread of this institution.

Financial crises become bigger events as the long nineteenth century unfolds. The financial environment allows for crises to more easily transmit across state boundaries. This period was a time of impressive economic growth attributed to the expansion of industry and free markets throughout the world. This expansion was fueled by an increase in global finance and investment, and this investment had the power to draw states into closer economic contact. Most crises in this period were caused by an overabundance of capital looking for more profitable outlets and crises are often preceded by an expansion in available capital and credit. During this period there is a growth in the amount of investment capital and capital spreads to new regions to fund industrial and transportation networks. As cross-border financial interactions grew, the nature of financial crisis changed since crises could be easily transmitted through investment channels. The size, scope and the density of financial networks increased steadily through this century.

Thus, by the last quarter of the nineteenth century financial crises possess two new characteristics. First, they required greater capacity to remedy them. Since crises were increasingly tied to international investment channels, the expansion of capital movements and flight required more liquidity to end a crisis. Second, they had become truly international events with many states feeling their effects near simultaneously when they emerged.

In one sense, the response system lagged behind these developments because its level of establishment was domestic while crises were increasingly showing signs of being international. But creation of an institution that could mobilize to manage a domestic crisis was a necessary first step in the response system and the spread of this institution created the possibility for central bank coordination to manage crises. As mixed actor systems fell out of favor, so did the idea that private actors should play a central role in response systems. Response actors changed slowly in their locus of control. While some central banks were fully public institutions by the end of the long nineteenth century, others, mainly the Bank of England was still only quasi-public at the end of this period.[553] The central bank was an institution that had larger capacity, coupled with the political authority and legitimacy that the mixed actor system lacked and it quickly became the privileged actor in international economic cooperation.

The crisis of 1873 is identified as the key crisis in the period for two reasons. First, it is the crisis where the mixed actor response system is globally overwhelmed. Most states relied on these kinds of response systems throughout most of the 1800s. In 1873, the states that were hit hardest by the crisis and suffered greatest in the subsequent

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[553] The Bank of England became a fully public institution very late in the process, in the 1930s.

downturn were those relying on a mixed actor system. Only two states had banks that possessed central banking functions when the crisis of 1873 hit: France and England. These states managed the crisis and escaped the subsequent depression. Second, in the aftermath of this crisis and in depression that followed, the institution of the central bank proliferated throughout Europe so that by the next crisis period, in 1907, most states were more able to handle the crises, the United States being the exception. The central banks of England and France were used as templates for other states to construct their own central banks.

The long nineteenth century is actually a protracted period of institutional selection and creation that provided one of the most significant financial institutions in the history of the world. Central banks would from this time forward play an important role in crisis response, even if not always a primary role. The creation phase of this response system would go up until the political disruptions of World War I and even continue into the interwar period. This system was based on an actor that was a domestic, quasi-public public institution. The public/private issue was still being worked out, but central banks were becoming autonomous public actors that were responsible for economic health within their state. How they would fare as crises became more international events was still left to be determined.

## Chapter 4

# THE INTERWAR ERA AND THE GREAT DEPRESSION

The First World War would have lasting effects on global economic and political relationships. Politically, new boundaries were established, new power relationships emerged and the League of Nations was created to secure peace. Economically too, old relationships were altered. The First World War seriously weakened the gold standard that had facilitated the increase in cross-border financial interactions of the second half of the nineteenth century. Britain entered the war at the center of the global economy, firmly in control of international finance and the guarantor of free trade and a liberal economic system. By 1919, Britain was in debt to the United States, the Pound Sterling was devalued and domestic economic difficulties were mounting. Amidst the chaos, it was evident that the post-war political economy lacked a leader strong enough to recreate the rules and stability of the pre-war system.[554]

The interwar years are most well known for the decline of international cooperation. Nationalism dominated political movements, mercantilist and beggar-thy-neighbor policies dominated economies, an isolationist foreign policy kept the United States from participating in multilateral endeavors, and by the end of the 1930s Europe

[554] Kindleberger, *The World in Depression 1929-1939*.

would once again be at war. What is often overlooked is the extent of economic cooperation that emerged early in this period and laid the foundations for the post-World War II reconstruction of the global economy. This cooperation was a necessity given the economic instabilities after World War I and the density of international economic interactions that had developed during the war. It became clear in this period that economic problems across borders could destabilize domestic economies and the entire global economic system.

This chapter will discuss the interwar period. World War I caused an extraordinary shock to the international financial system, one that has been credited with causing the Great Depression.[555] The most serious financial effect was the dissolution of the gold standard. Although England did not suspend gold payments until 1919, the gold standard effectively ended during the crisis of 1914 when most states stopped honoring their pledges to convert currency to gold on demand. A desire to recreate the gold standard drove global economics in the 1920s. Added to this, severe economic problems plagued the system and in a more interdependent economic environment, and such problems were readily transmitted across borders. Loan payments, currency devaluations and German war reparations were other obstacles that defined this period. Unlike the nineteenth century, which can be characterized by a dozen acute financial crises, the 1920s was a decade of prolonged and chronic economic problems as states tried to recreate the pre-war system under significantly different conditions. Indeed, the 1920s can be seen as an extended period of crisis punctuated by short booms and several

[555] Temin, *Lessons from the Great Depressions*.

significant acute crashes. During this trying time, multilateral economic cooperation grew to deal with the continuing economic concerns and successfully kept a more serious breakdown at bay. Eventually, under economic and political pressures cooperation failed in 1931.

This chapter will begin by examining the increased density of state interactions in the world economy and will explain multilateral efforts to address the problems created by these interactions. In the 1920s there was a series of relatively minor currency crises and devaluations throughout Europe. These devaluations were addressed successfully through multilateral efforts in the form of extensive central bank cooperation. Several multilateral arrangements were negotiated to manage cross-border capital movements, currency values, and particularly loans and reparations. The domestic central bank was still a central actor in crisis response but it was heavily supplemented through cooperative central banking policies. Multilateral efforts grew throughout the period. The early 1920s are an excellent example of a period with a crisis response system that was created to deal with the new parameters of the global, and did so successful.

Unfortunately, multilateral cooperation was severely strained by the end of the decade and ultimately broke down. The 1929 American stock market crash was resolved without multilateral assistance and domestic institutions steadied the markets as a serious depression settled in. In Europe, a series of currency crises sparked off by the *Credit Anstalt* failure in 1931 would be addressed, but unsuccessfully resolved by the multilateral response system that was struggling to formalize throughout the period. Interactions had become too extensive for domestic central bank actions to address.

nascent multilateral institutions lacked the design, capacity and ability to remedy these crises, and without an adequate response, these crises deepened the depression.

By 1939 the world was once again at war and international finance was focused on how to pay for the fighting. No other crisis period has received as much attention or analysis as the Great Depression. This crisis is particularly interesting for the present study because the lack of a response system suited to address the crisis conditions caused a long, difficult recovery punctuated by another world war. After discussing the conditions of the 1920s and the multilateral efforts to respond to early crises in the interwar period, this chapter will focus on the most serious crises of this time: the American stock market crash and the *Credit Anstalt* crisis.

In light of the model presented in this dissertation the interwar period provides a most interesting case. By 1914 the creation of the domestic central bank response system was complete. States with central banks endured crises in the latter part of the century better than those without, and this led to a widespread creation and adoption of central banks. On occasion, central banks cooperated to alleviate crises in the nineteenth century, but most crises required domestic action not international. The final crisis of the long nineteenth century raises some questions about the ability of the domestic central bank, acting unilaterally, to address a crisis that affects the global monetary system. This problem would become increasingly relevant for the interwar period.

Global financial connections became more dense throughout the 1920s and a desire to recreate the gold standard made central bank cooperation a necessity. In this environment, a response system that is based more on multilateral cooperation becomes privileged. The creation of this system is interrupted by the severity of the *Credit Anstalt* crisis and the ensuing currency crises throughout Europe where unilateral central bank responses are privileged and the emergent system abandoned. Thus, during the creation phase, the new response system is called upon and fails. Lacking a better means to address financial crisis, states turn to unilateral domestic measures. Unfortunately, the financial realities of the interwar period made this response system problematic. Unilateral inward oriented central bank responses would be discredited in the aftermath of the Great Depression and the lack of multilateral cooperation to address these crises blamed for deepening the economic downturn.

The *Credit Anstalt* crisis is the key crisis of the period. The failure of this Austrian bank began the financial instabilities and the negative spiral that mired Europe in decline. This crisis could not be contained by or alleviated through the existing multilateral system of central bank cooperation. Though the nascent elements of a more suited response system had already been created, they had not been widely proven or accepted and political hostilities prevailed over economic interests. The *Credit Anstalt* crisis was therefore the crisis where the emerging system and the old system were both unable to provide the necessary response and the response system failed.

By the end of World War II, the ghosts of the pre-World War I global economy were exorcised, the economic system was destroyed and would need to be reconstructed. Multilateral institutions would take a prominent position in the global economic system and financial crises would be addressed through these institutions in the post-World War II era. This chapter will examine the reasons for the emergence of multilateral organizations in the 1920s, the failures of both multilateral efforts and unilateral central bank responses in the crises in 1930s Europe and suggest that the system was evolving toward a more multilateral and cooperative response system in order to address changes in the financial system and crisis. This chapter will conclude that responses moved toward multilateral, public, regional mechanisms to address the increasingly cross border nature of financial crisis.

## The Interwar Economy: An Era of Cooperation, 1919-1929

### The War Debt and Reparation Networks: The Global Integrative Dynamic

When World War I began, the global economic system was quite stable. It owed this stability to the gold standard, which was managed successfully by London. The successful operation of the gold standard helped provide a fertile environment for both international investment and trade.[556] From the period of 1850-1913 trade averaged about a 3.3% growth per year, and the amount of world trade went from approximately $7.2 billion in 1860 to about $40 billion in 1913.[557] Capital crossed borders at a record rate. England and France were the largest capital exporting countries with Britain exporting approximately $20 billion, or one-fourth of British wealth by 1914 and the

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[556] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 172-82.

[557] Herbert Feis, *The Changing Pattern of International Economic Affairs* (New York: Harper and Brothers, 1940), 25, W.A. Lewis, "The Rate of Growth of World Trade 1830-1973," in *The World Economic Order, Past and Prospects*, ed. S. Grassman and E. Lundberg (New York: St. Martin's Press, 1981), Angus Maddison, *Phases of Capitalist Development* (Oxford: Oxford University Press, 1982).

French exporting about $9 billion or one-sixth of French wealth in the same period.[558] This capital was sent all over the world but Germany, Russia and the United States by far were the largest recipients of this investment. The United States received capital mainly from England and Germany.[559] Russia got considerable capital from England and France.[560] Germany, imported capital in the form of loans from England and France but by 1914 had become a major exporter of capital to North America, Latin America and Austria-Hungary.[561] As illustrated earlier, cross-border economic interactions in the form of trade and finance was a global integrative dynamic making state economies far more dependent on each other, and London sat in the middle of a web of financial interactions. But all of this came to a crashing halt in 1914. Although the crisis of 1914 was addressed in various countries by central bank action, the war ended the global economic expansion and integration that the process of industrialization had begun in the long nineteenth century..

The war redirected economies toward fighting and cross-border investment dried up. But a market for supplies, necessary to continue fighting emerged and domestic capital was spent to acquire these supplies. Countries accumulated large amounts of

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[558] Feis, *Europe the World's Banker 1870-1914: An Account of European Foreign Investment and the Connection of World Finance with Diplomacy before the War*. For a discussion of British foreign investment see page 11. For a discussion of French capital see page 44.

[559] Ibid., 17-26 and 73-8.

[560] Ibid., 51 and 17-26.

[561] Ibid., 74.

internal and external debt as a result. Internally, war bond issues allowed governments to borrow from their populations and exchange controls were enacted to keep gold from leaving the country. In some states gold was purchased or collected from the public to help the war effort. In return, citizens got either government securities or notes.[562] Belligerent countries also heavily relied on external borrowing. After creditor countries repatriated all foreign securities and exhausted these funds, they needed to purchase supplies with external credit. This caused an outflow of gold from the fighting states of Europe to the United States. Added to the debt accumulated for war supplies were the eventual reparation payments that the loser would be required to pay. Both France and Germany financed their war efforts with the philosophy that they would win, and as the victor, they would receive large reparations from the loser. These reparations would be sufficient to finance their entire war endeavor.[563] Of course, one would lose and inevitably the other would find itself facing large reparation debts.

International borrowing reached an all-time high during World War I, because states required huge resources to continue fighting. At first, the belligerent Allied countries borrowed from private citizens in the United States either by getting loans or credit for commodities purchased.[564] After the United States entered the war, the U.S. government financed all Allied purchases and the Allied powers promised to pay the U.S.

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562 Paul Einzig, *World Finance, 1914-1935* (New York: Macmillan, 1935), 38.

563 Kindleberger, *A Financial History of Western Europe*.

564 Harold G. Moulton and Leo Pasvolsky, *World War Debt Settlements* (New York: Macmillan, 1926), 4.

Treasury at a later date for the goods supplied during the war. By the end of the war, the United States had outstanding accounts with all of the Allied powers. England had debts to the United States but was owed significant amounts by the rest of the Allied powers. France was heavily in debt to both England and the United States, and owed amounts by several smaller Allied powers. By 1918, the United Kingdom was in debt over $4 billion to the United States, France owed roughly $7 billion to England and the United States The United States emerged as the world's leading lender, loaning nearly $12 billion around the world, with three-fourths of that to England and France alone.[565] These amounts would increase substantially when interest was added to the repayment schedules that were created throughout the 1920s. The scheduled payments of 1931 anticipated nearly $21 billion to be transferred to the United States from its European debtors.[566]

In addition to the funds that were required to pay for supplies to wage war, often included in the war debt calculations are reparation payments. These are funds that the Central powers were assessed to pay for the war. While reparations were expected to be part of the peace settlement at Versailles, the amount of reparations was not set during the peace negotiations. Germany essentially signed the treaty along with a blank check for which the Allied powers would eventually fill in the amounts. The League of Nations Reparations Committee, established in February 1920, was given the responsibility of

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[565] Kindleberger, *The World in Depression 1929-1939*, 40.

[566] Harold G. Moulton and Leo Pasvolsky, *War Debts and World Prosperity* (Washington, D.C.: Brookings Institution, 1932), iv.

determining a sufficient amount of reparations for Germany based on Germany's capacity to pay. The amount was set at 132 billion gold marks in 1921 and readjusted to 2.5 billion gold marks by the Dawes Committee in 1924.[567] The Young Committee readjusted this amount again in 1929. The amounts owed among the Allied powers and the reparations owed by Germany totaled staggering amounts that fluctuated based on the scheduled rate of payments, and in the case of reparations, on a prosperity index that altered yearly German reparation amounts relative to the health of the German economy.[568] Because the amounts were so large, the transfer of these payments would be a monumental task that required extensive coordination between the creditors and debtors.

The transfer of capital during the war is significant for the interwar global economy. While investment had ceased, debt had skyrocketed. Public debt increased by at least 1000% between 1914 and 1919.[569] Interestingly, the accumulation of debt had a similar effect on the system as international investment had had in the nineteenth century; it provided a global integrative dynamic that significantly linked state economies. Debt affected the balance of payments in the debtor states, which needed to have either budget or trade surpluses to pay their debts, and when debtor states were unable or unwilling to pay, balance of payments problems emerged in the creditor states.

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[567] Moulton and Pasvolsky, *World War Debt Settlements*, 12-19.

[568] Joseph Davis, *The World between the Wars, 1919-1939: An Economist's View* (Baltimore: The Johns Hopkins University Press, 1975), 62.

[569] Einzig, *World Finance, 1914-1935*, 44.

Moreover, after the war was over, states had to deal with the complex relationships created by this network of debt. Most every European state was affected. By the end of the war, over twenty-eight countries were directly involved in debt relations. This included every European power that participated in the war, all of Europe's neutral countries, the new countries created after the war and the non-continental powers of the United States and Japan.[570] Germany owed eleven creditors; the United States had sixteen debtors, the United Kingdom seventeen and France ten.[571] This situation forced greater contact between central banks and economic linkages became more densely integrated. States pursued individual domestic policies to deal with their own balance-of-payments problems, which were often caused by their heavy burdens of debt, but concurrently states had to be mindful of conditions in the states to which they were linked through debt. In this way debt was the global integrative dynamic in the interwar period; this means that economic problems could be transferred across borders more easily and more frequently through these networks.

Another problem loomed. The gold standard, which had been managed successfully by England for decades, was suspended during the war. Most of Europe enacted gold embargoes and exchange controls in 1914.[572] Britain had effectively suspended domestic gold payments prior to the war but maintained the link between the Pound Sterling and gold payments for foreign demands. But the gold standard had

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[570] Moulton and Pasvolsky, *War Debts and World Prosperity*, 5.

[571] Ibid.

[572] Great Britain being an exception didn't enact an embargo until 1919.

effectively ended since there were few states that could draw balances on London. In 1919, after the fighting had stopped, Britain passed legislation to prohibit the export of gold, making the gold standard's resurrection less likely.[573] Even the United States, which had a large gold supply by the end of the war, enacted a gold embargo in 1917. The dissolution of the gold standard had significant effects on the interwar global economy. Breaking the link with gold disguised the real market value of currencies and allowed currency values to be inflated.[574] The war had changed the economic positions of Britain, Germany and the United States, but a protracted effort to restore the gold standard under significantly different circumstances was nonetheless undertaken. States no longer followed the gold standard rules, and London was too weak to enforce them like it had prior to the war. This led to problems in the value of currencies. At the end of the war the Pound Sterling was significantly lower in value in relation to American dollars and gold. The French Franc and the German Mark were similarly destroyed by the war and highly devalued and unstable afterward.

The chronic crisis conditions of the interwar economy were the result of these two circumstances: massive war debts (including reparations), and the end of the gold standard but a continuing desire to recreate it under vastly different circumstances. These issues were significantly linked. States could only manage to pay their debts if their balance-of-payments were in surplus, if they could borrow more, or if export sectors were

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[573] R. S. Sayers, *The Bank of England 1891-1944*, 3 vols., vol. 1 (Cambridge: Cambridge University Press, 1976), chapter 6.

[574] Einzig, *World Finance, 1914-1935*, 38.

able to generate surpluses. Balance-of-payments surpluses could only be realized through curbing public expenditures and increasing taxes. Both were pursued, but only half-heartedly since heavy taxation was difficult to enact in war torn economies and deficit spending to repair infrastructure and lower unemployment was domestically supported.[575] Borrowing was difficult because all of Europe was in heavy debt and therefore a bad risk. The only source of borrowing was the United States, but shortly after the Armistice, American lending to the Allied countries stopped.[576] International credit markets were exhausted from war expenditures and had dried up. The last alternative was reestablishing trade, but in order to do this, states needed to stabilize their currency values. This was difficult given the internal budgetary problems and trade was significantly affected as a result of unstable currency rates.

Coordinating to Respond to Early Crises

World War I was a real impetus to international financial cooperation. The necessity of mobilizing funds to pay for supplies brought the Allied powers together in financial arrangements. A conference in Paris in 1915 initiated this cooperation. Such policies included the issue of joint Allied loans, cooperation on granting advances to the Allied states for supplies, closer relations among the banks of issue and coordinating

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[575] Kindleberger, *A Financial History of Western Europe*, 84-96.

[576] Stephen V.O. Clarke, *Central Bank Cooperation 1924-1931* (New York: The Federal Reserve Bank of New York Publications Section, 1967), 4.

purchases from neutral countries.[577] Most of the early responsibility for the Allies financial requirements fell on Britain because of its vast resources, but after the United States entered the war in April 1917, the U.S. government took on the responsibility of funding the Allied countries through Liberty Loans.[578] The intention to continue financial cooperation after the war was also considered by leaders at the Bank of England and New York Federal Reserve Bank,[579] but the international collaboration that was established during the war would abruptly end after the Armistice in 1918 when states turned inward to address domestic problems. As the international economic system continued to struggle with problems caused by the war, it became apparent that domestic policies would not be sufficient to solve the economic problems created by the failing gold standard and extensive debt. Reparation amounts, debt settlement, currency instabilities and transfer issues were problems that tied states together and slowed economic recovery.

The problematic state of global finance was a primary concern of the newly created League of Nations. When the League held its first meeting in January 1920, one of its first tasks was to create a commission to deal with setting reparation amounts. The Reparations Commission met in February 1920 and continued at the Spa Conference in the summer of 1920 and the International Financial Conference in the fall.

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[577] Moulton and Pasvolsky, *War Debts and World Prosperity*, 28.

[578] Ibid., 28-38.

[579] Sayers, *The Bank of England 1891-1944*, 93.

While reparation amounts were being negotiated, between 1919-1921 the world began dealing with the post-war boom and contraction. The boom was fueled by the end of hostilities, a desire to replace inventories destroyed by war, and easy money conditions in Europe and the United States.[580] Kindleberger calls the boom worldwide but then admits that it was mostly felt in England and the United States and "France, Germany and the rest of the European Continent stood largely aside, lacking the financial resources to participate in the bidding."[581] The expansion, and especially the 44% rise in prices during the first year, was dramatic. This inflation concerned both American and English bankers and there was pressure in both countries to raise the discount rates to control the growth. In the United States, back on the gold standard at this time, there was the additional concern of a dwindling gold reserve. Low discount rates drew gold from the United States, but for those countries that had not yet restored gold convertibility, low discount rates made their exchange rates unstable. Concerned about its gold reserve, in early 1920 the Fed raised its discount rate and this action was shortly followed by the same from the Bank of England and the Bank of France.[582] Tightening the money supply and contracting credit killed the boom.[583] The stock exchanges in New York and London declined significantly, prices fell sharply and lending stopped. Globally, exchange rates

[580] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 107-14, Kindleberger, *The World in Depression 1929-1939*, 32.

[581] Kindleberger, *The World in Depression 1929-1939*, 32.

[582] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 119.

[583] Friedman and Schwartz, *A Monetary History of the United States 1867-1960*, 231-40.

fluctuated in response first to the rise in prices and then to the rise in interest rates.[584] The Fed's action raising the interest rate forced Europe to pursue deflationary policies that increased global economic instability. Eichengreen argues that in pursuing an insular approach to monetary policy, American policymakers demonstrated their incomplete appreciation of the influence that U.S. interest rates had abroad.[585] The contraction had a powerful effect in Europe. As U.S. capital tightened, lending stopped and European states, already saddled with considerable debt, had no choice but to pursue deflationary policies to meet their obligations.

The boom and decline in 1920-21 has taken a back seat historically to the problems of 1929. The reasons for this are straightforward. The boom collapsed quickly and the recession that followed in its wake was brief. By 1922 credit would be plentiful and even though debt problems lingered, a global expansion would be underway that would last until 1929. The responses to the contraction were unremarkable. Deliberately raising the discount rate and contracting credit halted the boom. The effects of these actions were a brief stock market panic, lower commodity prices, bank failures and higher unemployment. A recession settled in but with no acute crisis period and "some observers drew the conclusion that the purging of excesses had been quite salutary and

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[584] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 107.

[585] Ibid., 121.

urged its repetition."[586] No responses were necessary in the United States to deal with the deflationary conditions because they were seen as a reasonable readjustment.

In Europe the responses were a bit different, but still not very noteworthy. There was also no acute panic in Europe either and therefore no perceived need for specific actions by central banks or private actors. Europe's suspension of convertibility meant that with the credit contraction some currency values plummeted. This was a serious problem that would have repercussions throughout the 1920s, but the slump did not prompt any European government to pursue significant policies to stabilize their currencies at this time. All states desired a return to the gold standard, but none were in a position to pursue that policy. The eventual result of not contracting along with the United States was high inflation. This would make returning to the gold standard more difficult but at the time central banks did little to stop their currencies from devaluing.[587] States that chose to keep in step with the Fed's actions and tighten their own money supply, such as Britain, still had some maneuverability due to the fact that the link between all currencies and gold had been broken. So even if a state reacted by tightening its domestic credit in response to the Fed's action, it did not have to raise its interest rates to the level that the United States did. This allowed slower declines in countries such as England and Sweden.[588] Even though the credit contraction presented a far more serious problem in Europe, there was little response to the slump.

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[586] Ibid., 122.

[587] Ibid., 123.

[588] Ibid., 124.

The slump highlighted the chronic problems in the post-war economy. Capital was not flowing to the states that needed to rebuild in order to service their debts. International lending, both private and governmental was sluggish. With serious balance of payment problems throughout most of the countries in Europe, lenders felt unsure that their loans could improve conditions and given the amounts already owed, European borrowers were considerably risky investments.[589] International credit markets had little hope of recovering given the state of the economy and the level of assistance needed. Remedies for these problems, in the form of loans, had to come through governmental international assistance since lending through private channels was hardly possible.[590] Combined with high commodity prices exchange rate problems were slowing global trade. Primary product producers had lost their markets and a global agricultural depression was starting to emerge.

The boom and slump also had an interesting effect on central bank cooperation. As the boom developed, both the Bank of England and the Fed grew concerned about inflation and began corresponding to coordinate action. This novel idea of central bank cooperation was far different from the insularity of the Bank of England that typified its pre-war operations.[591] Coordinated central bank activity between the Bank of England and the Fed was a product of the post-war economic instability. Cooperation was expanded because there was a growing belief that international markets needed to be

[589] Einzig, *World Finance, 1914-1935*, 134.

[590] Ibid.

[591] Sayers, *The Bank of England 1891-1944*, 120-1.

restored in order for any state to prosper.[592] In addition, the financial position of London was in question and England could no longer dominate and stabilize the system single-handedly. If international markets needed to be stabilized, practically, it now had to be done in conjunction with other banks and governments. The 1920-21 decline did not attract any specific responses or attention, but it furthered the idea of central bank coordination. The newly established League of Nations seemed the best and most practical forum to tackle global economic problems.

## Early Multilateralism and Response: Brussels and Genoa

In September 1920 as the crest of the boom was breaking, the League of Nations called an International Financial Conference that was to be held in Brussels. The purpose of this conference was to study the international financial crisis conditions and seek remedies.[593] By international financial crisis conditions, the League was not alluding to the emerging recession created by the post-war slump but rather the overall problems in the global economy.[594] In a truly multilateral effort, thirty nine-countries sent representatives to the Brussels Conference including all of Europe (except Russia) the United States, Japan, China and five countries of the British Empire.[595]

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[592] Ibid., 121.

[593] Ibid., 153.

[594] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 154-8.

[595] Sayers, *The Bank of England 1891-1944*, 153.

Prior to 1914 central bank cooperation was rare. There were cases when one central bank assisted another during a crisis by securing balances or choosing not to withdraw balances from a state facing a crisis. But these measures were infrequent and mostly bilateral.[596] Some multilateral negotiation did occur during the late 1800s when a series of International Monetary Conferences (IMCs) were held to standardize gold coin purity and eliminate bimetallism. In addition, France attempted to extend the Latin Monetary Union and link international currencies through these conferences.[597] The IMCs brought much of Europe and the United States together to discuss monetary issues, but few policies were decided upon as a result and their overall impact on the international monetary system was negligible.

The Brussels Conference agenda addressed three issues that were causing international economic instability: severe exchange rate fluctuations, inflation and capital shortages.[598] These issues were interconnected, but the conference considered them independently and three committees were created to address these problems: the Committee on Currency and Exchange, the Committee Public Finance and the Committee on International Credits. The Committee on Currency and Exchange produced a most elaborate set of resolutions, which were unanimously adopted by the 39

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[596] Einzig, *World Finance, 1914-1935*, 133.

[597] Russell, *International Monetary Conferences: Their Purposes, Character and Results*.

[598] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 155.

participating countries.[599] Within the resolutions, policies to decrease inflation, encourage further central bank establishment in newly independent countries, limit deficit spending, remove central banks from political pressures, recreate the gold standard, and promote trade were endorsed. The conference also condemned specific policies such as the creation of an international currency and the use of exchange controls.[600] The overall tone of the report was to endorse tight money internationally. The Committee on Public Finance endorsed domestic financial orthodoxy including balanced budgets and decreased public spending. The Committee on International Credits recommended establishing an international financial commission of the League of Nations to extend reconstruction loans and credits to the war-torn economies. The International Credits Committee's suggestion for an international bank of issue met with serious resistance from the United States, which was leery of an international organization with such power and opposed to reconstruction considering large war debts were still outstanding.[601]

The Brussels conference would not be remembered for accomplishing much. Eichengreen argues that the proposals were stillborn due to American ambivalence toward multilateral endeavors and continuing arguments about debt and reparations.[602]

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[599] Sayers, *The Bank of England 1891-1944*, 154.

[600] Interestingly the Conference also considered a proposal made by the Guatemalan delegate, Jean van de Putte and British financial journalist Paul Einzig, that suggested the creation of a global central bank. While this suggestion was entertained, it did not appear in any form in the final committee resolutions. See Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 155.

[601] Ibid., 156.

[602] Ibid., 157.

But to look only to policy outcomes minimizes the effects of the conference. Brussels helped foster relationships and created an environment where further cooperation could be pursued. Montagu Norman, Governor of the Bank of England, used the Brussels Conference to establish international connections for the Bank of England and by 1922 would capitalize on the momentum created at Brussels to call another international conference.[603] Thus, the Brussels Conference can be seen as a starting point for the cooperation that would emerge throughout the 1920s. American ambivalence toward international organizations was troublesome and certainly prevented higher levels of international cooperation, as did the political rivalries throughout Europe. But throughout the 1920s, Bank of England, Bank of France, *Reichsbank* and Fed officials corresponded considerably over central banking policies. The American refusal to join the League of Nations did have an effect on U.S. participation, but while official representatives from the U.S. government did not attend the interwar financial conferences, there was always an American presence at these conferences. Sometimes this presence consisted of private banking interests, neutral delegations or unofficial observers.[604]

By 1922 the problems of the European economy were more serious and the political climate was turning hostile. In 1921 the Germans were forced to accept a 33 billion dollar reparations bill. This was far more than the Germans were willing or able to pay and just a few months later, in 1922, the German government requested a

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[603] Sayers, *The Bank of England 1891-1944*, 154-6.

[604] Ibid., 153-63. Clarke, *Central Bank Cooperation 1924-1931*, 34-44.

conference to negotiate a moratorium and revise the payment schedule.[605] At the same time, the United States and England were dealing with the recession from the collapse of the post-war boom. Currency values in France, Germany, Austria, Hungary and Poland were unstable and hyperinflation was settling in. Hyperinflation was possible because currencies were no longer tied to a country's gold supply. Exchange rates were especially problematic because their instability caused trade instability as well. Several states were clearly headed toward financial crises when in April of 1922 the governments of Britain, France, Italy, Belgium and Japan called an International Economic Conference to be held in Genoa. The purpose of this conference was to "restore by agreement and management as much as possible of the London-centered international financial system that had existed prior to 1914."[606] The pre-war stability was highly desirable, but London could no longer manage the global economy single-handedly. The advantages of wartime financial collaboration were still fresh in the minds of policymakers, and European leaders sought to create a system of financial cooperation to stabilize the global economy.[607] Thirty-three governments participated in the Genoa Conference including nearly all the governments in Europe, Japan, and the United States sent an unofficial observer.

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[605] Kindleberger, *A Financial History of Western Europe*, 292.

[606] Clarke, *Central Bank Cooperation 1924-1931*, 34.

[607] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 153.

The Genoa Conference would not touch the reparations issue, which would become more problematic as 1922 progressed. Instead the focus of the Conference was on the "restoration of the gold standard in the European countries, and international cooperation among central bankers."[608] It was a widely held belief in the financial community that the restoration of exchange rates pegged to gold was a necessary condition for European and global economic recovery. The twelve resolutions passed in Genoa reflected the most ambitious attempt of the 1920s to organize central bank coordination. They were an attempt to move beyond the *ad hoc* system of cooperation that had developed in the nineteenth century, and regularize cooperative responses to international monetary problems.[609]

In many ways, these measures were an attempt at creating a new financial architecture after the failure of the previous, gold standard based architecture. The major points called for a resumption of the gold standard, slightly modified in the principles of the gold exchange standard,[610] and further cooperation and consultation among central banks. The resolutions also emphasized that credit policies should be used to prevent undue gold price fluctuations, and the necessity of making central banks free from

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[608] Sayers, *The Bank of England 1891-1944*, 160.

[609] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939.*

[610] The gold exchange standard was different from the gold standard because it endorsed key currencies being held for reserve requirements, not just gold.

political pressure and more autonomous.[611] In retrospect many authors consider the Genoa conference a failure because the resolutions were never fully implemented.[612] As with the Belgian Conference, the Genoa resolutions were far more ambitious than what could be expected through monetary cooperation at the time. The gold exchange standard was never truly embraced by France or Germany, and U.S. representatives voiced strong opposition to both the gold exchange standard and credit policies.[613] Moreover, the announcement of the Repallo Agreement[614] during the conference jeopardized the collection of war debts and served as a reminder of the serious economic problems surrounding war debts and reparations. But the conference did have an effect. Its endorsement of central bank cooperation was accepted and cooperation among central banks developed rapidly after the conference.[615] The four major central banks in Germany, Britain, France and the United States, took part in cooperative efforts that

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[611] Clarke, *Central Bank Cooperation 1924-1931*, 33-9, Sayers, *The Bank of England 1891-1944*, 157-63.

[612] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 152-62. It should also be noted that Eichengreen considered the proposals a failure because the gold standard had become untenable. Thus, his central argument in *Golden Fetters* is that reconstructing the gold standard was a problematic policy goal and pursuing this policy caused the subsequent and serious problems in the global economy. Eichengreen presents the paradox of states being committed to the gold standard as a stabilizing force and the instability that this policy created.

[613] Clarke, *Central Bank Cooperation 1924-1931*, 37.

[614] The Repallo Agreement was between Germany and the Soviet Union. The agreement was in violation of the Versailles settlement because it mutually canceled financial claims between the Soviet government and Germany. This bode badly for the Allies who had hoped to collect Czarist war debts from the Soviet regime.

[615] Sayers, *The Bank of England 1891-1944*, 162.

stabilized the currencies in central Europe and restored the gold standard by 1925. Central bank cooperation was pursued because it was a pragmatic solution to the problems effecting the global economy.[616]

Although Brussels and Genoa Conferences are often remembered as failed attempts to coordinate state policies to deal with reparations and exchange rates, if one examines these attempts in relation to the insularity of central banks and state economic policies prior to World War I, another picture emerges. Through the war effort financial policies became more coordinated. After a brief retreat to deal with domestic economic problems between 1918 and 1920, states slowly realized that coordinated efforts were necessary to deal with reparations, debt and exchange rates. The economy had simply become too integrated for states to retreat to their domestic economies. Multilateral conferences are evidence of this realization. Suggesting that international cooperation and central bank coordination did not reach their full potentials because national interests hindered these endeavors does not detract from the fact that central bank coordination was pursed and even bore fruit between 1920 to 1922, and this trend would continue.

## Stabilizing the Economy: The Dawes Plan

Central Europe was facing serious economic problems as early as 1921. The most serious conditions were in Austria, Hungary and Germany. These states had in common high unemployment, food shortages, out of control inflation, high government deficit spending and huge debts. Currency problems were not confined to these states and the

[616] Clarke, *Central Bank Cooperation 1924-1931*, 40.

Genoa conference was an attempt to deal with unstable currencies across Europe. But before the Genoa conference even met, a crisis in Austria required the attention of the international community.

Austria was heavily in debt from the war, pre-war business claims and intended reparations. As such a poor credit risk foreign creditors avoided the Austrian market.[617] Plans were made for the Bank of England and a group of banks in France to sponsor an issue of Austrian Treasury Bills, but as this measure was beginning the value of the Austrian crown collapsed. The situation became too serious for any single government to risk helping so the League of Nations itself orchestrated a comprehensive plan that included budgetary reform, securing long term credits to stabilize the currency, installing an Agent General to supervise the government's execution of the plan, and establishing a truly independent central bank. The League of Nations relied heavily on the Bank of England to both finance credits to Austria and also provide advice about restructuring the Austrian National Bank.[618]

The measures taken by the League of Nations in Austria helped stabilize the situation and put a plan in place for the Austrian economy. But Germany was clearly the most serious problem in Europe, and by 1922 the situation was unraveling quickly. The heavy reparations burden forced on Germany in 1921 was beyond the German capacity to pay and the delivery of reparation payments-in-kind (e.g. coal, telegraph poles) fell into arrears by mid-1922. Payments falling behind disrupted French and Belgian

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[617] Sayers, *The Bank of England 1891-1944*, 164.

[618] Ibid., 170.

reconstruction efforts and pushed the burden of reconstruction onto their domestic economies. The French believed that Germans had to resume payments to alleviate problems in the French economy and this prompted Belgian and French troops to occupy the Ruhr in January 1923 to try and force reparations.[619] German economic problems were similar to those of Austria, but the size and importance of the German economy made them more important. There was a huge budget deficit, a trade deficit, high inflation, and the value of the mark was steadily declining. In addition, Germany's economic difficulties rubbed off on her major creditors.[620] The economic fates of France and Belgium were tied to Germany and since both were in considerable debt to the United States and United Kingdom, the international community recognized the importance of stabilizing German finances as a necessary precursor to European and global recovery.

Although the United States is often painted as strictly isolationist in this time period, the recognition that American economic health was tied to Europe permeated the policy and academic community. An example can be found in Secretary of State Charles Hughes' address to the American Historical Association where he articulated that European economic problems were a threat to the United States: "We are deeply interested from an economic standpoint, as our credits and markets are involved...We

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[619] Kindleberger, *A Financial History of Western Europe*, 293.

[620] Clarke, *Central Bank Cooperation 1924-1931*, 45.

cannot dispose of these problems by calling them European, for they are world problems and we cannot escape the injurious consequences of a failure to settle them".[621]

The solution to the German currency problem was created through the Dawes Plan. The Dawes Plan was an attempt to take the reparations problem out of the hands of political leaders and put it in the hands of nonpolitical businessmen.[622] Although the Dawes Committee, (officially named the Reparations Commission Committee) was empowered under the Reparations Commission created by the League of Nations, the Dawes Committee was created to be a group of international experts independent of the League. Because of this distinction, there was an American delegation. Consistent with American ambivalence toward international cooperation, the Federal Reserve did not send official representatives and American commercial bankers played a more prominent role than American central bankers.[623] Internationally, most of the members of the Dawes Committee were highly respected bankers and industrialists nominated by their governments.

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[621] *Current History*, 23 February 1923.

[622] Davis, *The World between the Wars, 1919-1939: An Economist's View*.

[623] Clarke, *Central Bank Cooperation 1924-1931*, 47, Davis, *The World between the Wars, 1919-1939: An Economist's View*, 56. The American delegation consisted of Secretary of State Charles Hughes, Treasury Secretary Andrew Mellon, Commerce Secretary Herbert Hoover. Charles G. Dawes was a well know American financier became the chairman of the committee and would later become the Vice President of the United States. J.P. Morgan and Co. sent a delegation headed by Thomas Lamont who was a partner. Owen D. Young, chairman of the General Electric Co. and future director of the Federal Reserve Bank of New York was also in attendance as an alternate.

In April 1924 the final draft of the Dawes Plan was published, it was ratified in August and began operating in September. The final draft represented the best efforts of international cooperation to date. It recognized that the rehabilitation of the German currency could not happen under the heavy burden of reparations created in 1921 and worked to move Germany from its crisis situation to into prosperity that would restore confidence in the German market and stimulate foreign investment.[624] The Plan consisted of three major initiatives. First, it addressed the reparations problem. The amounts of 1921 were deemed impossible for the Germans to meet and the Dawes Committee readjusted the reparation schedule to amounts that could be more reasonably paid. Second, the Plan addressed some of the problems in the German domestic economy. An Agent General was appointed to deal with reparations transfers and the *Reichsbank* was reorganized under the close supervision of foreign governments.[625] The job of the Agent General was to make sure reparations were paid without further devaluing the German currency.[626] The *Reichsbank* was reformed to be completely independent of the government and a General Council, one-half of its members required to be foreign, was given the power to control note issue and reserve requirements.[627] The *Reichsbank* pressed the German government for drastic budget reforms targeted at

624 Davis, *The World between the Wars, 1919-1939: An Economist's View*, 62.

625 Sayers, *The Bank of England 1891-1944*, 180-3.

626 Ibid., 174-80.

627 Ibid., 182.

rebuilding and increasing the confidence within Germany.[628] Essentially, the entire German economy was put into foreign receivership and this allowed confidence to be restored in German markets. But confidence could only go so far; the *Reichsbank* required capital. This was the third provision of the Dawes Plan that provided 800 million gold *Reichsmarks* ($191 million) as a reserve for the *Reichsbank*. This money was raised through bond issues in New York ($110 million or approximately 50%), London (25%) and France, Belgium, the Netherlands, Italy Sweden and Switzerland (together making up the final 25%). The Dawes loan offered critical relief for the German economy and helped stabilize the mark.

At the time, the Dawes Plan was cited as a great success. Germans made their scheduled reparation payments over the following two years and the economic prognosis for Germany was favorable. Foreign capital poured into Germany with new enthusiasm. Much of this capital came from the United States as American funds inundated international financial markets between 1924 and 1929.[629]

With the mark stabilized, work began on stabilizing the Pound Sterling and a return to the gold standard, which would happen in 1925 as a result of considerable Anglo-American cooperation.[630] Politically, the Dawes Plan "generated a spirit of international good will...harmony among Britain, France and Germany persisted despite

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[628] Ibid., 179.

[629] Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, 151.

[630] Clarke, *Central Bank Cooperation 1924-1931*, 71-108.

interruptions."[631] But stabilizing the mark did not rid Europe of financial crisis. France had serious budget and debt problems and as the details of the Dawes plan were being worked out, there was a speculative attack on the franc. This attack drove the price of the franc down and caused the French government to borrow $100 million from J. P. Morgan and Co. to stop the decline. This was an interesting move, because the French approached a private bank to secure capital instead of approaching another central bank.

This measure worked but not before the declining value of the franc caused an Austrian bank panic. Austrian National Bank halted the panic using liquidity from the stabilization loan that had been organized in 1921 to rescue the banking community.[632] Again, in 1926 the French franc came under attack and a line of credit was procured in the United States, but the franc recovered quickly and the loan was never drawn upon. This crisis triggered a financial crisis in Belgium. The value of the Belgian franc declined throughout 1925 and due to the interconnectedness of French and Belgian finances, rapidly lost value during the French devaluation of 1926. Loans to stabilize the Belgian franc were procured through the Bank of England and other central banks and these efforts successfully stabilized the Belgian franc in October of 1926.[633] Rumania, Poland and Italy also faced serious financial crises in 1925-1927 and international credits

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[631] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 70.

[632] Kindleberger, *A Financial History of Western Europe*, 338-44.

[633] Sayers, *The Bank of England 1891-1944*, 191-93.

were sought to deal with these problems.[634] Currency devaluations throughout Europe did not end with the Dawes plan, but a more reliable system of international stabilization loans was created.

With regards to this dissertation and the evolution of crisis response, several things should be highlighted about the Dawes plan. First, the crises in this period show the intricacies of financial connections that had developed. A crisis in one country was often followed by one in a neighboring country due to the financial connections between states. Germany was at the center of this web and the successful functioning of the global economy depended on the stabilization of reparations and the mark. While this time period was still tumultuous, the Dawes Plan stabilized Germany enough so that credit mechanisms could begin working again. The system was on better footing because Germany was on better footing. Second, the level of central bank coordination and assistance that developed throughout the period was significant. The Dawes Plan began the codification of a system of response that would be called upon throughout the rest of the 1920s. This system required countries in crisis to fix their internal budgets before receiving funds to stabilize their currency. Third, the system was becoming increasingly multilateral and public. Although bilateral central bank cooperation is still present and states secured lines of credit from private banks, the Dawes Plan helps extend multilateral central bank cooperation in times of crisis.

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[634] Kindleberger, *A Financial History of Western Europe*, 349-52, Sayers, *The Bank of England 1891-1944*, 195-201.

Renegotiating Reparations: The Young Plan and the Bank for International Settlements

Although several countries were affected by crises, the mid 1920s would be better years for the global economy than had been seen in a long while. The United States had completely recovered from its recession and was in the middle of an unprecedented credit expansion and stock market boom. The Pound Sterling looked stronger than it had since the end of the war and parity was restored in May of 1925. The gold standard was back! The French suffered through ups and downs but credit markets were easy and their gold reserves were strong. In fact, from 1924 when it was enacted, until 1929, the Dawes Plan appeared to operate successfully.

Events in this time period both show both positive and negative trends. Financial crises related to the value of currencies continued and were indications of the deep economic problems in the post-war economy. But stabilization programs addressed these problems successfully. Central bank cooperation continued to expand, especially to address the most noticeable reparations problems. In 1927 a conference in Geneva and a meeting on Long Island between the central bankers of the United States, England, France and Germany are further evidence of continuing collaboration. Both of these meetings pursued deepening central bank policy coordination. At the Long Island meeting redistributing gold stocks from the United States to Great Britain in order to maintain the pound's value was discussed.[635] Although there were advances, central bank cooperation also stalled a bit after the German Mark and the Pound Sterling were stabilized in 1924 and 1925 respectively. Central bank cooperation lost some of its

[635] Sayers, *The Bank of England 1891-1944*, 336-45.

purpose and nationalistic interests became stronger, especially in the booming economy of the United States.[636] Still a feeling of optimism followed the Dawes Plan, and one author describes its effects as bringing about a "pactomania" culminating in the Pact of Paris in 1928, which is better remembered as the "Kellogg Briand Pact."[637]

Around the fifth anniversary of the Dawes Plan, the American stock market boom and growing concerns about the Weimer Republic's stability began altering the capital flow to Germany and resulted in a slow down. Concerns surfaced about the ability of Germans to continue their reparation payments given their new inability to attract capital. Central bankers and private financiers began to make a connection between Germany's lack of capital its probable inability to continue with Dawes Plan obligations. This prompted the Agent-General for German Reparations to suggest that a committee of experts evaluate the progress of the Dawes Plan and the Young Committee was established. The first meeting of this committee was in Paris, February 11, 1929. Its work was continued through three conferences, in the summer and fall of 1929 and another in January 1930. The Young committee was officially entrusted with the task of drawing up proposals for the "complete and final settlement of the reparation problem," and the restoration of German economic sovereignty.[638] It brought together private financiers and central bankers representing Germany, Belgium, France, England, Italy and Japan. As the meetings continued, ministers of finance, foreign ministers, treasury

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[636] Clarke, *Central Bank Cooperation 1924-1931*, 144-45.

[637] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 70.

[638] Ibid., 80, Moulton and Pasvolsky, *War Debts and World Prosperity*, 187.

ministers and economic ministries joined the ranks of experts and worked to design and adopt the Young Plan.[639] It is important to note that Germany and Japan were added to the countries that had participated in the Dawes Plan because of their growing importance and that the inclusion of Japan extended the system to Asia. The United States was invited to participate, but it officially refused the invitation. A group of American commercial bankers that were cleared by the White House participated instead.[640] Interestingly, though the U.S did not send an official delegation, the Young Committee got its name from the American banker chairing the committee, Owen Young.

The Young Committee published the Young Plan, which was first released in June 1929 but underwent several iterations during the Hague Conferences and finally began operation on May 17, 1930. The Young Plan made three major contributions to the interwar economy. First, it reorganized reparation payments and amounts and changed the manner in which payments were transferred from Germany. Second, it created the Bank for International Settlements (BIS), to which we will turn soon. Third, it arranged for a $300 million loan to provide enough credit in the system to allow the new German reparation amounts to be met. The money was earmarked $100 million for Germany, $200 million for Germany's creditors.[641] The Young Plan tried to manage global economic problems by removing the most important causes of the problems from

[639] Beth Simmons, "Why Innovate? Founding the Bank for International Settlements," *World Politics* 45, no. 3 (1993).

[640] These commercial banks would also become charter members of the Bank for International Settlements (BIS), which was established by the Young Committee.

[641] Kindleberger, *The World in Depression 1929-1939*, 81.

the political realm and placing them under the control of businessmen and economists.[642] This had been the goal of economic management in the interwar period since 1920, to separate the political and economic functions of government. This explains why central bank cooperation continued regardless of the brewing international political problems.[643] The Bank for International Settlements was the institutionalization of the separation between politics and economics. It was not under the control of any government, not subsidized by any country. It was not allowed to make advances to or receive deposits from governments, and with the exception of central bank presidents, no government officials were allowed to be BIS directors.[644] In short, the BIS was created to act as a technical arbiter in international financial problems and to facilitate central bank cooperation.[645]

The BIS' specific function was to deal with the reparations issue and transfer payments from Germany to her creditors. However, the Young Committee also intended that the BIS be used as an instrument to extend central bank cooperation beyond the reparations issue.[646] The Committee proposed that the BIS provide new financial

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[642] Moulton and Pasvolsky, *War Debts and World Prosperity*, 199.

[643] Sayers, *The Bank of England 1891-1944*, 352.

[644] Eleanor Lansing Dulles, *The Bank for International Settlements at Work* (New York: Macmillan, 1932), 82-6.

[645] Roger Auboin, *The Bank for International Settlements, 1930-1955, Essays in International Finance, No. 22* (Princeton, NJ: International Finance Section, Department of Economics Princeton University, 1955), 7.

[646] Dulles, *The Bank for International Settlements at Work*, 68-97.

facilities to encourage the development of international trade, facilitate financial relations and even deal with gold settlements.[647] In fact, the BIS quickly outlived its original purpose. Within two years of the BIS' founding, reparation payments ceased due to crises spreading throughout Europe. This refocused the organization on the task of central bank cooperation and away from reparations settlements. The BIS *Fifth Annual Report* issued in 1935 presented an extensive discussion of the reasons for central bank cooperation and how cooperation could add to the stability of the international economy.[648] Thus, the BIS became a forum where central bankers could meet, coordinate policy and exchange information. But was the BIS designed as a forum for cooperation or as a purposeful actor in the international system? Was it more than the sum of its central bankers parts?

The answers to these questions are somewhat unclear and become more confusing when one examines the history of the BIS and its actions regarding German occupied territories and the liquidation of these states' BIS gold accounts. Transfers of gold from occupied states into the *Reichsbank* suggest the BIS assisted the Nazi government in taking ownership of these resources, but in all cases the BIS was following the

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[647] Harry Gideonse, *The International Bank* (New Brunswick, NJ: Rutgers University Press, 1930), 27. Moulton and Pasvolsky, *War Debts and World Prosperity*, 200.

[648] Bank for International Settlements, "Fifth Annual Report," (Basel: Bank for International Settlements, 1935). Henry Schloss, *The Bank for International Settlements: An Experiment in Central Bank Cooperation* (Amsterdam: North-Holland Publishing, 1958), 63-71.

regulations written before the war.[649] As an independent actor the BIS acted to secure profits, was beyond the control of governments and has pursued specific policies independent of the countries represented. But one can also strongly make the case that the BIS was constrained statutorily from being a purposeful international actor and besides having the role of administering the reparation payments, was created to be a forum for cooperation for central banks.[650] Nonetheless, the creation of the BIS as a forum for multilateral central bank negotiation institutionalized the *de facto* principle of central bank cooperation. As Eleanor Dulles argued in 1932:

> Until recent years financial coordination between countries was less important because the economic links between nations were less close. Transportation was slower, industrial expansion and changes in techniques less rapid. Formerly the possibility of mass production, which would now permit even the smaller countries to fill the world needs in certain commodities, did not present the same threat and promise as at present. Moreover, credit had not been developed to such a high point, nor was the velocity of circulation subject to so many sudden changes. In the past a well-developed nation could manage to get on, comparatively free from outside influences by relying on certain established relationships in internal and external trade; now swift changes and technical progress make this impossible. The choice is, therefore, between reasonable cooperation, or a straight nationalism in economic policies which would mean a decline in the standard of living everywhere[651]

The BIS began operations in 1930 as the global economy was beginning to experience its most serious crises. The American stock market crash in the fall of 1929,

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[649] Schloss, *The Bank for International Settlements: An Experiment in Central Bank Cooperation*, 102-18.

[650] Dulles, *The Bank for International Settlements at Work*, 68-97.

[651] Ibid., 452-3.

the continued contraction of global credit, the *Credit Anstalt* crisis in 1931 and the subsequent crises that spread across Europe after these shocks all had serious effects on the financial arrangements that had developed in the 1920s and are the subject of the rest of this chapter. Central bank cooperation would continue, but the relationships were more tenuous and nationalistic policies would win out over cooperative ones. Dulles' fears, articulated above, would come to pass. The system of financial management survived and during the crises that swept through Europe in 1931, the BIS provided insufficient assistance to faltering economies. Unfortunately, the BIS was too underdeveloped and its capacity to stop the crisis was overwhelmed quickly by the extent of the problems. In the remaining years of the interwar period, from 1931 to 1939, the system of financial management struggled and ultimately failed as individual states attempted their own solutions to the economic problems. But the seeds planted between 1920 to 1930 would bear fruit in the post-World War II period as financial governance re-emerged with the BIS and the Bretton Woods System.

## Situating Cooperation 1919-1930

Many authors downplay the level of cooperation that existed between 1919 and 1930, by arguing that political hostilities greatly affected the ability of central bankers to coordinate policies that would fix the problems in international economy. Widespread political suspicions and the American refusal to join the League of Nations were factors that hindered economic cooperation. However, the historical record provides evidence that multilateralism in international finance increased dramatically in the post-war era.[652] The Brussels and Genoa Conferences, the negotiations for the Dawes and Young plans, managing the gold exchange standard, several currency stabilizations (including that of the Pound Sterling) and the creation of the Bank for International Settlements all required extensive negotiation and central bank policy coordination. The debt and reparations networks created by the war connected state economies to a greater degree than they had been before the war. The new realities of financial interactions and the fact that crisis in one country could spread quickly to another through the financial networks changed the nature of crisis. International economic problems were transnational and required transnational solutions. Multilateralism in international finance was not only desirable, it was necessary to deal with economic problems that had grown beyond the capacity of individual states to address.

With regard to this study, the response system evolved through the interwar period and by 1930 international central bank cooperation was an important response to crises. Unlike the domestic or occasional bilateral assistance that punctuated central bank responses of the nineteenth century, this system was far more multilateral, although responses were largely confined to responding to European crises. Cooperation progressed through several stages culminating with creation of the Bank for International Settlements. Multilateral central bank cooperation was both successful and unsuccessful. It was unsuccessful because the hopes for international monetary collaboration far outweighed the realities of the system in practice. Moreover, the gold exchange system

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[652] This trend parallels the strides made in political multilateralism and security cooperation which are evidenced most clearly in the creation of the League of Nations.

was very difficult to maintain, even in an expansionary period. But the point should not be lost; from 1920 until 1930, many of the financial crises that emerged were addressed through central bank cooperation and assistance. This response system was highly successful in ameliorating the crises that occurred and by 1930 the system was institutionalized through the BIS. The breakdown; however, was just around the corner, and nascent elements of it were emerging one year prior to the creation of the BIS.

## The American Stock Market Crash of 1929

### Introduction

Until this point, this chapter has painted a picture of how central bank cooperation evolved during a period of chronic economic crises and instabilities. These developments are important because they illustrate the evolution of the interwar economy and they also identify the emergence of a more coordinated multilateral system to respond to the smaller financial crises in the early 1920s. But this is not the only story to be told of the interwar period and the far more popular one is about the breakdown of cooperation and economic isolation of states. By the end of the 1920s cooperation to deal with international finance was severely strained and by the 1930s there would be few remaining impulses to address crises through central bank cooperation. While the Young Plan was being negotiated, there was another set of trends that were emerging

International cooperation evolved during a time period where the momentum was behind economic expansion and the environment was one of greater interdependence and denser financial connections caused by reparation and loan networks. After the post-war slump of 1920-21, most countries shared in the recovery and economic growth even though many states faced acute crises along the way. Great Britain and Japan are the possible exceptions to widespread prosperity. England's struggle to stabilize the pound led to domestic deflation and high unemployment. Thus the British never really emerged from the 1920 to 1921 slump as strongly as other states did. In an effort to stabilize the yen the Japanese government held credit tight. This coupled with a serious earthquake that the country never truly recovered from slowed economic recovery.[653] But these were the exceptions; the rest of the world was booming. From 1925 until well into 1928, capital was plentiful and flooded into Europe and North America.

The American stock market crash of 1929 and the ensuing Great Depression are two of the most written about economic events in history. The enormous scope of literature and opinions on this period can only be acknowledged in this project and will not be investigated fully. My discussion of this financial crisis will be focused on three points that are relevant to this dissertation's thesis. This section will first examine the expansion that happened culminating in 1928 and how the global flows and the character of capital were contributing factors to the ultimate downturn. This is the continuation of the story of the interwar economy to this point. I will then turn to the global credit contraction that began in 1928 with the movement of capital toward booming investments in the American stock market. This contraction became more pronounced as U.S. economic problems and ultimately the Fed's policy caused capital markets to dry up.

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[653] Kindleberger, *The World in Depression 1929-1939*, 58-9.

Last, I will examine the responses to the stock market crash and evaluate them in terms of this dissertation's thesis. What will become evident is that this crisis was a serious American domestic problem that had enormous global repercussions. This crisis is important for the present analysis because it puts into play policies that will strain the international response system. But the 1929 stock market crash is not nearly as significant for the crisis response system as the next crisis that began in 1931.

Expansion – 1925-1928

As already illustrated, throughout the 1920s the global economy recovered and expanded at an astonishing rate. The stabilization of the Reichsmark and Pound Sterling revived economic activity in Europe and a true boom emerged after 1925. Credit was cheap and widely available, investments were flowing, prices stable, international trade restored and growing, and production expanded in much of Europe. Compared to immediately after the World War I when famine was widespread and industry crippled, by 1925 it seemed as if the problems of reconstruction were mostly solved.[654] In their assessment of the period, the League of Nations declared:

> The years 1925 to 1929 were, on the whole, years of considerable and widespread prosperity. Prices were practically stable, production and trade developed rapidly, and many of the characteristic phenomena of an industrial and investment boom began to appear.[655]

[654] League of Nations, *World Economic Survey 1931-32* (Geneva: League of Nations, 1932).

[655] Ibid., 47.

The statistics support the generally glowing assessment. Growth in international trade and international capital movements are indicative of a strong economic climate. International trade increased consistently from 1925 until 1929. Compared to pre-war levels in 1913, trade increased 20% by 1927 and another 4% between 1927 and 1929.[656] The value of world trade increased to a high of $68 billion by 1929 before dropping off about 19% in 1930 and continuing the downward spiral from there. The expansion in foreign investment and capital markets was particularly strong. As prior to the war, Britain played a large role in providing capital and it sent about $1.3 billion abroad between 1925 and 1929.[657] The real burst of capital came from the United States. Between 1925 and 1929 the United States exported approximately $2.2 billion in capital and became the world's primary creditor.[658] While this change was significant and displaced British power, the most significant changes in capital markets were in the composition of the investment. Prior to the war, more long-term credits were available,

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[656] All trade numbers have been compiled from League of Nations Sources. Sources used include: League of Nations, "Memorandum on Production and Trade," (Geneva: League of Nations, 1926), League of Nations, "Memorandum on Production and Trade 1913 and 1923-27," (Geneva: League of Nations, 1927), League of Nations, "Memorandum on Production and Trade 1926-28," (Geneva: League of Nations, 1929), League of Nations, *Statistical Yearbook of the League of Nations 1929/30* (Geneva: League of Nations, 1930), League of Nations, *Statistical Yearbook of the League of Nations 1930/1* (Geneva: League of Nations, 1931), League of Nations, *World Economic Survey 1931-32*.

[657] It should be noted that Britain's foreign capital reached a high point in 1923 and declined from there until 1929. After World War I, Britain would never be the capital exporter that it was before the war.

[658] Bertil Ohlin, *The Course and Phases of the World Economic Depression: Report Presented to the Assembly of the League of Nations* (New York: Arno Press, 1931; reprint, 1972), 31.

but in the interwar period most financing was through short-term credits.[659] This had the potential to be a problem. If higher rates of return were available, short-term financing could be withdrawn quickly and moved to more profitable investments.

Germany was one of the major capital importers in this period and financed both reparation payments and municipal projects with money from abroad. Because of the inflow of foreign capital, German reconstruction was quite successful from 1926-1928.[660] Foreign money was so plentiful in Germany that almost every need for credit, from plant reconstructions to managing governmental balance of payment problems, was satisfied through short-term foreign loans.[661] While Germany recovered the hidden danger persisted. The use of short-term credits created an unstable system since this funding could be withdrawn quickly, leaving the German state without the financing it so desperately needed both to rebuild and to continue reparation payments.

The boom of the mid-1920s was felt strongest in the United States where a "New Era" psychology abounded.[662] The "New Era" was characterized by excessive confidence in the ability of American industry to be profitable, for stock prices to soar indefinitely and for prosperity to continue unabated. Furthermore, there was enormous

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[659] Einzig, *World Finance, 1914-1935*, 152-3.

[660] W. Arthur Lewis, *Economic Survey 1919-1939* (Philadelphia: The Blakiston Company, 1950), 40-1.

[661] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 154, Einzig, *World Finance, 1914-1935*, 147-54, Lewis, *Economic Survey 1919-1939*, 40-1, Ohlin, *The Course and Phases of the World Economic Depression: Report Presented to the Assembly of the League of Nations*, 33.

[662] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 151.

confidence in the Federal Reserve System and the government to assist sectors in trouble and to reverse any economic problems that were threatening the American economy.[663] In 1927 the Fed lowered the discount rate in an effort to reverse a small business contraction and to further assist the recovery of Europe.[664] This measure sent the U.S. stock market into a speculative mania. Activity on the market soared. The amount of shares traded and the value of the Dow-Jones industrial average doubled in less than two years.[665] The market value of the shares listed on the New York Stock Exchange was a little over $27 billion in 1925 and increased to almost $67.5 billion by the first month of 1929.[666]

The U.S. stock market boom had both domestic and international financial effects. United States foreign invested capital was largely repatriated as the home market offered better opportunities for profits. In addition, gold and capital moved to the U.S. market in search of better investment opportunities.[667] Thus, the United States, a state awash with surplus capital before 1927, attracted more from 1927 until 1929, and this deprived other markets, particularly Germany, of much needed capital.

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[663] Ibid., 155.

[664] Ibid., 123.

[665] Robert Sobel, *The Great Bull Market: Wall Street in the 1920s* (New York: W.W. Norton, 1968).

[666] George Soule, *Prosperity Decade: From War to Depression 1917-1929* (New York: Rinehart, 1947), 250.

[667] Kindleberger, *The World in Depression 1929-1939*, 108.

Trigger and Dynamics of Contraction

While 1928 was a year of enormous prosperity in some places, there were problems in others. The biggest problem was in global agricultural markets. The agricultural depression is cited by several authors as a significant precursor to the decline in 1929 and the ensuing crises.[668] Briefly, the problem in agriculture was one of overproduction and falling demand. Bumper harvests created more crops internationally than the market could absorb, and a decline in the prices of primary products set in somewhere around 1927.[669] The decline in prices meant that agricultural exporters such as Canada, India, Argentina and Australia, who had already become major recipients of capital and heavily indebted, needed to borrow more to pay back loans and to make up for the lost profits caused by the downwardly spiraling agricultural commodity prices.[670]

This is another byproduct of the boom in the United States. As credit contracted internationally the first states to be hit were large agricultural exporters who required capital to finance their previously accrued debt and to assist them in a time of high instabilities in commodity markets. Even though a speculative boom was hitting Wall Street, there was a contraction beginning. The draw of gold to the United States drained reserves from other places in the world, exacerbating the recessionary tendencies in these

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[668] Ibid, David Williams, "The 1931 Financial Crisis," *Yorkshire Bulletin of Economic and Social Research* 15 (1963), David Williams, "London and the 1931 Financial Crisis," *The Economic History Review* 15, no. 3 (1963).

[669] League of Nations, *The Agricultural Crisis* (Geneva: League of Nations, 1931), Williams, "The 1931 Financial Crisis."

[670] Kindleberger, *The World in Depression 1929-1939*. Particularly see chapter 4.

locations. Gold also moved into France. The unstable value of the pound, the key reserve currency in the gold exchange standard, made it less attractive to hold as a reserve. This and a continued rivalry between the British and French, led the French government to re-evaluate its use of the gold exchange standard. Thus France began changing its composition of reserves to be more heavily comprised of gold. This measure also curtailed the amount of global capital available for lending.

In 1928 the Federal Reserve set about to curb the speculative mania that had emerged in the stock market by raising interest rates between January and August by 1.5%.[671] This move did not curb speculation immediately, in fact speculation grew throughout 1928 attracting more short-term funds, looking to take advantage of high New York money rates. In Friedman and Schwartz's view the Fed's action was not strict enough to break the speculation but was too tight to allow the economy to grow and therefore was a problematic policy.[672] Raising the discount rate continued to curtail available credit for places other than the New York market and exacerbate the downturn globally, especially in agricultural states.[673]

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[671] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 123.

[672] Friedman and Schwartz, *A Monetary History of the United States 1867-1960*, Chapter 6.

[673] D.E. Moggridge, "Policy in the Crises of 1920 and 1929," in *Financial Crises: Theory, History and Policy*, ed. Charles Poor Kindleberger and Jean-Pierre Laffargue (Cambridge: Cambridge University Press, 1982), 177-79.

By summer 1929 leading business indicators in the U.S. economy signaled a recession, but speculation continued.[674] The Federal Reserve decided to take more decisive action to turn around the U.S. economy. August 1929 it raised the rate one point and further constricted credit.[675] The speculative mania went on unabated. London did not follow suit in raising rates, but was forced to take action when a prominent conglomerate owned by Clarence Hatry declared bankruptcy amidst corruption and scandal. The failure of this firm sent a panic through the London stock market that was quelled by the Bank raising the discount rate to 6.5% on 26 September.[676] With the Fed's and the Bank of England's tighter money policy, the contraction in global credit markets was even more pronounced.

Internationally, Germany was also slipping into a depression with unemployment and business failures increasing.[677] The resettlement of reparations through the Young Plan created a feeling of optimism in Germany by late summer, but the economic conditions still deteriorated. France continued to hoard gold and economically seemed strong.

The stock market reached its highest point in September 1929. By the beginning of October 1929 the U.S. stock market began to show signs of collapse and the credit

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[674] Kindleberger, *The World in Depression 1929-1939*, 116-18.

[675] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 29-31.

[676] The Hatry scandal is a relatively minor financial event but it led to a stock market shock in Britain and fearing another one, the Bank of England raised the bank rate. For a full account see Lindert and Morton, "How Sovereign Debt Has Worked."

[677] Kindleberger, *The World in Depression 1929-1939*, 116-18.

crunch in England affected the call market. Call loans are money that is invested and lent at a high interest rate for a short period of time and can be "called" or removed with no notice. It is therefore a very liquid form of investment. When the English credit market tightened in late September, many foreigners decided to sell their securities and call their short-term loan obligations. This caused capital to move out of the U.S. market quickly and began a cascade effect. Domestic business leaders withdrew their loans for fear that the markets would be suspended and they would not be able to get their assets out.[678] Since in the years before the decline, many loans had become denominated as short-term loans, this allowed credit markets to contract very rapidly.

All of this happened in an unstable stock market environment. The U.S. market took its first significant dip on October 3, and declined steadily until October 14. These were just the precursors to the major panics on October 23 and then again on October 29, the infamous "Black Tuesday." Small rallies took place throughout November, but the declines were far more prevalent than the rallies. On days when it appeared another "Black Tuesday" was in the works, the exchange closed early to prevent more serious declines. While private investors globally suffered great losses from the crash, global markets did not generally respond with as significant a collapse. The German, French and British stock exchanges declined between 11-16%, much less than the 32% freefall in the U.S. market.[679] The global economic change immediately following the crash was a

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[678] Kindleberger, *A Financial History of Western Europe*, 356.

[679] "The Break in Wall Street," *The Economist*, 2 November 1929, Kindleberger, *A Financial History of Western Europe*, 358-60. There were a few exceptions. The

decrease in interest rates in the major markets, resulting in easier credit markets. More serious declines in prices, international trade, housing markets and agricultural products would emerge in 1930.

Response

The crash hit with such a fury that opinion was at first divided about whether there should be a response at all. Economists had predicted for months prior that an adjustment of the American stock market would happen since most stocks were way overvalued.[680] Keynes and Stamp also made comments immediately after the October 23 crash that the readjustment would ultimately be good for credit markets and the global economy.[681] If the crisis was merely a readjustment then business activity would resume at more reasonable rate afterward and no dramatic rescue operations were needed. The hope that the crash was simply a quick market readjustment slowly disappeared as problems continued throughout October and November.

The first response came from the business and banking community. This response was grossly inadequate in terms of the liquidity that it provided, so it ultimately

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Canadian market lost about 33% and Belgium about 30% immediately after Wall Street crashed.

[680] John Maynard Keynes, Josiah Stamp and George Paish all sounded significant warnings. Stamp wrote a particularly memorable forward to Paish's *Road to Prosperity*. See Sir George Paish, *The Road to Prosperity* (London: E. Benn Limited, 1927). Keynes published articles in the London weekly *The Nation and Athenaeum*.

[681] As summarized and quoted in Francis W. Hirst, *Wall Street and Lombard Street: The Stock Exchange Slump of 1929 and the Trade Depression of 1930* (New York: The Macmillan Company, 1931), 28-31.

had little success. Some firms tried to purchase their own stocks to raise their prices. John D. Rockefeller and his sons attempted this strategy and while it had a temporary effect the price of Standard Oil continued to decline.[682] The banking response came from a concerted action of several New York bankers under the supervision of J.P. Morgan and Company.[683]

The banking response attempted to support stock prices through direct purchases on October 24th. It was only briefly successful but it allowed many stock prices rebound for a few days. By October 28th selling resumed. The New York banks also took over loans that had been called by non-New York banks. They did this in order to provide liquidity as the rush out of securities and out of the New York money market picked up steam. This measure amounted to $1 billion between October 23rd and October 30th.[684] The New York banking response was simply too little to provide the liquidity the market needed to rebound or even to stabilize. Hirst argued that the ineffective and less than necessary amount of banking support had a negative psychological impact on the market.[685] Investors had assumed the banking community would pool their resources and

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682 Ibid.

683 Davis, *The World between the Wars, 1919-1939: An Economist's View*.

684 Ibid., 192, Kindleberger, *The World in Depression 1929-1939*, 119.

685 Hirst, *Wall Street and Lombard Street: The Stock Exchange Slump of 1929 and the Trade Depression of 1930*, 28-33.

infuse the necessary cash as they had in earlier crises, but their meager effort only aggravated the situation by making the banking community appear absent.[686]

The second wave of responses came from the Federal Reserve. In the last week of October the New York Federal Reserve Bank expanded its government security holdings by $160 million, and continued to buy securities throughout November.[687] Kindleberger called this action a true lender-of-last resort operation to provide liquidity in the crunch and expand credit.[688] The Fed then eased the money conditions and reduced the discount rate from 6% to 4.5% the first two weeks of November.[689] These measures were highly praised and although the stock market did not revive as a result, there were no significant banking or business failures. The Fed had acted correctly to provide liquidity in a crisis and the system had proven itself. Although prices continued to decline throughout the first part of November, they stabilized by the end of the month.

The final responses came from President Hoover who suggested several measures to spur the U.S. economy. At first the Hoover administration backed away from the problem arguing that the crisis needed to liquidate itself.[690] As the contraction continued, the administration responded by holding a conference with business leaders, labor and farmers in attendance. The goal was to construct a plan of action for addressing the

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[686] Ibid., 33.

[687] Kindleberger, *A Financial History of Western Europe*, 358.

[688] Ibid.

[689] Davis, *The World between the Wars, 1919-1939: An Economist's View*.

[690] Ibid., 205.

predicted depression that would result from the crash. At the end of the meetings two policies were announced. First, Hoover announced a reduction in the tax rate and had asked businesses not to lower their wages in return.[691] Second, growing unemployment numbers were addressed. Businesses were asked to shorten their work week to retain employees, the federal government pledged to expand public construction, and labor promised not to initiate strikes.[692] These policies were generally well received and along with the Federal Reserve policies, seemed to calm both public concerns and the economic downturn. By January 1930, the government and the American public were optimistic about the economy.

There were no international responses to the 1929 crash. In fact, individual foreign investor actions of withdrawing call money and leaving the U.S. market probably aggravated the decline. No foreign governments assisted the U.S. market bilaterally or multilaterally. The reasons for this inaction are obvious. Many states were struggling with their own economies. While 1925 to 1929 was a time of global prosperity, many of these economies were still fragile and did not have resources comparable to the United States, so assistance would have been too expensive for other states and probably ineffective. Several countries responded to their own economic contractions of October and November by lowering their discount rates and easing money. This response was more domestically driven as markets around the world became sluggish in the aftermath

[691] Kindleberger, *A Financial History of Western Europe*, 358.

[692] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 207-10.

of the crash and states needed to expand their own liquidity to fight the slowdown at home.

The U.S. domestic public response system seemed to manage the crash pretty well. By the end of the year forecasts were optimistic and economic indicators better than they had been in the closing quarter of 1929. The international crisis response system never kicked into action for the 1929 crisis. While the Young Plan was being negotiated and central bank cooperation was expanding on one front, within the U.S. domestic action was the only real response to the 1929 crash. 1930 would be greeted with optimism as the stock market began to rebound, but by April 1930 the market was again in a serious decline. The problems in the United States had just started, but it is to the problems in Europe that we turn now.

## Credit Anstalt and the Gold Standard Fails: 1931 - The Key Crisis

*The Commercial History and Review of 1931*, a supplement published yearly by *The Economist* begins with an ominous statement: "The pages which follow do not make for pleasant reading. In every industry and every country which comes under review the picture is dismally similar."[693] Economically, 1931 was one of the worst years in history. By 1929, depressions were well underway in many peripheral, and particularly agriculture exporting states. The United States showed some signs of recovery early in 1930, but spiraled into a depression from mid-year onward. Discount rates continued downward throughout 1930 and credit markets were once again easy, but depressive

[693] "Commercial History and Review of 1931," *The Economist*, 13 February 1932, 3.

conditions were mounting globally. The most significant problem was an enormous slowdown in global trade aggravated by the infamous Smoot-Hawley Tariff Act, passed by the United States in the summer of 1930. All of these factors contributed to the global depression of 1931.

The currency crises of 1931 have been considered in less detail than the stock market crash of 1929, but these crises are far more important for the response system than the U.S. crash was. This section will discuss the emergence of these crises throughout Europe, beginning with the *Credit Anstalt* failure, which began a cascade of currency crises throughout 1931 that culminated with the final abandonment of the gold standard. The response system that was developing throughout the period would be put to the test in 1931. Central bank cooperation would come under significant pressure as the problems in Europe mounted. The final result would be a failure of the multilateral response system. In the absence of a working system, states were forced to respond to crises through their own central banks. This made responses insular, less effective, and ultimately deepened the global economic problems.

## The Missing Expansion – 1929-1931

The crisis emerged in the summer of 1931, but unlike prior to many crises, there was no significant capital or credit expansion before its outbreak. Interest rates declined steadily in all of the major markets reaching their low for the Bank of England of 2.5%, and a 2% low in the United States. Under normal circumstances, the decrease in interest rates would free up capital to create an expansion, but none took place. Although Clarke points out that early in 1930 international lending expanded, this was a short-lived change, abruptly ending by mid-1930.[694] While there was little evidence of scarce credit, a different problem had set in. Hirst sums it up best:

> In truth, credit cannot be used unless someone has the confidence to use it, and unless the bank shares the borrower's confidence. A ragged man's demand for clothes is only effective if he has money to pay for a suit, and if someone else has a suit for sale. So there may be a plethora of gold and credit when a bankrupt company or country asks for a loan, and those who have both gold and credit in abundance refuse it.[695]

Trigger and Dynamics of Contraction

The contraction can be said to have begun either in the agricultural commodity markets in 1927-28 or in the U.S. stock market after the crash of 1929. The start date is less important than the consequences and the crises that emerged as a result. Before discussing the events of the *Credit Anstalt* and the crises that followed, it is important to provide a little more detail on the global economic contraction and how the connections between state economies spread the decline. Two factors seemed to have an enormous impact on the decline of the global economy. The first is the enormous fall in the U.S. economy from the end of 1929 onward. Unemployment rose, commodity prices fell, business failures increased and trade declined precipitously. This affected the world because in the late 1920s the United States was, "a giant component of the world

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[694] Clarke, *Central Bank Cooperation 1924-1931*.

[695] Hirst, *Wall Street and Lombard Street: The Stock Exchange Slump of 1929 and the Trade Depression of 1930*.

economy."[696] It consumed nearly 40% of the world's primary products and represented over 45% of the total industrial production of developed countries.[697] Simply, prosperity of the world heavily depended on the continued prosperity of the United States.[698] As a recession at home caused a retreat of U.S. economic interests, the depressive conditions were transmitted abroad.

The second factor that contributed to the contraction is the decline of three major markets throughout 1930. Economies were significantly linked through global commodity markets, trade markets and financial markets. As each one declined, the problems were spread through the channels these markets created.

The prices for raw materials and primary products began declining in 1928 with production outrunning demand on basic primary commodities like wheat, cotton, rubber and sugar.[699] This decline moved into other industries by 1930 and by the end of that year there were significant downturns in production across Europe. Kindleberger suggests that a decline in commodity prices in the developing world caused a global "structural deflation."[700] Excess supply in commodity markets created a situation where states attempted to sell their crops for whatever they could bring on the international

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[696] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 234.

[697] Bank for International Settlements, "Eighth Annual Report," (Basle: Bank for International Settlements, 1938), Lewis, *Economic Survey 1919-1939*.

[698] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 234-6.

[699] "Commercial History and Review of 1930," *The Economist*, 14 February 1931.

[700] Kindleberger, *The World in Depression 1929-1939*, 105.

market. This forced prices down abroad, created a process of downward spiraling prices and spread deflation from commodity to commodity.[701]

Related to the decline in world commodity prices was the decline in trade for both raw materials and manufactured goods. The trade decline can be traced back to agricultural producing states who in light of declining income and contracted international credit curbed their export purchases. Added to this problem was the curtailment of U.S. demand for primary products as domestic business production slowed down after the crash.[702] But the real jolt to international trade came from protectionism in the United States and a decline in imports in Germany. The reaction to the depression was to increase barriers to trade in order to fix economic problems domestically. Tariffs, quotas and exchange controls became the weapons of this war.

In 1930, the U.S. Congress passed the infamous Smoot-Hawley Tariff Act,[703] which set tariffs for dozens of manufactured and primary products. The impetus behind this was a concern for both agricultural and industrial interests since both sectors were in decline. In addition, there was a desire to keep gold within the United States and reduce it being sent abroad to purchase imports. Ultimately the tariffs did keep gold in the

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[701] Ibid., 105-7.

[702] Lewis, *Economic Survey 1919-1939*, 57-9.

[703] The official name of the act was the "Hawley-Smoot Tariff Act," however, somewhere between 1930 and present the common usage has become Smoot-Hawley. I have no idea why the flip-flop of names happened. This document will keep consistent with contemporary usage and employ Smoot-Hawley. The act also sometimes is referred to as the "Grundy Tariff." Roosevelt used this name in his campaign speeches to attack Senator Grundy of Pennsylvania, who was actually opposed to the tariff.

United States, and put further pressure on international financial markets, but the tariffs were of little assistance to industrial interests and actually hurt agriculture. A global reaction to the Smoot-Hawley tariffs followed as states enacted a wave of retaliatory tariffs mostly targeted at U.S. agricultural products.[704] Most significantly, the British who initially worked for tariff reductions, abandoned their ideological support of free trade.[705]

Germany was faced with a slightly different problem. When the global credit contraction caused the amount of foreign loans going to Germany to decline, the German government had little choice but to try and raise capital through their export industry. This meant that Germany pursued a policy that discouraged imports and encouraged exports to try and better their trade deficit and generate capital to pay back their loans and reparations.[706] Both the German and American import reductions put greater pressure on global commodities and trade balances. As the pressures mounted, states chose policies that attempted to protect their domestic markets and trade continued to decline.

Financial markets were also in decline. International capital movements and loans were largely cut off as American, French and British capital declined.[707] What

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[704] Kindleberger, *A Financial History of Western Europe*, 356-8, Kindleberger, *The World in Depression 1929-1939*, 132.

[705] Kindleberger, *The World in Depression 1929-1939*, 135.

[706] Sidney B. Fay, "Causes of the German Financial Crisis," *Current History*, September 1931, 801.

[707] Ohlin, *The Course and Phases of the World Economic Depression: Report Presented to the Assembly of the League of Nations*, 200-15. France actually went from a net

meager amounts of capital that continued to be invested abroad were overwhelmingly denominated in short-term loans.[708] Capital recipients, particularly Germany, faced a more difficult environment to secure loans and long-term credits had all but disappeared. The Young negotiations attempted to re-establish a system of reparations and loan repayments based on more reasonable schedule of payments. But the problem in Germany was simply that financing reparations had been paid for by foreign credits, which were far more difficult to secure.[709]

Gold markets were another problem. A functioning gold standard required reserves to move across borders in order to stabilize exchange rates. In the gold exchange standard, exchange rates of key reserve currencies such as the pound and the dollar were particularly important because states held these currencies as reserves instead of holding gold. But the system did not work as planned. France began hoarding gold around mid-1929 and exchanged its pound holdings into gold. The United States attracted capital in the form of gold during the stock market boom and after Smoot-Hawley, slowed down redistributing it through cutting off trade markets. The result was a maldistribution of gold with most of it collecting in France and the United States.[710]

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capital exporter of about $230 million in 1928 to an importer of about $230 million in 1930.

[708] Ibid.

[709] Another contributing factor was that all collateral, such as factories, business inventories, etc., had declined in value and was simply not worth as much foreign credit as it had been.

[710] Ohlin, *The Course and Phases of the World Economic Depression: Report Presented to the Assembly of the League of Nations*, 228.

This put pressure on London, which was neither hoarding like the French, or refusing to distribute it through the export market like the United States, but was trying to maintain reserves.

This was the environment in 1931. The American engine of global economic growth had stalled, commodity markets were declining, trade was halted through protectionist policies, and financial markets, both credit and gold, were restrictive and not functioning to manage currency rates. The Young Plan was a cause for hope, but Germany was increasingly strapped for cash to make payments on loans and reparations. Domestically, beginning in 1930, many states saw an increase in private bank failures. These failures caused domestic bank runs and banking crises. While these were sometimes significant in individual countries, they seemed to be localized domestic phenomena and were handled through individual central bank action.[711] From 1930 onward the entire economic system continued to contract and was extremely strained.

In addition to the economic problems, political tensions were deepening. In March 1931, Austria and Germany announced that they would establish the Austro-German Customs Union. This trade alliance angered the French government, which after

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[711] Two notable cases are the Bank of the United States, a large American commercial bank that failed in December 1930 and the *Banque Adam* in Paris, which closed in November 1930. Sets of private bank failures seem to have no global connections. In the U.S. bank failures were mostly in the mid-west and a result of poor agricultural conditions. In Paris, it seems the most significant bank failures of 1930 were a result of corruption. Bank failures are indicative of the problems that domestic economies and individual banks were sharing due to the poor economic conditions, but until 1931, these failures do not seem to have been contagious from state to state. Although it should be noted that monetarist regard banking crises as the most significant kind of financial crisis. For detailed accounts of these crises see: Friedman and Schwartz, *A Monetary History of the United States 1867-1960*, 308-15, Kindleberger, *The World in Depression 1929-1939*.

the announcement attempted to apply diplomatic pressure on both Austria and Germany to dissolve the Union. Part of this pressure came in the form of the French withdrawing short-term credits to Germany and Austria.[712] Given the already difficult position of German and Austrian finances in light of the general contraction of foreign credits, this was an unwelcome announcement and heightened the financially difficult position of German and Austrian banks. In addition, fear that the French would once again occupy Germany to force economic concessions, like they had in the Ruhr in 1923, continued to aggravate credit markets within these countries.

The Crises and Responses

On May 8, 1931, the *Credit Anstalt*, the largest bank in Austria, announced to the Austrian government that it had lost about 85% of its equity and over half of its capital.[713] The cause of the losses was complex, but Schubert attributes them largely to the bank having a poor debt structure. Over one-third of the *Credit Anstalt's* creditors were foreign, with England and the United States playing central roles. All of these credits were on a short-term basis, but the bank was using them to finance long-term projects. When short-term credits were withdrawn or not renewed, this meant that the bank had more liabilities than assets. Thus, this biased their debt structure and was a significant

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712 Fay, "Causes of the German Financial Crisis," 805.

713 Aurel Schubert, "Credit-Anstalt," in *Business Cycles and Depressions*, ed. David Glasner (New York: Garland, 1997), 119-20, Aurel Schubert, *The Credit-Anstalt Crisis of 1931* (Cambridge: Cambridge University Press, 1991).

contributing cause to the insolvency of the bank.[714] The loss was kept private until May 11, when the Austrian government announced both the problems and a reconstruction plan.[715] The plan assured depositors that the Austrian National Bank (ANB) would guarantee deposits and requested a standstill on foreign withdrawals. The plan was not well received, and within hours of the announcement the *Credit Anstalt* and other Viennese banks witnessed enormous runs on their deposits. The *Credit Anstalt* lost 30% of its deposits within two weeks as foreign and domestic depositors withdrew their holdings.[716]

The ANB acted in its capacity as a domestic lender of last resort and discounted freely the bills presented by the *Credit Anstalt*.[717] This did not stop the withdrawals, nor did it calm the public's fears about losing their deposits and a run on the bank's liquidity continued. Knowing its funds were becoming depleted, the Austrian government then approached the Bank of England, who refused assistance.[718] The Bank for International

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[714] Schubert, *The Credit-Anstalt Crisis of 1931*, 44-6.

[715] Ibid., 11.

[716] Ibid., 12. It should be noted that domestic withdrawals made up approximately two-thirds of the withdrawals.

[717] Funds to secure the deposits in the first reconstruction plan came from the Austrian National Bank, the government and also from Rothschild group in Amsterdam. The Credit Anstalt had been affiliated with the Rothschild group since its creation in 1855 and a Rothschild sat on its board of directors. Kindleberger, *A Financial History of Western Europe*, 360-1.

[718] Schubert suggests that the Bank of England rejected the request for assistance because it considered the BIS to be in charge of rescue operations. Schubert, *The Credit-Anstalt Crisis of 1931*, 13.

Settlements was then approached and promised 150 million schillings ($21 million) in credit for the ANB. Two weeks later, on May 29th, the BIS came through with a loan for 100 million schillings ($14 million). The delay in providing the funds, and their significantly lower amount meant that BIS assistance was too little to sure up the situation.[719] The credit was exhausted in five days. The BIS assured another 100 schillings of credit, but under the condition that the ANB raise 150 million schillings through foreign private sources.[720] Austria approached large international banks, including French banks, to secure the loan, but they would not grant the credit unless Austria abandoned the Austro-German Customs Union. The Austrian government refused, and did not secure the private loan or get the second BIS credit.[721] Frustrated by the French trying to exercise political leverage on an economic problem, the Bank of England promised a 100 million schilling loan to replace the thwarted BIS funds.[722] These loans calmed the Austrian market, and a reorganization plan of Austrian banking and finance was implemented, but the problems were just beginning for the rest of Europe.

The run on Austrian banks triggered similar runs throughout Central Europe including ones in Hungary, Czechoslovakia, Rumania and Poland. These crises received

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[719] Ibid., 15-6.

[720] Clarke, *Central Bank Cooperation 1924-1931*, 183-8, Kindleberger, *A Financial History of Western Europe*, 361.

[721] Clarke, *Central Bank Cooperation 1924-1931*.

[722] Kindleberger, *A Financial History of Western Europe*, 360-1.

responses from domestic central banks and in the case of Hungary the BIS supplied $30 million in credits to the National Bank of Hungary.[723] The crisis then moved on to Germany with a new ferocity. *The Economist* reported about 1931 that, "the year will be remembered in Germany as the year of the international credit catastrophe."[724]

Problems with international capital flight from Germany began in the fall 1930 with the election of the Hitler Nazi party, but calmed down until the crisis in Austria emerged.[725] A decline in political, economic and psychological confidence can be cited as reasons for German bank failures in the spring and summer of 1931. Politically, the French continued to apply financial pressures in order to gain a victory by forcing Germany to abandon Austro-German Customs Union. Throughout June and July French creditors withdrew their deposits and French banks refused new lines of short-term credit to German banks unless the customs union was abandoned.[726] In addition, statements by the Brüning government that it would stop reparation payments negotiated through the Young plan also created significant foreign withdrawals.[727] Economically, German banks were heavily tied to both Austrian and Hungarian interests. Thus, the crisis in

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723 "Commercial History and Review of 1931," 21.

724 Ibid., 14.

725 Ibid.

726 Fay, "Causes of the German Financial Crisis," 805-6.

727 Harold James, "The Causes of the German Banking Crisis of 1931," *The Economic History Review* 37, no. 1 (1984): 77.

Austria made a logical move toward the German market.[728] Psychologically, the panic that had spread throughout Central Europe moved on to Germany as these markets were considered to be very similar. The German press suggested that American investors were unable to distinguish between German and Austrian problems and this created a large removal of foreign credits from the German market.[729]

Regardless of the specific causes, most foreign capital in Germany withdrew between early June and July in the midst of bank runs. Both foreign and domestic depositors tried to get rid of their German holdings as quickly as possible. Between the beginning of the crisis in Austria in May, and the middle of July, about 3 billion Reichsmarks ($715 million) were withdrawn and this drastically lowered the *Reichsbank*'s gold and exchange reserves.[730] The most significant losses were in the first two weeks of June when the *Reichsbank* lost $250 in gold.[731] By June nineteenth it was evident that the *Reichsbank* could not meet its note cover requirements.[732] It seemed an immediate crash was imminent and there were fears that the Reichsmark would plummet in value.[733]

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[728] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 265-7.

[729] Kindleberger, *A Financial History of Western Europe*, 362-3.

[730] "Commercial History and Review of 1931," 14.

[731] Clarke, *Central Bank Cooperation 1924-1931*, 191.

[732] This means that the Reichsbank could meet its obligation for the payments coming due on short-term debt. James, "The Causes of the German Banking Crisis of 1931," 80.

[733] "Commercial History and Review of 1931," 7.

In both the Austrian and German cases, the banking crisis affected the currency values and reserves. Banking crises are a reaction to the fear that one's deposits will cease to be redeemable for liquid assets (e.g. gold). While bank notes can be used domestically to satisfy the population's desire for liquidity, with capital that leaves the country, gold or key currencies are desired. Banks closed as a reaction to losing their reserves, which were denominated either in pounds or gold. When official reserves held by the central bank decline, the desire to hold that currency declines and a depreciation of the currency, in relation to gold, emerges. Thus, currency crises often come on the heels of banking crises. Only by breaking the established connection between gold and currency, (i.e. suspending payments) can the central bank stabilize the value of its currency. Additionally, central banks would favor responses that would reduce their obligations to send gold overseas. Since both Austria and Germany were on the gold standard, their currency values were pegged to gold and the British Pound, and each country held both gold and pounds as reserve currency. As capital was withdrawn from each state, the banking crises transmitted to the foreign exchange markets dropping the value of the schilling and Reichsmark.

Understanding Response

The goal in responses was to provide liquidity, in other words, to make sure that the central banks had enough credit, denominated in gold or key currencies such as pounds or dollars, to meet the demand. The German case was of course more serious than the Austrian one since both the United States and the United Kingdom had a significant amount of credit within the German state. A break between gold and the Reichsmark would mean a loss of significant short-term capital from the United States and England. The responses to the German crisis needed to address far larger amounts of capital, and because of this the responses came in several forms.

The capital flight and need for liquidity at local banks in the first two weeks of June was addressed by the resources of the *Reichsbank*. Its response was to raise the discount rate to discourage the removal of capital from Germany. On 13 June, the bank rate was raised 2%. This move had the opposite of its intended effect. Instead of keeping capital within the country it accelerated withdrawals, because the rate raise signaled to the population that there was cause for concern.[734] As the drain of capital continued to the point that the *Reichsbank* was not going to be able to meet its obligations, the world became more concerned. The first significant international response attempted to alleviate pressure on German reserves by addressing their debt and reparation burden. The "Hoover Moratorium" or "Hoover Debt Holiday," was announced June 20, 1931. This action froze all reparation and war debt payments for one year. While this measure was not received well in France, it had the immediate effect of calming the German market. This action was immediately followed by a BIS loan of $100 million. The money came from the BIS, the Bank of England, Bank of France and the Federal Reserve on June 24.[735]

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[734] Clarke, *Central Bank Cooperation 1924-1931*, 191.

[735] Ibid., 192.

This credit had an effect and calmed the German capital withdrawal for a few days. The calm was short-lived. By July 4, the $100 million credit was exhausted. The *Reichsbank* then approached a consortium of private American banks who allowed the *Reichsbank* to draw on a previously agreed upon $50 million in credit.[736] But on July 13, the panic resumed again when the *Denatbank*[737] suspended payments. At this point the German government stepped in with a series of responses that attempted to shut down the flow of gold. With few reserves left, all German financial institutions were closed until August 5.[738] All stock exchanges were closed. Passport restrictions were implemented to prevent Germans from physically leaving the country with gold and a series of exchange controls were instituted. As a further line of defense, the *Reichsbank* raised the discount rate another three points to 10% and required citizens to declare foreign credits so they could be used to offset German withdrawals and liabilities.[739]

There were discussions among the central bankers of France, England and the United States regarding another BIS line of credit, but this loan would never be decided upon. International solutions were mostly exhausted at this juncture. The officials at both the Bank of England and the Fed were convinced that most German capital flight was from domestic sources and that this would not change regardless of how much credit

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[736] Ibid., 193.

[737] *Denatbank* is the abbreviation for *Darmstädter und Nationalbank.*

[738] Dulles, *The Bank for International Settlements at Work*, 386. It should be noted that banks were permitted to pay out wages and payrolls, but other than that they were closed for business.

[739] Fay, "Causes of the German Financial Crisis," 806.

was extended to the *Reichsbank*.[740] In addition, the Bank of England's own resources were strained by the rescue operation in Austria and their connections to the German problem.[741] Gold left the Bank of England's coffers at an alarming rate through July and forced the Bank to raise the discount rate twice in August. The crisis was clearly moving to London. France was still trying to score political points by withholding support if reparation payments were guaranteed.[742] The Fed had the gold to rescue Germany, but not the interest and the U.S. government had even less interest in providing a loan. Both backed away from the negotiations.[743]

The only actor left that continued to mount a response was the BIS, but there was a serious decline in BIS resources given the rescue operations with which it was involved. It could not offer sufficient credit.[744] It could do nothing more than offer another diplomatic solution through the private sector and it assembled the Wiggin Committee. The Wiggin Committee was a group of central and private bankers who met to arrange an agreement between German and international bankers regarding the withdrawal of credits from the German market. The "standstills"[745] negotiated though the Basle Standstill Agreement of August 19th froze $1.2 billion in short-term credits for

[740] Clarke, *Central Bank Cooperation 1924-1931*, 195-7.

[741] Dulles, *The Bank for International Settlements at Work*, 396-7.

[742] Clarke, *Central Bank Cooperation 1924-1931*, 200.

[743] Ibid., 198-200.

[744] Dulles, *The Bank for International Settlements at Work*, 397.

[745] Also referred to as *Stillhaltung* in some writing.

six months.[746] These agreements effectively, albeit temporarily released Germany from the short-term loan requirements.

By the end of the summer, the German economy stood in shambles behind a newly constructed wall of exchange controls, a moratorium on reparations and war debts, closed banks and exchanges, a 10% discount rate, and standstills on private short-term credits. The success of these measures is debatable. The goal was to allow the *Reichsbank* to control their exchanges and strengthen the mark, but the mark remained weak. Instead of having the desired effect of calming markets, freezing assets was interpreted as a warning signal that did not calm domestic panic but did scare away any hope of obtaining foreign credit. The situation in Germany was still uncertain, and now the problems in London were becoming more serious.

The drain of gold from London began in July and Clarke identifies July 13 as the first phase of the crisis.[747] With the announcement of the *Denatbank* failure and the publication of the Macmillian Report[748] the pound fell in value. Between July 13 and 29 the Bank of England lost nearly one quarter of its international reserves amounting to about $200 million in gold.[749] British overseas financial commitments, domestic budget

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[746] Dulles, *The Bank for International Settlements at Work.*

[747] Clarke, *Central Bank Cooperation 1924-1931*, 202.

[748] The Macmillian Report was a governmental accounting of the liabilities and assets of the British financial system. It reported that the short-term liabilities to foreign markets were far higher than the reserves of the banking system. In retrospect, the Macmillian report seems to have grossly underestimated the amount outstanding liabilities, but even the lower amounts caused a confidence crisis and lowered the value of the pound.

[749] Clarke, *Central Bank Cooperation 1924-1931.*

problems and declining trade balances all contributed to the eventual crisis.[750] The demand for short-term credits on London increased with the financial crises in Austria and Germany, and London continued to meet the demand for world liquidity, although, unlike the United States or France, it did not have the gold to do so, its short-term liabilities were higher than its reserves, and the value of the pound suffered.[751]

Providing short-term credits also reduced liquidity for the domestic market. This was further aggravated by the closure of German and Austrian banks, which effectively froze short-term loan payments and cut off the liquidity for British banks, bringing the British domestic banking system near collapse.[752] The pound weakened throughout the summer as reserves and gold left London in search of stronger returns elsewhere. The final contributing factor was that European commercial banks, fearing the crisis in Germany and Austria would spread to their markets, put additional pressures on the London reserves as they drew down their London balances in an effort to bolster their

[750] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 268-9.

[751] Williams, "London and the 1931 Financial Crisis." These actions are what led Kindleberger to conclude that the depression was so severe due to the failings of the United States to step in to provide the necessary global liquidity in the absence of the British being able to. See Kindleberger, *The World in Depression 1929-1939*. Moreover, London's policy position of maintaining the gold standard regardless of the cooperation among other banking centers to redistribute gold, helped contribute to Eichengreen's conclusion that the commitment to the gold standard unraveled global finance in the interwar period Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*.

[752] Paul Mazur, "The Gold Crisis: Its Causes and Significance," *Current History*, November 1931.

liquidity.[753] All of these conditions contributed to the confidence crisis and the declining value of the pound.

The British and international responses were counterintuitive in the early phases of the crisis. While a high bank rate was probably warranted (7-8%) to stop the drain of gold, the Bank of England only raised the rate from 2.5 to 3.5%, then another point by the end of July. Mostly, the domestic response can be characterized as one of inaction.[754] The Bank of England responses to the British crisis came too late and were completely ineffective. Attempting to reverse the exchanges it raised the bank rate four times between mid-May and mid-September.

Internationally, two sets of credits were secured from New York and Paris. The first at the end of July amounted to $125 million and came from the Bank of France and the Federal Reserve. The second at the end of August was a $400 million credit with $200 million each from Paris and New York. The last loans were secured through private banking syndicates and the Bank of France and the Federal Reserve Bank of New York.[755] But these credits came too late in the process to restore confidence. Moreover, both the Bank of England and Parliament were deadlocked in political battles about how

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[753] Clarke, *Central Bank Cooperation 1924-1931*, 202-3.

[754] Clarke contributes this to the physical and mental collapse of Montagu Norman, the Governor of the Bank of England, who from first week of August until October was sent off to rest on a trans-Atlantic vacation. Ibid.

[755] Kindleberger, *A Financial History of Western Europe*, 368, Sayers, *The Bank of England 1891-1944*, 397-401.

to address the crisis and so these lines of credit were not drawn on early enough.[756] The underlying problem however, was that Britain needed to find sufficient credit to pay for her short-term liabilities, but the credit system had completely broken down.

The Bank for International Settlements mounted no response; its resources were exhausted. Throughout the interwar period, the British fostered central bank cooperation, but the break in the pound in September 1931 caused a reversal in the external financial commitments of the British and reoriented their attentions within. Central banks no longer cooperated through the BIS mechanisms, and the attitude had switched to one of "every central bank for itself."[757] One could argue that the British came late to this position, as the French and other continental central banks were securing large stocks of gold and the Americans had already turned inward in their attitudes toward trade and repatriated much of their capital.

Unable to raise enough credits to support the pound, the gold standard ended on September 21, 1931 when the British announced that the pound would no longer be convertible. This put New York at the center of the storm. European central banks began converting their dollar holdings into gold, but by this time the United States had $3.4 billion in gold reserves and almost 40% of the world's gold.[758] Nearly $700 million in gold left the U.S. market between mid-September and the end of October, and the Fed raised the discount rate to stem the tide. The Federal Reserve received no international

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[756] Sayers, *The Bank of England 1891-1944*, 400-5.

[757] Dulles, *The Bank for International Settlements at Work*, 430.

[758] "Commercial History and Review of 1931," 9.

support at this time and weathered the storm by using the discount rate to stem the flow of gold.

The British abandonment of the gold standard caused dramatic reactions in markets all over the world. Security prices fell and most European stock markets closed immediately. Central bank rates increased further contracting international credit. All of the British dominions went off gold, as did the Scandinavian countries. Japan left the gold standard in December, and twenty-five additional states followed. In addition, many states enacted moratoriums on the export of gold.[759] Then the German and Austrian crises once again became severe. Widespread bank failures within these states and throughout Europe ensued.[760] The financial problems moved through financial markets from state to state and intensified the retrenchment of financial actors who focused on domestic solutions. "Tendencies toward exchange restrictions, increased tariffs, embargoes, and bilateral trade agreements were strengthened; and the universal heightening of trade barriers made far more difficult the payment of international debt."[761]

There is no question that this was a global financial crisis. The entire financial system that had become so interconnected through the debt and credit structure simply ground to a halt. Foreign exchanges were thrown into chaos, international credit dried up

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[759] Ibid., 8-9.

[760] Davis, *The World between the Wars, 1919-1939: An Economist's View*, 273.

[761] Ibid.

and the reaction of countries was to turn inward to address their domestic problems exacerbating the global economic problems.

The Key Crisis

I have identified the crisis of 1931, beginning with *Credit Anstalt*, as the key crisis. It will be recalled that a key crisis is a crisis where the response system fails. Throughout the interwar period there was a slow evolution from domestic central bank responses to cooperative central bank responses. This practice was a necessary by-product of the integrated financial system that had been created through the large reparations payments and loans of the period.

A common understanding of the interwar period is that by 1930, with the passage of the Smoot-Hawley Tariff Act, the United States and most European states were practicing beggar-thy-neighbor policies and conducting business behind high, impenetrable tariff walls. This is a largely accurate picture of the trade markets from 1931 onward. But the response to the *Credit Anstalt* crisis and the German crisis suggest that a nascent multilateral response system was called upon to address these crises. These efforts could not stop the failure of financial markets, but they did prolong the end. The Sterling crisis suggests a different dynamic at work. The BIS was not even approached. Cooperation between the major central banks became difficult. Though credits were supplied, London had to rely on private credits as well, and the amounts were too small to ultimately stop the crisis.

The Bank for International Settlements opened in May of 1930 as an agent to administer the Young loans and reparation plan. In a little over one year, the Hoover Moratorium completely changed the purpose and duties of the bank from managing the payment of reparations to providing funds for banks in distress and managing the repayment of emergency loans.[762] The BIS played a major role in stabilizing currencies throughout Europe in the early phases of the crisis of 1931 and offered seven loans to central banks.[763] In fact, given that it was a new creation and had extremely limited resources, the BIS extended an enormous amount of emergency aid. But the crisis in Europe quickly outpaced the BIS' resources. The German problem was dealt with not by stabilizing the mark and re-establishing the international flow of credits, but instead by insulating the problem behind exchange controls and that cut off the German market from the international financial system. The repercussions of this were clearly felt in the British market within weeks.

In 1933 the world leaders met in London to try and address the global economic problems at the World Economic Conference. This conference was largely unsuccessful. Many proposals were suggested to reestablish international central bank cooperation and to establish funds and mechanisms to provide for the stabilization of currencies and international credit, but these proposals were blocked by the United States.[764] The

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[762] Dulles, *The Bank for International Settlements at Work*, 382.

[763] Two to Austria, one to Germany, two to Hungary, one to Yugoslavia and one to Danzig.

[764] Kindleberger, *A Financial History of Western Europe*.

Roosevelt administration was completely inwardly focused and had little interest in global or regional solutions to international financial problems. Bilateral trade arrangements and extraordinarily high tariff barriers characterized the rest of the 1930s. In finance, exchanges would be managed in "blocs." A gold block emerged among France, Belgium, Switzerland, the Netherlands and Italy. The British empire would manage the sterling bloc. The United States, hell-bent on isolation from global markets, managed its currency alone. Then there were the countries excluded from the system, namely Germany, Austria and Japan. Each of these states turned inward to address their financial problems.[705] These policies continued throughout the 1930s until the war once again realigned global financial relationships

<u>The Evolution of Crisis Response 1919-1939</u>

This chapter has examined the incidence of crisis and the development of responses in the interwar period. It suggests that reparation and loan connections after the war brought with them increased financial networks and greater integration between states. To deal with these conditions, central bank cooperation evolved slowly throughout the period privileging multilateral regional cooperation between public institutions. The success of these cooperative efforts brought greater reliance on this system, ultimately codifying it in the Bank for International Settlements. But this cooperation became strained by 1931, and the system that had slowly evolved did not

[705] Ibid., 375-83.

have the capacity to respond to the enormity of the crisis. This section will further detail these conclusions.

The story of international finance in the interwar period can be broken into two distinct periods. First, between 1919 and approximately 1930 the realization that reparations and war loans tied economies together to an enormous degree, and efforts to maintain the new gold standard required significant central bank cooperation. This cooperation was successful in responding to the financial crises that occurred in the 1920s. Clarke argued that, "cooperation facilitated the stabilization of several major currencies and numerous minor ones. The strains that arose after these stabilizations were manageable."[766] Slowly throughout the 1920s a coordinated system of central bank cooperation emerged and became increasingly codified. The culmination of this process is the formation of the Bank for International Settlements to manage reparation transfers among the principal states in the international system.

Throughout the nineteenth century central bank cooperation emerged alongside the creation of central banks. This moved the response system from one consisting of a plethora of actors including private banking syndicates, to one that was primarily focused on central banks. This response was so successful that states with central banks seemed to manage crisis better and so this institution spread and by the beginning of World War I, the legitimization phase of the process was near complete. That response system can be described as relying on a public domestic actor.

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[766] Clarke, *Central Bank Cooperation 1924-1931*, 220.

The occasion for central bank cooperation emerged along with the creation of these institutions, but central bank cooperation was significantly furthered by the necessity of dealing with the new parameters of the international economy. Reparations and war debt provided a global integrative dynamic that connected state economies at a more sophisticated level than they had been prior to the war. The reaction to these new economic conditions was the expansion of central bank interactions, and an environment of cooperation emerged throughout the 1920s. The financial crisis response system mirrored this growth in central banking cooperation. Several conferences throughout the 1920s created stronger and more coordinated policies among central banks that helped provide emergency stabilization assistance to states that fell into crisis. Slowly, a multilateral, but mostly European, public response system was being created that relied heavily on central bank negotiations and policy coordination.

This response system was also largely successful. It addressed many crises throughout the 1920s and was further codified as a result. But the economic system began changing in the late 1920s. The enormous linkages and capital and credit expansions changed course. Capital movements constricted credit markets, and short-term credits replaced long-term ones. Thus the expansion of the early twenties was showing signs of reversal by 1928. As the economic system deteriorated from 1928 onward, central bank cooperation became more strained as states opted for domestic solutions to their increasing economic problems. This had direct consequences on the response system and these consequences would be apparent in the crises of 1931.

Even as things were deteriorating, the momentum behind central bank cooperation was codified in the creation of a "world bank" in 1930. The Bank for International Settlements, and the Young Plan that created it, were attempts to take the problem of reparations out of the political arena and have it managed through practical economic mechanisms. It was also hoped that this bank would move beyond its role in reparation settlements and acquire new duties to be a "central bank of central bankers."[767]

Though it did not receive that status, the BIS played an important role in the crises of 1931. The BIS was on the front line of response, along with central bank cooperation between the major banks of Europe and the United States. The BIS coordinated a series of credits for central banks and in total made seven loans to provide liquidity for states in crisis. This is an impressive record considering the bank had opened only months before.

The crisis in 1931 stalled the creation phase of a multilateral regional system to manage financial crisis. Creation of this system was a response to the increasing complexity of global financial interactions. This is evidenced throughout the 1920s as central bank cooperation is deepened. The failure of this system occurs when the crisis moves to the British market, because by that time, it had become too large for the resources of central banking cooperation to manage. Not having the capacity to respond, the BIS becomes sidelined, and American and French responses are insufficient to save the Pound Sterling. The result is that cooperation is abandoned and domestic solutions

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[767] Schloss, *The Bank for International Settlements: An Experiment in Central Bank Cooperation*, 84.

provide a fallback response that is ultimately unsuccessful, and in the absence of a sufficient response, the global economy fell further into depression.

# Chapter 5

# THE BRETTON WOODS SYSTEM

To deal with the problems of international exchange and of international investment is beyond the capacity of any one country, or of any two or three countries. These are multilateral problems, to be solved only by multilateral cooperation.... The transcendent fact of contemporary life is this – that the world is a community

*Henry L. Morgenthau, Jr.*
*Secretary of the U.S. Treasury at*
*Bretton Woods, July 1, 1944*

## Introduction

The Second World War thoroughly destroyed the global economy and disrupted the flow of international finance. In the War's aftermath the international community, directed by the United States, purposefully reconstructed the economic order. The result was a system that was perceived as having been influenced by the lessons of history; designed so as not to repeat the economic problems that were so closely associated with the outbreak of war. The architecture of the post-war international trading and financial system began to take shape in 1942 with the proposals of John Maynard Keynes and Harry Dexter White. The trading system favored a liberal philosophy and the financial system was founded on fixed exchange rates and state control of short-term capital.[768] But this new internationalist financial architecture did not eliminate financial crises. After the initial post-war slump and widespread recovery spurred largely by the Marshall Plan, the global economy entered a period of rapid expansion and prosperity. Global finance, at first constrained through capital controls, became a primary engine of global economic growth toward the end of the period. But as early as 1958 problems in global finance again became evident as crises, centered in the foreign exchange markets, started to rumble through Europe.

The crises of this period were contained and remedied quite successfully by a more institutionalized type of central bank cooperation that functioned through the BIS forum. An emerging organization, the International Monetary Fund (IMF) would also begin to take an active but secondary role in crisis response throughout this period. Its role would be expanded during the debt crisis that began in 1982 because the scope of the debt crisis overwhelmed both the capacity of the central bank cooperation that had emerged and the willingness of the Western central banks to provide relief.

The goal of this chapter is to discuss the post-war period and the crisis response system that emerged. It will proceed in three sections. I will begin with an examination of the post-war global economy that concentrates on the reconstruction of the economic system after the war and the economic expansion that followed. Both the reconstruction and the expansion created important institutions that would become instrumental in the

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[768] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 240. Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*.

crisis response system. Then I will focus on the crises in this period. I will look in depth at the exchange rate crises in Western Europe that occurred between 1958-1973 and the most significant crisis of this period, the American dollar crisis in 1971. Responses to these crises were provided by an intricate network of central bank credits and cooperation. By 1982, the international debt crisis presented new problems. This crisis was different in character from the others of this period for two reasons. First, although it affected both Western Europe and the United States, the epicenter of the crisis was in the developing world, not the developed world. Second, it was of an enormous geographical and financial scale. These factors changed the nature of responses and moved the responsibility for addressing crises from central bank cooperation to an international organization. The final section of this chapter will discuss these changes with respect to the dissertation's central model.

This chapter will detail the rise of the BIS system to address financial crisis, show this system's successes and entrenchment, and finally discuss the transition to the new IMF centered response system. The purpose of this discussion is to illustrate that crisis response system underwent a significant change in the period between 1945 and 1982. The early crises of the period, centered in Western Europe and the United States, codified and expanded a familiar response system: central bank cooperation. The cooperation that emerged in the 1950s was based on multilateral, but regional central bank cooperation through the Bank for International Settlements. This system was refined as crises continued to emerge throughout the 1960s. The BIS centered system worked and successfully provided necessary liquidity to developed country markets and averted a collapse of the global financial system, especially during the breakdown of the Bretton Woods peg and the dollar crisis in the early 1970s. However, the Debt Crisis that emerged in 1982 challenged the BIS response system. It is therefore the key crisis in this period.

Throughout the 1970s the expansion of capital and credit to the developing world brought more actors into the global financial arena. When Mexico defaulted and other countries followed, the BIS centered response system was no longer adequate to address crises in the new financial environment. Thus a new response system was forged through an organization that had a wider scope and membership to address the problems of the developing world: the IMF. Since 1982, the IMF has become the centerpiece of financial crisis response. This chapter concludes that the debt crisis prompted a change in the global crisis response system that can be characterized by increasing the role of multilateralism in addressing crises. Thus, this chapter concludes, that the expansion of global capital and credit to the developing world strained the BIS centered response system. In this period, financial interconnections between the developed and developing world increased the possibility that a crisis in the developing world would cause a collapse in the developed world. The crisis response system that emerged to deal with these conditions used the IMF as the IMF primary response actor. The IMF, being a public, multilateral institution had a wider scope that was able to address crises that occurred in the developing not just the developed world.

The crises of the post-war period and the response system that grew out of them are consistent with the thesis of this dissertation, which suggests that crisis response changes over time due to the inability of response actors to continue to effectively deal with the new conditions of the global economy. This chapter continues to elucidate this thesis by showing the transition from the BIS centered response system, a system of extensive regional cooperation limited to developed countries, to one centered on the IMF a organization with a global scope and membership.

## The Post-War Global Economy

### The Early Years 1945-1950

The global economic situation in the period following World-War II is often described with nostalgia as an era where economic prosperity and expansion were the main dynamics. It is also in this period that international economic institutions grew more prevalent and gained wider responsibilities for managing the significantly expanded global economy.

As early as 1942, the United States and the United Kingdom, while dealing with lend-lease arrangements, began to consider how to reconstruct the international economy and devise preliminary plans for the international trading and financial system.[769] Both countries recognized that significant changes to reduce barriers to trade and exchange would need to be made once the war ended.[770] In 1944 the Bretton Woods conference

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[769] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 238.

[770] A.G. Kenwood and A.L. Lougheed, *The Growth of the International Economy 1820-1990*, 3rd ed. (London: Routledge, 1992), 235.

made important strides towards addressing these concerns and redesigning the post-war economy. The conference created two institutions, the IMF and International Bank for Reconstruction and Development; and proposed the creation of a third, the International Trade Organization (ITO).[771] These institutions emerged from the White Plan, which continued the trend of multilateral cooperation that had begun in the interwar period.[772]

Central to the architecture of post-war international finance was the International Monetary Fund, which was designed to reduce currency and financial problems that were obstructive to free trade. The ITO was to reduce trade barriers, but the IMF was to stabilize the economic environment in which trade occurred. It was hoped that the IMF would, "create a multilateral system of payments based on a world-wide convertibility of currencies," and maintain exchange rate stability while allowing members to pursue full employment policies.[773] The intent of the Bretton Woods institutions as a whole was to reduce both the currency instability and trade nationalism that had caused so many problems in the 1930s and to do both through multilateral cooperation.

Functionally, the Fund pursued stable global exchange rates by setting agreed upon par values for member currencies, making the par values unchangeable without a majority vote of the members, and getting members to agree upon maintaining less than a two percent fluctuation in their exchange rates. In the case where a state could not

[771] The proposal for the ITO failed to create an organization, leaving the stopgap measure of the General Agreement on Tariffs and Trade (GATT) to address trade relations for nearly 50 years.

[772] Kenwood and Lougheed, *The Growth of the International Economy 1820-1990*, 235.

[773] Ibid., 236.

maintain their exchange rate within two percent the par value, in other words when a devaluation crisis faced a state, IMF funds would be made available to help stabilize their exchange rates.[774] These funds would come from a pool of currencies to which member states would contribute and from which they could draw in times of crisis. When there were problems, the Fund was to bring the international economy into equilibrium. As Kenwood and Lougheed note, "When the international monetary system was functioning smoothly, the Fund's operations were expected to be of minor importance. On the other hand, should imbalances and other difficulties arise, the Fund was considered to possess ample reserves and sufficient powers to return the world monetary system quickly to stability."[775] If it worked as designed, the Fund was to be the primary actor when a financial crisis occurred.

At the same time that the Bretton Woods institutions were being discussed and created, the Bank for International Settlements was facing a fight for its life. The delegates to the Bretton Woods Conference overwhelmingly wanted to liquidate the BIS but were unable to do so because the New York banking community would not allow it, and because technically the Bretton Woods delegates did not have the necessary authority to dismantle the BIS without the Bank's representatives in attendance.[776] Two reasons

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[774] Ibid., 237, Raymond Mikesell, *Foreign Exchange in the Postwar World* (New York: Twentieth Century Fund, 1954), 23-4.

[775] Kenwood and Lougheed, *The Growth of the International Economy 1820-1990*, 238.

[776] The resolution presented to the Bretton Woods Conference would have required states to work toward dismantling the BIS in order to participate in the Bretton Woods institutions. Therefore, not having BIS representatives only presented a minor hindrance to abolishing the organization. See Helleiner, *States and the Re-Emergence of Global*

were cited for attempting to liquidated the BIS. First, there were significant concerns that the BIS had been linked to the Nazi government. Second, there was a belief that the IMF and BIS would overlap in their functions enough to make the BIS redundant.[---] The BIS escaped the attempted liquidation because by the end of the war the difficulties in Europe made collaboration and cooperation between central banks more desirable. The existence of a forum where central bankers could meet on a regular basis to discuss the international economy brought new life to the BIS. But the concerns that the BIS and IMF would overlap in their responsibilities lingered since the IMF was designed to assure the same economic stability in international finance that the BIS had tried to secure 15 years earlier. The question of whether the post-war economy would need both the BIS and the IMF was left unanswered, but not for long. Immediately following the end of the war, economic conditions left the IMF temporarily on the sidelines and brought the BIS to the forefront of the international economy.

The war destroyed most domestic economies to the point that they had little or no productive capacity in its aftermath. Global demand for goods was high, but supplies were small. Most states were barely able to meet their domestic population's requirements for manufacturers and foodstuffs. The solution was to import goods from the only country still capable of significant production: the United States. But in order to pay for required goods states had to either export their own manufactures or raw

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*Finance: From Bretton Woods to the 1990s*, 52-5. and Schloss, *The Bank for International Settlements: An Experiment in Central Bank Cooperation*, 118-20.

[---] Schloss, *The Bank for International Settlements: An Experiment in Central Bank Cooperation*, 118-20.

materials, or use their supply of reserve currency to purchase them. This soon became a problem because the states of Europe did not have the ability to produce goods for export and they needed to use their reserves to acquire goods. This resulted in European states quickly running out of dollar reserves. A condition that has been termed the "dollar gap."[778] The IMF was designed with the purpose of managing exchange rates but these duties were assumed to take place under a stable functioning economy global economy. Given the feeble state of most European economies immediately after the war, the IMF had little to do and its rules were mostly ignored.[779] This is not to say that the Bretton Woods institutions, especially the IMF, could not have played a more significant role to address or manage the solution of the dollar gap. As Susan Strange notes, it is something of a mystery as to why the IMF missed the opportunity to have more influence.[780] On the other hand, the missed opportunities of the IMF provided space for the BIS to become active. Central bank cooperation was needed to address the dollar gap and the BIS was a well-suited organization for the task. Therefore, starting in 1945 and continuing throughout the 1970s the BIS played a significant role in reconstructing the global economy and mitigating financial crises.

The condition of the global economy immediately following World War II was far better than immediately after World War I. States recovered faster and while there

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[778] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 243.

[779] Ibid., 241.

[780] Strange, *International Monetary Relations*, 34.

was a drop in caloric intake in most of Europe, the widespread famines that had happened just 20 years earlier were not part of the post-war landscape.[781] But there was a brewing problem: the dollar gap was becoming serious. By 1947, the U.S. government was concerned that Europe would soon be unable to pay for American exports. American industries were booming mostly because of markets in Europe and Japan, but it was feared that industry would become depressed and unemployment would increase if the dollar gap was not addressed. The solution was the Marshall Plan, which was initiated in part to deal with this lack of dollars abroad as but also tried to speed the recovery of intra-European trade and spur the creation of European businesses.[782]

An expanded layer of institutional economic management supplemented the effect of Marshall Plan aid and helped jumpstart the global economy. In trade, the General Agreement on Tariffs and Trade (GATT), which became the primary manager of trading relationships, replaced the failed ITO. The GATT grew considerably from 1947 through the Kennedy Round in 1967 and expanded the products covered, further reduced tariffs and increased in membership. In finance both the IMF and BIS played important roles. The IMF had little purpose at first and its development into a major actor in the global

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[781] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 243.

[782] I should also note that security concerns were central to the creation of the Marshall Plan. This policy in addition to being seen as part of the economic policy of the United States for jumpstarting the global economy, has also been identified by many scholars as a response to the threat of communism in Europe, especially since the date of Marshall Plan coincided with the statement of the Truman Doctrine just months before. For an elaboration on this position see: Wayne C. McWilliams and Harry Piotrowski, *The World since 1945: A History of International Relations* (Boulder, CO: Lynne Rienner Publishers, 1993), 40-2 and 73-7.

economy happened at a much slower pace than the GATT. The reasons for this delayed development are somewhat unclear but Strange attributes this it to the organization's voting structure and the ambivalence that the U.S. government had toward the IMF.[783] The BIS had a larger role in the post-war economy than one would have anticipated in 1944 when it was at the brink of extinction. The turning point for the BIS was 1950 when it became the agent for the European Payments Union (EPU), thus permanently entrenching itself in the post-war economy.

The EPU created a multilateral payments mechanism to facilitate currency transactions at a time when Western European currencies were inconvertible. Each state reported to the BIS its current account surpluses and deficits with other European states. The BIS then offset each state's payments based on their surplus or deficit position relative to other states and accounts were settled through bilateral gold and credit arrangements.[784] The EPU facilitated greater payments coordination among European states and ultimately led to a collective European decision to gradually restore convertibility through the 1950s.[785]

The European Payments Union was a significant step toward the recovery of financial markets and the expansion of intra-European trade in the years immediately following the war. International economic organizations developed significantly as the

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[783] Strange, *International Monetary Relations*, 33-4.

[784] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 248, Mikesell, *Foreign Exchange in the Postwar World*, 118.

[785] Strange, *International Monetary Relations*, 36.

global economy recovered in these first few years. The responsibilities that these organizations acquired in this early period would allow them to make major contributions to global financial stability in later years.

The Great Expansion 1950-1970: The Global Integrative Dynamic and Investment

The Marshall Plan marked a real turning point in the recovery of the global economy from the devastation of World War II. Soon after the European Recovery Plan was implemented, Europe and the rest of the world began an unprecedented economic expansion. This post-war boom was sustained for two decades as it continued to develop through the 1950s and 1960s. By the 1970s there was some evidence of a downturn, but the phenomenal growth of the post-war era had long-term effects on the interconnectedness of the global economy. The Marshall Plan brought new investment and development to Europe and the Bretton Woods institutions, "usher[ed] in an era of unprecedented growth in international trade and increasing economic interdependence."[786]

All economic indicators for the 1950s and 1960s show dramatic increases. The GDP of OECD countries increased at an average annual rate of 4.8%, raising living standards. In the developing world growth rates also skyrocketed. In the decade of the 1960s developing economies averaged around 6% growth annually in their GDP, though

[786] Gilpin, *The Political Economy of International Relations*, 132.

growth was not consistent across all regions or countries.[787] Much of the expansion was fueled by the strength of the U.S. economy, which transmitted growth to the rest of the world. The steady flow of dollars out of the United States through private investment and government aid provided the needed liquidity and credit to fund commerce globally and in the post-war era, both the amount of international trade and the flow of international capital increased.

International trade showed enormous increases. Statistics suggest that the volume of global exports between 1950-1973 was eight times greater than between 1913-1949.[788] Trade grew at an average of about 6% per year through the 1950s and around 8% per year through the 1960s and early 1970s.[789] The peak decade of world trade was 1963-1973 where trade grew at an annual rate of 9.1%, doubling every eight years.[790] While GNP and GDP and trade growth rates leveled off and declined in the 1970s, the volume of global trade continued strong throughout this period. Trade in manufactured goods, and especially capital goods, was the most significant part of the growth expanding by 93% in the 1950s. Although trade in primary products also expanded in the 1950s, it did

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[787] Angus Maddison, *The World Economy in the 20th Century* (Paris: Organization for Economic Cooperation and Development, 1989), 125-6.

[788] Stephen Marglin and Juliet Shor, *Golden Age of Capitalism: Reinterpreting the Post-War Experience* (Oxford: Clarendon, 1990), 42-5. Maddison, *Phases of Capitalist Development*, 60.

[789] Kenwood and Lougheed, *The Growth of the International Economy 1820-1990*, 286.

[790] Ronald Rogowski, *Commerce and Coalitions: How Trade Affects Domestic Political Alignments* (Princeton, NJ: Princeton University Press, 1989), 88-9.

so by only 34%.[791] This indicates that the bulk of growth from the trade expansion and the largest benefits accrued to developed industrial countries and not to the less developed countries (LDCs).[792]

Uneven benefits are also evident in the patterns of trade relationships. This was most noticeable in the expanding role that developing countries played in the post-war economy. The centrally planned economies of the communist block experienced significant growth in production, but were isolated from the global market by trading almost exclusively with themselves. The developed states of Europe, North America, Japan and Oceania were most affected by the tariff reductions of the GATT and the creation of the European Economic Community (EEC) and European Free Trade Area (EFTA). These three organizations reduced the barriers to trade, and increased both primary and manufactured product trade among the advanced industrial states. Intra-developed country trade accounted for nearly half of all global trade in the post-war period.[793]

The other half of global trade included the developing world either trading with other developing countries or with developed countries. However, the effects in the developing world were uneven. While less developed countries experienced growth, and

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[791] Ibid., 88-90.

[792] Kenwood and Lougheed, *The Growth of the International Economy 1820-1990*, 290.

[793] Ibid., 288.

the amount of trade expanded, the LDCs simultaneously experienced a decline in their terms of trade.[794] This trend would be more pronounced throughout the 1970s. Export patterns indicate that the LDCs were more actively engaged in global trade in the post-war period than they were before, but since the composition of world trade was reflected an increase in trade in capital goods, manufactured products and services, LDCs were still on the periphery of trade benefits. However, the important characteristic of expanded trade after 1950 is that along with the GATT rounds and the increase in multinational investment, it increased interdependence among industrial countries and between industrial and developing countries.[795]

International financial expansion in this period is more complicated. Three types of finance must be considered to understand what occurred in the post-war era: foreign aid, foreign direct investment and portfolio investment. The overall trend suggests that the transfer of international capital increased at an equally astonishing rate as trade. Interestingly, this increase happened in an environment where portfolio investment was severely constrained through capital controls. Under these conditions, foreign aid and foreign direct investment made up the bulk of capital movements. As avenues for portfolio investment opened in the 1960s, the amounts of portfolio investment quickly outpaced the rate of FDI an aid. Therefore, the rebirth of capital markets was slow at first, but really accelerated in the 1970s. The first capital markets to reestablish were

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[794] Ibid., 306.

[795] Andrew Glyn et al., "The Rise and Fall of the Golden Age," in *The Golden Age of Capitalism: Reinterpreting the Postwar Experience*, ed. Stephen Marglin and Juliet Schor (Oxford: Oxford University Press, 1990), 101.

between Europe and the United States, but markets soon expanded beyond the North America-European relationship to other areas of the world, particularly Asia and Latin America. By the early 1970s, the Eurocurrency market created a significant amount of international capital that was beyond the control of states.

Reconstruction in Europe and the rest of the world began with governmental aid and loans in the late 1940s. Nearly all of the loans and aid in the early period were from the United States to Europe. Two early loans were significant for beginning international lending trend. In 1945 the British received $3.75 billion from the U.S. government it to be used to restore the pound's convertibility by 1947. While convertibility was restored, it lasted only a disastrous seven weeks and was suspended again. The underlying purpose of this loan was to stabilize a key currency in order to restore confidence in global financial and trade markets.[296] The Marshall Plan, which totaled over $13 billion in four years, was the other significant loan and provided the dollars needed for Europeans to continue to import necessary items and to facilitate the rebuilding of European industry.

Loans also came from multilateral actors such as the IMF, the International Bank for Reconstruction and Development and the United Nations Relief and Rehabilitation Administration (UNRRA). But the Marshall Plan clearly eclipsed the amounts from these other organizations. By the late 1950s, the recipients of foreign aid shifted from the war-torn states of Europe and Japan to the underdeveloped countries of the world. This was a major change in the international flow of capital, which before World War II was

[296] Kindleberger, *A Financial History of Western Europe*, 418-22.

directed at underdeveloped countries through portfolio and direct investment and not governmental or multilateral aid.[797] The cause of this shift in aid can be attributed to the Cold War and American security concerns, and as a result much of this aid was neither intended for, nor did it facilitate real economic development. The amounts were considerable. From 1945 to 1960 advanced countries granted about $26 billion to aid poor states. In the decade of the 1960s, this amount reached about $74 billion in Official Development Assistance.[798] Regional and international organizations, such as the Inter-American Development Bank and the European Development Fund, were established to direct developed country resources into official development projects.

Channels for both direct and portfolio investment had been opened between developed countries and between developed and developing countries for centuries, but the increase in government aid in the post war period raised hopes and increased the flow of capital to the developing world. Private investment followed, and supplemented many of the industrial and infrastructure improvements that were begun with government aid.

The United States led the world in the export of capital after 1945. Between 1952 and 1960, U.S. export of private capital expanded to over $2 billion annually with a value of $32.8 billion in 1960. Between 1964 and 1973, U.S. capital exports exceeded $3 billion annually, amounting to about $107 billion by 1973.[799] About three-quarters of all American investment was long-term capital channeled through multinational corporations

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[797] Kenwood and Lougheed, *The Growth of the International Economy 1820-1990*, 247.

[798] Ibid., 254.

[799] Ibid., 251-3.

(MNCs).[800] Europe became a more significant capital exporter in the 1950s and 1960s and British capital exports tripled between 1950 and 1970. Unlike Americans, Europeans tended to hold more portfolio (short-term) investment than foreign direct investment.[801] Japan emerged as a significant capital exporter in the late 1960s, but its role in international financial movements would not be striking until the 1980s.

It is understandable how long-term foreign direct investment through MNCs tended to comprise the largest amount of aggregate global investment in the immediate post-war era. The creation of the European Community made MNC investments particularly attractive to American producers trying to operate behind the EC tariff wall.[802] Moreover, following the crisis of 1931, capital markets became highly regulated and remained so for decades.[803] While it faced some restrictions, foreign direct investment did not face the same state created barriers as other financial transactions and short-term capital movements.

By the late 1950s state imposed capital controls began to be less effective due to the emergence of the Eurocurrency market. Over the years, the Eurocurrency market has received a lot of attention from scholars who have argued that this phenomenon changed

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800 Gilpin, *U.S. Power and the Multinational Corporation: The Political Economy of Foreign Direct Investment*, 10-15.

801 Ibid., 13-15.

802 Ibid., 231-62.

803 Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*. Helleiner, "When Finance Was the Servant: International Capital Movements in the Bretton Woods Order."

the tenor of global finance.[804] The Eurocurrency market can be best described as an international non-state regulated market that provided short-term credit through the use of expatriated dollars held in banks operating outside the American borders.[805] This market emerged because American banks operating on U.S. soil were under U.S. banking laws that required high levels of reserve and had many restrictions for dealing with socialist states. These laws could be circumvented if banks were located off U.S. territory. Eurodollars were originally U.S. dollars held in banks operating in Europe, though the banks could be headquartered anywhere. Usually, banks lent these funds at high rates of interest, thereby providing finance capital (denominated in dollars) to those willing to pay for it.

The Eurocurrency market expanded considerably throughout the 1960s and its growth exploded in the 1970s. This financial arrangement fueled portfolio investment by making transactions across non-convertible currencies possible. Although portfolio investment was meager in the early post-war era due to state imposed capital controls, by the 1960s, the further development of international banking and the growth of the Eurocurrency market started to dramatically increase portfolio investment. Much of the increase in investment was seen through advanced country banks lending to developing countries via the Eurocurrency market throughout the 1970s.[806]

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[804] For example see Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*. Strange, *International Monetary Relations*.

[805] Strange, *International Monetary Relations*, 178.

[806] Kenwood and Lougheed, *The Growth of the International Economy 1820-1990*, 252.

Slowing Down and Speeding Up: 1970-1982

While many of the expansive trends in trade and finance that had begun in the 1950s and 1960 continued through the 1970s, there were significant economic problems to make this time period worthy of a brief but separate treatment. With the exception of Asia and Japan, growth levels in most countries began to taper off, and after 1973 the pace of growth of the global economy slowed considerably. Commodity prices, with the exception of oil, dropped, and trade, while continuing to grow, increased only half a quickly as it did throughout the 1960s.[807] Global unemployment increased and inflation became a serious concern in most states. Two oil shocks in the 1970s added to the problem by dramatically increasing the price of this vital commodity. In this environment, the Eurocurrency market grew larger and the connections between expanding portfolio and foreign direct investment grew stronger.

The story is familiar. As a result of the increase in oil prices, banks both in the United States and those that held dollars in the Eurocurrency market suddenly had excess liquidity looking for profitable outlets. This expansion in credit, similar to the types of expansion commonly seen before financial crises, led to an impressive wave of foreign lending, as these "petrodollars" were recycled globally through loans to predominantly underdeveloped states. The global recession that began to deepen between 1974 and 1975 increased foreign borrowing, especially in the underdeveloped world, to

[807] Marglin and Shor, *Golden Age of Capitalism: Reinterpreting the Post-War Experience*, 42-5.

compensate for balance of payments deficits and the rising price of oil. Between 1974 and 1976, three quarters of the world's deficits were financed by private bank loans.[808] Furthermore, the United States used the existence of Eurodollars to offset its balance of payments problems and escape the more serious effects of the oil crisis.[809] But this simply transferred more serious economic problems to the underdeveloped countries. These countries were borrowing to pay back the short term debts that they had incurred since the beginning of the decade and also dealing with the rising price of oil. By the second oil shock in the late 1970s, global economic conditions had changed, as did the optimism for growth in underdeveloped countries. Rising interest rates, decreasing terms of trade and evaporating currency reserves were making the debt burden harder to manage. This only briefly caused a slow down in lending as volume of loans fell by 16% in 1980.[810] These concerns lasted barely a year and by 1981 lending had reached new highs, but this time short-term loans were the bulk of lending since banks considered them to be lower risk than long term loans.[811] From 1973 to the eve of Mexico's default in 1982 debt rose nearly fivefold in developing non-oil producing countries.[812] Interest

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[808] Foreman-Peck, *A History of the World Economy: International Economic Relations since 1850*, 318.

[809] Ibid., 307-15.

[810] Richard O'Brien, "Introduction: A Perspective on Debt," in *The Global Debt Crisis: Forecasting for the Future*, ed. Scott B. MacDonald, Margie Lindsay, and David L. Crum (London: Pinter Publishers, 1990), 4.

[811] Ibid., 5.

[812] Cline, *International Debt and the Stability of the World Economy*, 2.

rates were rising, debt service had increased from about 27% of GDP to nearly 35% and the writing was on the wall that the system was about to unravel.[813]

Summarizing Economic Conditions in the Post-War Era

Overall the growth in global economic activity in the period between 1945 and 1982 was at a level that the world had never experienced. Global trade expanded significantly. Foreign investment, portfolio investment and governmental aid brought life and tremendous growth to capital markets and the unregulated Eurocurrency market allowed capital to move faster and flow more freely beyond the control of states. Although economic expansion did not uniformly spread to all corners of the globe, it was more geographically widespread than at any other time in history and communication and transportation developments aided in its expansion. In addition to intra-European and North American-European capital flows, Latin America, Asia and Africa were all recipients of significant amounts of investment and loans during this period.

By far the most important political development resulting from the international economic boom between 1945 and 1982 was that the increase in trade, foreign aid, foreign direct investment and portfolio investment led to expanded connections between economies. Speaking about the Eurocurrency market, Susan Strange sums up the effects of increased international financial transactions nicely:

> This international market for Eurocurrencies was one of several ingenious devices made necessary by the much faster rate of change in the international economic and social systems than in the international

[813] Ibid.

political system. It enabled operators and enterprises in the rapidly growing international economy to treat wealth, in the form of a monetary medium of exchange and credit, *as if the world really were a single economic system and one currency area, as if national frontiers and restrictive statutes did not exist*. It could be called a gearing or meshing device by which private agents operating in a relatively static political order took advantage of the greater opportunities offered by an increasing dynamic international or transnational market economy.[814]

Having discussed the political economic environment of the post-war era, we can now turn our attention toward understanding the financial crises that occurred in this period. The increased geographic scope of economic interactions as well as the expanded volume of economic transactions would help define a new environment for crisis response.

## The Crises

There were several significant financial crises in the post-war period. Kindleberger divides these crises into three distinct periods.[815] The first period, from about 1947 through the 1960s, contains a series of crises related to balance of payments problems and speculation in currencies. These crises had in common their European location and were related to the issue of convertibility and volatility in gold markets. Responses to these crises came from regional arrangements, focusing on the BIS. The second period contains only one crisis, the collapse of the Bretton Woods peg and the

[814] Strange, *International Monetary Relations*, 177. Emphasis added.

[815] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 3rd Ed.*, 210-11.

resolution of this problem between 1973-75, which was solved mostly by the intervention of developed economies again through the BIS forum. In the third period, between 1979-82 the developing world debt crisis began to emerge. This crisis was managed by another institution, the IMF.

Throughout the near three decades from 1945 to 1983, responses to financial crisis indicate that central bank cooperation was still the primary system of response, but the nature of central bank cooperation changed considerably from the earlier period. Cooperation was more codified and systematized through an essentially regional multilateral forum. As Helleiner describes it, crisis management was expressed through a "consolidation of the central bankers' regime centered around the Bank for International Settlements."[816] But this system of crisis response would eventually prove inadequate to address the problems of the developing world.

## The Early Crises: 1947-1971

### Early Expansion, Contraction and Balance of Payments Crises

One effect of World War II was the expansion of capital into Europe to speed recovery. Alongside this expansion was a high rate of capital flight from Europe to the United States. This capital flight was cause by two circumstances. First, the need to pay for goods to begin the rebuilding of Europe transferred capital to the United States. Second, it is estimated that a large amount of capital fled Europe searching for safer

[816] Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*, 18.

investment havens.[817] The movement of investment capital from the Europe to the United States sounds inconsistent with the Bretton Woods goals of constraining capital flows in order to restore trade relationships, and it was. Much of this capital was transferred illegally and prior to American regulations on incoming capital were implemented. European governments were interested in controlling capital movements but their efforts were exacerbated by the difficulty of identifying which funds constituted investment capital. Thus, a large amount of illicit capital ended up in the United States immediately after the war.[818]

This expansion and contraction of capital in Europe, which seemed to happen almost simultaneously, created crisis conditions through much of the late 1940s and early 1950s. The situation was exacerbated by the inconvertibility of European currencies and a series of devaluations throughout Europe in 1949. Both made it difficult for European states to clear their accounts from trade transactions and correct intra-European payments disequilibria. In these conditions, balance of payments crises emerged in Europe throughout the 1950s as states tried to settle their accounts with their neighbors and the United States.

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[817] Ibid., 54-5.

[818] Because it was illicit, the amounts of capital flight from Europe are hard to predict, but several economic historians note that the level of capital movements in this period were significant enough to cause the 1947 crisis. See Arthur I. Bloomfield, *Speculative and Flight Movements of Capital in Postwar International Finance* (Princeton: Princeton University Press, 1954), Marcello de Cecco, "Origins of the Postwar Payments System," *Cambridge Journal of Economics* 3 (1979): 56-60. Helleiner argues that it was only after the crisis in 1947 that true bilateral capital controls became implemented and effective. See Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*, 55-6.

The BIS, as the agent of the European Payments Union, created a regional system that handled the response to balance of payments crises in Europe throughout the 1950s.[819] The system was quite successful because it isolated the European state economies from currency convertibility until 1958 and provided the necessary mechanism for states with inconvertible currencies to clear and settle payment deficits. BIS regional multilateral management provided a mechanism to respond to and prevent balance of payments crises in this period.[820]

Pressure on Gold

In 1958, with most European economies protected from balance of payments crises, the restoration of external convertibility (convertibility for non-domestic non-resident assets) was completed. This removed the barriers protecting the European economies from bigger crises at exactly the time that global markets were showing signs of becoming unstable. The expansion of world trade and the internationalization of finance in the 1960s increased the interconnectedness among and between global financial centers, placed all major currencies under pressure, and created a situation where exchange markets grew exponentially.[821] Exchange and gold markets also became intricately linked because gold markets were used to stabilize currency values and exchange rates. While the growth of exchange markets seemed adequate to provide

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[819] de Cecco, "Origins of the Postwar Payments System," 55-65.

[820] Kenwood and Lougheed, *The Growth of the International Economy 1820-1990*, 262-3.

[821] Strange, *Sterling and British Policy*, 73.

enough flexibility and liquidity should there be a crisis, the markets were tested in 1960 and again in 1961. The linkages between the gold and foreign exchange markets presented a practical and potentially serious problem. A panic on the gold market could translate into currency devaluations, or more seriously, threaten the gold/dollar peg. Therefore, a response mechanism that could alleviate the pressure on gold or exchange rates was required should a crisis occur.

The 1960 Sharpeville riots in South Africa demonstrated the potential for a problem. The riots threatened a contraction in the supply of gold, thus shooting-up the price of gold. This made the peg more difficult to maintain and had the potential to drive down the value of dollar reserves that European states held instead of gold.[822] This small panic was quickly resolved by the sale of Soviet gold on the open market.[823] While unilateral Russian action worked, this event signaled the fragility of the system and the likelihood for a crisis to develop in the gold markets. More serious problems would develop in 1960 and 1961 as the United States and United Kingdom tried to stabilize the price of gold in the face of political uncertainty.

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[822] Essentially the Bretton Woods system created another gold-exchange standard, in some ways similar to the one created during the interwar period, but more exclusively focused on the U.S. dollar as the key reserve currency. Kenwood and Lougheed, *The Growth of the International Economy 1820-1990*, 264.

[823] Strange, *International Monetary Relations*, 73-4. The Soviet government did this with hopes of earning a high profit before the problem was resolved and the price of gold went back to its normal level.

The Response to the Gold Crises

The U.S. economy ran a deficit in 1960 and the political uncertainty regarding the new president's commitment to keeping the Bretton Woods peg cultivated concern about how the United States would respond to a rising gold price.[824] Capital was plentiful, but a contraction in the gold supply or considerable speculative pressure on the dollar, was all that was needed to cause a serious crisis that could break the peg. Such pressure emerged late in 1960. The response was the creation of a bilateral gold pool between the United States and the United Kingdom whereby, the United States stabilized the price of gold (thus the price of the dollar) by providing the Bank of England a gold supply to offset rising prices caused by a lowered supply and higher demand.[825] This arrangement was helped along by European Central Banks restraining themselves from entering the market and destabilizing the situation even further.

This solved the problem temporarily but the more serious structural problems continued. The potential for crisis was a byproduct of an open gold market working in conjunction with a gold price pegged to the key currency in the system. This made speculative pressure on gold a structural characteristic of the market in the 1960s. At certain moments, when political or economic instability made gold holdings more desirable, the fear of crisis intensified and the price of gold went higher than the U.S. dollar peg. In 1961, the U.S. payments deficit, a shorter supply of gold, and anxiety over

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[824] Charles Coombs, *The Arena of International Finance* (New York: John Wiley and Sons, 1976), 12-23.

[825] Ibid., 12-4, Strange, *International Monetary Relations*, 75-9.

Berlin caused stronger demand for gold.[826] Speculation on the London gold market became significant again, putting pressure on foreign exchange and threatening the equilibrium of the global financial system. These conditions mustered support for safeguarding the price of gold multilaterally. The IMF could have been used in this situation to provide financing that would offset speculative capital flows, but its decision-making process was too slow and cumbersome to intervene quickly. The BIS, a more flexible institution with a smaller homogenous membership, therefore became the primary line of defense against speculative capital flows.[827] The BIS Gold Pool was approved and began operation in March 1962.

The success of the bilateral gold arrangement between the United States and United Kingdom in 1960 provided a model for the BIS Gold Pool. The Gold Pool created a multilateral buffer stock of gold to manage the market. European central banks pledged to purchase or sell gold when speculation caused the price to destabilize.[828] The Gold Pool proved an effective measure in responding to speculative crises sparked by the Cuban Missile crisis and other unsettling political events up until 1967. In 1967 the gold market once again experienced strong speculation. This time central bank cooperation was more difficult. The problems of the Gold Pool are commonly described as a political battle between the French and the Americans, but Strange describes the problems as

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[826] Strange, *International Monetary Relations*, 77.

[827] Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*, 97.

[828] Coombs, *The Arena of International Finance*, 60-5, Strange, *International Monetary Relations*, 65-79.

related to the power and activity of the gold market and parallel international money markets which led to the inability of the Gold Pool to maintain the buffer stock and intervene effectively in the gold market.[829] Pressure on gold became so significant that the French withdrew their commitment from the Pool in 1967. The rest of the pool faced a growing fear that states would abandon their commitments to the Pool but policy options were limited to deal with the speculative attack on gold. Gold Pool members considered accepting substantial gold losses by trying to stabilize the price with more gold, or considered the option of closing the gold window. Both of these paths were eventually regarded as problematic and undesirable. What emerged was a two-tiered arrangement that created both a private market price and official transaction price for gold. This effectively ended the need for the Gold Pool system and moved international attention more heavily to the foreign exchange markets from 1968 onward.[830]

Foreign Exchange Market Speculation and Crises

The regional multilateral response system for dealing with gold crises worked well until 1967, but this addressed only half of the problem. Currency speculation in the foreign exchange market was also destabilizing and currency crises were a significant threat that existed alongside upheaval in the gold market. The United States had tried to respond to this threat unilaterally by buying or selling dollars on the forward market,

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[829] Strange, *International Monetary Relations*, 288.

[830] Ibid., 290-5.

changing the U.S. interest rate, and implementing gold holding restrictions.[831] While these unilateral measures had some effects, they were on the whole inadequate to address the extensive and complex nature of dollar fluctuations. The dollar had become a global currency and pursuing a solution unilaterally required the United States to hold an enormous array of currencies in order to intervene in the market should a crisis occur. As Charles Coombs, the President of the Federal Reserve Bank of New York, noted in his memoirs, not only was it risky to stockpile European currencies, but it was an inflexible and inefficient way to protect the dollar.[832] The dollar's global role and the interconnection between currencies created the threat of a liquidity crisis[833] and the need for a multilateral response system that could protect the dollar when it came under pressure, and protect other currencies as well.

Due to the close relationship between the dollar and the Pound Sterling, as well as the pound's role as the world second most important reserve currency, protection of the pound was important both for the United States and for the stability of the reserve currency system.[834] When the pound came under pressure in 1961, an international desire to protect its value furthered international central bank cooperation. The Sterling

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[831] Ibid., 80-2.

[832] Coombs, *The Arena of International Finance*, 73-5.

[833] Triffin, *Gold and the Dollar Crisis: The Future of Convertibility*. Triffin argued that the United States, needing to fend off the collapse of the dollar/gold parity would have to revert to deflationary policies that would starve the world of liquidity. This was called the Triffin Dilemma.

[834] Eichengreen, *Globalizing Capital: A History of the International Monetary System*, 125.

Crises in 1960 and 1961 were "very directly responsible for some important extensions of international monetary cooperation."[835] As a result of these crises, the Basle Agreement was negotiated to protect the pound and buffer the world from dollar fluctuations.

In 1961 accelerated growth in the United Kingdom created an influx of imports and changed the British current account surplus to a significant deficit. The Bank of England raised the bank rate to encourage capital repatriation and the international community provided assistance to quell speculation. The response to the British Crisis in 1961 came from the 1961 Basle Agreement. This agreement set up a system to discourage speculation and minimize the repercussions that hot money movements had on a state's reserve position.[836] The BIS central banks undertook two kinds of action to restore markets in the face of a capital drain. First, they acquired foreign currency and held it for a set period of time with the understanding that the originating central bank would reverse the transaction after the set holding period. The second action was that a country receiving funds, as a result of capital flight from another state, would recycle those funds back into the originating state's central bank. This response mechanism restored currency stability by providing temporary emergency aid from the countries that were the recipients of hot money.[837]

The creation of the Basle Agreement has been widely cited as a major breakthrough in international finance and as an important turning point in international

[835] Strange, *International Monetary Relations*, 121.

[836] Ibid., 84.

[837] Ibid., 86.

monetary cooperation.[838] This agreement created a closer form of cooperation between central banks by supplementing gold with other types of international liquidity. This system would evolve into an efficient swap network over the course of the 1960s.

The swap network officially began in 1962. The Federal Reserve Bank sought a way to defend the dollar against the kind of speculation sterling faced in 1961. The resulting system was preventative and arranged bilateral credit networks that could be called upon quickly in the case of a speculative threat, and that could also be repaid quickly when the threat subsided. The swap network system, as it came to be called, expanded considerably throughout the 1960s. In 1962, it began with a small $50 million bilateral line between France and the Fed, and by 1975, managed through the BIS forum, it included 14 central banks and was worth about $20 billion.[839] This arrangement dramatically expanded the amount of credit and liquidity available to the developed countries in times of crisis. It provided not only a response mechanism but also a preventative process available when states sensed difficulties. It helped manage international monetary stability.[840]

The swap network was used throughout the 1960s, notably in response to significant crises in Canada (1962), Italy (1963), France (1968) and Germany (1961-62 and 1968). No state however, used the swap network more than the British when they

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838 Coombs, *The Arena of International Finance*, 37, Strange, *International Monetary Relations*, 85.

839 Coombs, *The Arena of International Finance*, 78.

840 Strange, *International Monetary Relations*, 85.

suffered through several sterling crises in the 1960s. In fact, sterling problems were the impetus for the network's creation in 1961 and the United Kingdom relied on these credits again in 1964 and 1966-7. The British crises are worth discussing in detail because of their severity and because the pound had the role as the secondary reserve currency.

Early in 1964 the British economy was booming, but by May stagnant export markets signaled a lack of competitiveness. By summer these problems were reflected in significant capital flight from the United Kingdom.[841] Signs indicated that a crisis was on the horizon, but it did not break until November. A swap, organized by the Federal Reserve Bank of New York (FRBNY) with the cooperation of the BIS membership put together a $3 billion loan to support sterling. This restored confidence in the pound, provided the necessary liquidity and calmed the crisis. Throughout 1966 and 1967 negotiations among BIS bankers continued with the objective of creating a course of action that would provide London with international assistance in the case of a sterling crisis.[842] The problems with sterling continued and by July 1966, British reserves had lost $1.1 billion in value, and assistance to stop the drain of capital amounted to over $2 billion.[843] By 1967 the pound could not be defended by international cooperation and assistance, and was therefore devalued.

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[841] Ibid., 123.

[842] Coombs, *The Arena of International Finance*, 134.

[843] Ibid., 136.

Each sterling crisis had the potential to put the global monetary system in jeopardy and certainly put enormous pressure on the dollar/gold peg. While the international response system functioned with few problems, the ability of central banks to coordinate their actions and actually cooperate was severely tested. Responses moved from *ad hoc* arrangements when a crisis occurred, to preventative constructions that were more codified and politicized over time.[844] These responses demonstrated the capability of the BIS to respond to crises and the necessity of multilateral central bank coordination to restore markets. The nature of international economic interactions had become such that not addressing these crises had the potential to undermine the international financial system.[845] By the end of the 1960s it was obvious that the dollar/gold peg was in jeopardy. The Dollar Crisis of 1971 would call upon all of the crisis response mechanisms that had been created in the decades following the war to keep the monetary system from falling apart.

IMF Responses

While the BIS system worked to provide liquidity to foreign exchange markets and stabilize the price of gold, the IMF began to emerge as a more significant actor in the international system. Kindleberger recognizes the importance of the IMF as an international lender of last resort and crisis manager in the 1960s, but he rightly argues that the IMF was at that early date the "second line of defense" behind cooperative

[844] Strange, *International Monetary Relations*, 151.

[845] Coombs, *The Arena of International Finance*, 138.

central bank agreements.[846] In the late 1950s the Fund created standby credits that allowed states to draw on their gold and credit tranches in order to meet balance of payments needs. While the developed countries in Europe drew on IMF standby credits, as did Britain in the late 1950s and 1961, and France in 1957 and 1958, developing countries began to rely on the Fund much more heavily.[847] By the 1960s the Fund came under attack for putting too much emphasis on its relationships with developing, especially Latin American states.[848] This put pressure on the Fund's ability to provide credit to developed countries during crises. Moreover, its work with developing countries served to justify the practice of requiring certain borrowing states to meet conditions for their assistance.[849]

There emerged, therefore, a dual system of crisis response. The BIS system focused on providing a response for the core industrialized economies of North America and Western Europe and the IMF system focused primarily on providing relief to developing countries. Even though it received less attention, the central banker's club of the BIS effectively responded to crises in the developed world throughout the 1960s and 1970s.

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[846] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 197.

[847] Strange, *International Monetary Relations*, 55.

[848] Ibid., 95-6.

[849] Ibid., 93-7.

The IMF did create a way to assist developed countries in crisis in 1962. To provide even more liquidity to a strained international financial system, the Group of Ten (G-10)[850] met and established the General Arrangement to Borrow (GAB). The GAB created within the IMF a large line of credit contributed by and only available to the G-10 countries in times of crisis. The size of the fund was substantial at $6 billion. Creating the GAB demonstrates that the liquidity and credit needs necessary to face a crisis in this period were enormous. Due to the interconnections and expansion of global monetary networks, the needs were far more extensive than one country, even the United States, was willing or able to provide. Thus, the United States called on European states to help provide the Fund with the extra resources it needed.[851]

Throughout the 1960s the crisis response system was called into action often. The IMF responded repeatedly to crises in Latin America other parts of the developing world (e.g. India). For the developed world the 1960s were also a time of increased crises. These crises were handled quite successfully through the BIS swap arrangements with the IMF General Arrangement to Borrow offering a solid secondary line of defense. Many developed states, especially the United Kingdom, used this system to supplement the swap network. But these resources were not available to the developing world and the IMF was not prepared to deal with developing country crises that required large amounts of liquidity.

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850 The G-10 consisted of: Germany, The United Kingdom, The United States, France, Italy, Japan, Canada, Holland, Belgium and Sweden.

851 Strange, *International Monetary Relations*, 115.

## The Dollar Crisis and the End of the Bretton Woods Peg

By the mid-1960s there was mounting pressure on the dollar and the dollar-gold peg. Speculative pressure on gold had already caused the Gold Pool system of crisis response to disband in favor of a two-tiered system to manage the official price of gold and allow the market to set the private price. From the creation of the two-tiered system onward, a crisis on the foreign exchange market and particularly one that would force the United States to break the fixed exchange rate between the dollar and gold was a constant concern. This crisis would eventually emerge in 1971, and was the most infamous of the period. Closing of the gold window, meaning the United States would no longer honor its obligation to exchange $35 for one ounce of gold, had the potential to be the most significant financial crisis to hit the international monetary system since the *Credit Anstalt* crisis of 1931. Although this was a serious crisis, the multilateral mechanisms to address crises had significantly developed to the point that it was able to mitigate it successfully

The story of the end of the dollar/gold peg is well known. It exemplifies how the expansion of international finance in the post-war period put enormous pressures on the Bretton Woods pegged exchange system, and subsequently on the crisis response system that had developed. Most scholars agree that the peg's survival into the 1970s was surprising and would not have been possible without the level of central bank coordination that developed through the BIS and the IMF.[852] Crisis alleviating measures such as the Gold Pool, swap arrangements and the General Arrangements to Borrow helped bolster other currencies in the system when they faced problems. These measures insulated the dollar from significant problems and allowed the peg to continue.

Expansion

Global capital expanded consistently through the 1950s and 1960s, helped along to a great degree by the Eurocurrency market. The outflows of dollars from the United States into the Eurocurrency market, multiplied the effect of the original dollars and increased the international money supply.[853] The global supply of money increased an average of about 8.6% per year between 1965 and 1970.[854] As the amount of dollars increased, inflation and erratic currency speculation followed.[855]

This created more pressure on the United States economy, which was suffering from inflation and deficits. A stricter policy to control inflation by regulating banks, interest rates and credit was pursued. But the Eurocurrency market worked against these policies. Its enormous expansion from about $1.5 billion in 1959 to $44 billion by 1969

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852 Eichengreen, *Globalizing Capital: A History of the International Monetary System*, 123.

853 Harold James, *International Monetary Cooperation since Bretton Woods* (Washington, DC: International Monetary Fund, 1996), 180-1.

854 Victor Argy, *The Postwar International Monetary Crisis: An Analysis* (London: George Allen and Unwin, 1981), 69.

855 Gilpin, *The Political Economy of International Relations*, 137.

fueled greater liquidity and credit creation. Private liquidity increased and by 1970 inter-bank lending had grown from negligible amounts to about $50-60 billion in borrowing facilities.[856] By 1969, American banks found it desirable to circumvent regulations that controlled domestic credit and borrowed nearly $15 billion on the Eurocurrency market.[857] In addition, throughout 1970 the BIS was engaged in a practice where it accepted dollar deposits from central banks and recycled them by investing them in the Eurocurrency markets. As these funds were spent, the multiplier effect was massive and increased dollar holdings far greater than could be accounted for through U.S. deficit spending.[858] The structure of international credit markets meant that restrictive policies needed to fix U.S. economic woes, such as raising interest rates, were frustrated by the banks' use of the Eurocurrency market.[859]

Restrictive policies were then abandoned as the Nixon administration looked toward the 1972 election. Hoping to encourage investment and reduce unemployment the administration lowered interest rates.[860] This new phase of expansionist monetary policies added to the increase in capital domestically and globally, and aggravated American balance of payment problems. The U.S. deficit became an international

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[856] Strange, *International Monetary Relations*, 60-1.

[857] Coombs, *The Arena of International Finance*, 206.

[858] Robert Solomon, *The International Monetary System 1945-1981* (New York: Harper and Row, 1982), 177.

[859] Strange, *International Monetary Relations*, 332.

[860] Ibid., 333.

concern. This policy further undermined the international value of the dollar from the fall of 1970 onward. The Nixon administration chose to print more dollars at home to fight domestic economic pressures while simultaneously continue to fight the Vietnam War, and as a result the international value of the dollar was further undermined.

## The Trigger and Dynamics of Contraction

By the late 1960s, the entire global monetary system was feeling the strain of inflation due to the increase in global capital. Owing to a strong economy, the German market became a primary recipient of global capital, and speculation in favor of the mark intensified throughout the decade. This forced a 10% revaluation of the mark in 1969. Speculation against weak currencies continued on a growing scale and states with currencies on the precipice of devaluation lost capital from their markets. Governments were forced to support their currencies or choose to devalue. Such a case happened in 1969 when the French franc was forced to devalue in the face of continued speculative pressure.[861] The French crisis was addressed with the response mechanisms that had been established throughout the 1960s, relying heavily on swap arrangements, but included IMF funds and activating the GAB as well. Solving the franc problem, or stabilizing any currency value for that matter, did not stop speculation, it simply diverted it to another weak currency in the system. The system was so interconnected that when

[861] Peter M. Garber, "The Collapse of the Bretton Woods Fixed Exchange Rate System," in *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform*, ed. Michael Bordo and Barry Eichengreen (Chicago: University of Chicago Press, 1993), 462-5.

one problem was fixed, another would begin to emerge. By the late 1960s, the revaluation of the franc moved pressure to the dollar, which was significantly overvalued. While American domestic expansionary policies exacerbated global inflation, there was there was little desire to devalue or shrink the money supply because of the positive domestic economic effects of these policies. The United States pursued what has been referred to as "benign neglect" of the international ramifications that domestic policies had. In this environment, the dollar grew more vulnerable.[862]

The dollar would be spared for a while longer. An outflow of dollars to Eurocurrency markets continued throughout early 1971, many ended up in Germany and swelled German reserves to a level higher than prior to the 1969 mark revaluation.[863] Throughout April, the *Bundesbank* had to buy dollars in large amounts, and purchased nearly $3 billion to stabilize the mark.[864] With mounting pressure on the mark and inflation rising, the German government faced crisis conditions, and in response chose to float the mark on May 5, 1971. This moved speculative pressure against the dollar to Japan, which refused to float or devalue the yen and pursued a policy of supporting the yen's price while implementing restrictions on the purchase of securities by foreigners.[865] The Japanese government's refusal to revalue increased pressures on the dollar throughout the summer. This time defense of the dollar would be most intense. From

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[862] Coombs, *The Arena of International Finance*, 208.

[863] Strange, *International Monetary Relations*, 334.

[864] Solomon, *The International Monetary System 1945-1981*, 178.

[865] James, *International Monetary Cooperation since Bretton Woods*, 216.

May onward the U.S. government had to rely heavily on the swap network and its IMF gold tranche in order to stabilize the dollar's price.[866] The BIS network was helped by central bank members exercising restraint in converting their dollar reserves to gold. By August the remedies applied to stabilize the dollar were heavily strained and another significant round of speculation hit the dollar the first week of August, causing $4 billion in hot money to flee the U.S. market.[867] The United States was quickly approaching its swap limits and had little left of its IMF credits. The remedies created were not sufficient to provide the funds needed to stabilize the dollar. Thus, with U.S. gold reserves dwindling, on August 15 President Nixon announced in a televised speech that the gold window was closed and the dollar was no longer convertible to gold. The Bretton Woods financial system ended with that announcement.

Under the Bretton Woods system, the dollar had been tied to gold at a rate of $35 per ounce and other currency values were fixed to dollars, thus creating an easy mechanism for convertibility of all currencies to gold. The announcement of inconvertibility altered all currency relationships by allowing the market to determine the price of currencies, much as the rules of supply and demand determine the price of goods. Thus, fixed currency values were now market determined values, or in the exchange market vernacular, currency values "floated." The practical and negative implications of the change from a fixed to floating currency system is that state currency values could

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[866] Coombs, *The Arena of International Finance*, 216-7, Strange, *International Monetary Relations*.

[867] Coombs, *The Arena of International Finance*, 217.

devalue making imports more expensive, reducing buying power, and affecting the value of bank reserves.

The immediate reaction of European states was to stop intervening in their exchange markets to prop up the price of their currencies in relation to the old parities. Instead, they worked to coordinate a response to the new financial conditions. Even though European markets were coincidently scheduled to be closed that week for holiday, European governments were not able to hammer out a coordinated policy to deal with the American announcement. The Bank of Japan accepted losses and supported the old yen-dollar rate for two weeks at an enormous cost. The yen finally became inconvertible on August 28, 1971.[868]

The four months following the August 15 announcement were marked by uncertainty in financial markets, but exchange rates stabilized some in the new market based environment.[869] Any remaining speculative currency buying was kept in check by some small-scale government interventions in foreign exchange markets. The American decision halted the speculative mania that had gripped the markets enough for diplomatic bargaining on how to reconstruct the international monetary system to begin. The Group of Ten (G-10) became the primary negotiating forum for these meetings and met several times from September until December. The G-10 included only the most affluent

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[868] James, *International Monetary Cooperation since Bretton Woods*, 220-1.

[869] International Monetary Fund, "Annual Report of the Executive Director for the Fiscal Year 1971," (Washington, DC: International Monetery Fund, 1972), 2.

countries of the IMF. The Group's intention was to find some way to manage global exchange rate relationships before floating exchange rates caused a global contraction.

In December 1971 the G-10 finally reached an understanding and the Smithsonian Agreement was negotiated. This agreement attempted to realign exchange rates, reestablish parities and revalue the dollar in terms of gold. Gold would now be worth $38 per ounce. But the Smithsonian Agreement only forestalled the final demise of the Bretton Woods exchange system. After the agreement, crises continued to rumble through the developed world in 1972 and 1973. Essentially these crises challenged the new parities that had been established. In June 1972 the United Kingdom was forced to abandon the Smithsonian rules float the pound again and the German government proposed joint floating of the European currencies.[870] By early 1973 speculative currency crises were rushing through Europe challenging the new parities, and one by one European states reacted by floating their currencies and abandoning the Smithsonian Agreement. It was clear that a full devaluation of the dollar was coming and it would happen beginning in February 1973 when the Federal Reserve stopped relying on measures to support the price of the dollar. Widespread dumping of the dollar followed until the summer when swap lines were increased from $11.7 billion to $18 billion to support the dollar.[871] The orderly monetary system of Bretton Woods era was over. The oil crisis, global inflation and various attacks on the dollar would make the international monetary system unstable at times throughout the rest of the 1970s. While interventions

[870] James, *International Monetary Cooperation since Bretton Woods*, 239-41.

[871] Coombs, *The Arena of International Finance*, 230-4.

to fend off speculative attacks would be used, defending parities and the fixed price of gold was a part of history.

Response

The events leading up to the May and August 1971 crises paint a picture of a destabilized international monetary system that was exploding with growth spurred by an explosion in trade, and strongly influenced by the Eurocurrency market capital explosion. The system, and more specifically the dollar as the key reserve currency, was unable to accommodate the burgeoning amount of capital created in the 1960s. Understanding the response system in the 1970s becomes difficult, because the lines between crisis and response seem to blur. It is a common interpretation to see the announcement of August 15 as the crisis since it marked the beginning of the end for the Bretton Woods system. However, Nixon's closing the gold window probably closer resembles a last ditch response to conditions that were making the parity more difficult to maintain. Having exhausted the usefulness of multilateral solutions, the United States retrenched into a domestic response. Making the dollar inconvertible halted the speculative mania, stopped the flow dollars from the United States and most importantly secured the threatened American gold reserves. The crisis therefore occurred in the weeks and months leading up to the August 15 decision, the acute phase being the week of August 6 when $4 billion in capital fled the U.S. market and the United States drew $2.2 billion on the swap network.[872]

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[872] Ibid., 217.

The response to the acute phase was unilateral action that floated currencies, starting with the mark in May and ending with the dollar in August. Parities and convertibility were abandoned. But crisis response mechanisms that were created throughout the decade, including the GAB and swap networks, were used to provide relief for the system up until the point where the United States decided not to support parity. Each of these cooperative responses was called upon to alleviate the pressures that were created by the system's design flaw of using the dollar as the key currency while the United States practiced benign neglect. Thus, the swap network was the prominent response mechanism throughout 1971. States could draw on these resources to stabilize their currency values and avoid or forestall a crisis. The United States relied heavily on swaps until it finally broke convertibility. The swaps that were arranged though the BIS forum took on a life of their own by the late 1970s. The network was extensive, well funded and represented the most extensive and orderly cooperation of developed governments and central banks up until that point.

An important question remains. Did the BIS act independently or was it simply a forum where states could pursue multilateral cooperation and negotiate swaps? This is an important question because it identifies whether a formalized institution became the primary response actor in this time period, or if the response actor was a less formalized regime. Politically it seems that the tradition of central bank cooperation expressed through the BIS system provided the rules, helped overcome collective action problems and provided regularity. This is why Helleiner describes the BIS as being the center of a regime that managed financial crises.[873] Strange argues however, that institutions including the BIS were too weak to address or ameliorate the crisis conditions of the early 1970s.[874] If they had been stronger, she suggests, the United States would not have had to take things into its own hands by declaring inconvertibility. But she also explains that the system's resilience was based on an "intergovernmental network of understanding and mutual cooperation," and that calling the period after August 1971 a "crisis" inaccurately paints the picture of a system near collapse instead of one that suffered through a disturbance and emerged without a truly devastating crisis.[875]

Could the BIS and IMF be relied on in a crisis situation? In terms of crisis response, the more important of the two during the Bretton Woods period was the BIS. Neither the BIS nor the IMF were allowed to dominate, but without these institutions assisting developed countries, particularly the BIS, the basic tools with which to address financial crises would not have been available.

The global financial system had outgrown the limits of any single state's ability to manage it or respond to a crisis. In the absence of widespread multilateral cooperation among the developed states to manage the problems that led up to the end of the Bretton Woods peg, the situation could have been reminiscent of the protectionist and destructive policies pursued in the 1930s. Instead, the dollar crisis caused a surprisingly short global

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[873] Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*, 18-9.

[874] Strange, *International Monetary Relations*, 346.

[875] Ibid., 46-7.

dislocation as the monetary system underwent a massive restructuring. The response regime centered around the BIS furthered cooperation by creating arrangements that codified it more fully and brought more responsibility and prestige to this organization. The 1971 to 1973 crisis thus exposed the resilience of the system and the strengths of the regime in the face of crisis. The old monetary system was not suited for the new global economic environment and it collapsed, but the after effects of that failure were minimized by the further establishment of multilateral management. The IMF was an ascendant actor in this period. The GAB and the role of the G-10 were the IMF's contribution to remedying crisis conditions. By the 1970s the IMF was in search of a purpose in the new global financial system because the end of the Bretton Woods exchange rate mechanism left it without a job. Institutional developments beginning in 1971 would allow the IMF to emerge more fully during the next crisis. The BIS, while still an actor in crisis response, would begin to take a back seat to the IMF in the next decades due to the fact that the next wave of crises would not be centered in the developed world.

## The Debt Crisis—The Key Crisis.

In the debt crisis the IMF assumed a more central role as the response actor in the global system. While the BIS system, particularly relying on the swap network, worked fine for crises in the developed world, the BIS was not the significant actor in the developing world. Kindleberger notes that swaps were a crisis response procedure limited to the developed world and that developing countries were precluded from this arrangement because they were poor credit risks.[876] In addition, throughout history crises in the developing world only rarely impacted the developed world.[877] Thus, there were few compelling reasons for the developed world to provide assistance to poor countries facing crisis. This began to change after World War II as the developing world achieved more independence politically and as the global economic system tied these economies more closely together through investments and loans. More and more the developed and developing economies were tied to similar fates, although any crisis that the developed world experienced was felt more seriously in the developing world, and rarely vice-versa.

My identification of the debt crisis as the key crisis in the post war era may seem odd considering it was the end of the Bretton Woods system that caused the transformation of the monetary system from pegged exchange rates to floating exchanges. The 1971-1973 dollar crisis was an influential event in monetary history. This dissertation however, is not concerned with changes in the monetary system, but instead interested in evaluating changes in the crisis response actor. During the demise of the Bretton Woods financial system in the early 1970s, the response actor was consistent with previous post-war crises. There was a reliance on the BIS system, and a retreat to central banks when it seemed that system would not have the necessary resources. The debt crisis presents a different dynamic. While there is clearly evidence of the

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[876] Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises, 4th Ed.*, 201.

[877] There are exceptions of course, for example the Baring Crisis in 1890.

importance of the BIS system, there is a dramatic and sudden change in the response actor. The IMF emerged as the primary crisis response actor in the debt crisis.

The transition from an exclusive club of predominantly European central bankers consulting and coordinating responses in the developed core to the more multilateral forum of the IMF seems a reasonable change given the conditions and timing of the crisis. The debt crisis was centered in the developing world at a time when the IMF was struggling for an identity after the exchange rate regime collapsed. The switch from the "affluent alliance" as Strange terms it, to the IMF spread risks and responsibility to a multilateral organization with greater global reach.[878]

## Expansion

The debt crisis has spurred considerable scholarship. The story is quite well known and even today continues to evolve. The roots of the debt crisis extend back to several events that expanded capital, provided loans for developing countries and recycled petrodollars into developing countries. As noted, capital expansion in the post war era was significant and a considerable amount of capital went to developing countries through Cold War aid and particularly through Eurocurrency market lending. To give a fuller picture of the effect that the capital expansion had on the developing world, it is important to back up and re-examine a few events in the 1960s that contributed to the lending boom.

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[878] Strange, *International Monetary Relations*.

Until the late 1960s the capital came to developing countries predominantly in the form of foreign direct investment.[879] This dynamic changed as capital and credit became more plentiful, and as developing states appeared to be more profitable investments. Throughout the 1960s capital expansion, as indicated by the global expansion of money was steady and significant maintaining between 6 to 9% per year.[880] Monetary expansion really took off in the early 1970s ranging from between 11 to 13% between 1971 and 1973.[881] The increase in the supply of money had an inflationary effect on prices and thus kicked off a boom in global commodity prices. Commodity prices between 1970 and 1973 increased 70% for non-food, non-fuel and 101% for food commodities.[882] This made the prospects for Third World development more promising as export earnings in many cases doubled or increased exponentially. For lenders, developing states looked like good risks especially if the commodity price boom continued.[883] For borrowers, the prospect of borrowing money cheap and sometimes at negative real interest rates, made good sense.

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[879] Kristin Hallberg, "International Debt, 1985: Origins and Issues for the Future," in *World Debt Crisis: International Lending on Trial*, ed. Michael P. Claudon (Cambridge, MA: Ballinger Publishing, 1986), 8.

[880] International Monetary Fund, *International Financial Statistics Yearbook*, vol. XLIII (Washington, D.C.: International Monetary Fund, 1990), 90-1.

[881] Ibid.

[882] James, *International Monetary Cooperation since Bretton Woods*, 250-4.

[883] O'Brien, "Introduction: A Perspective on Debt," 1-2.

Between 1970 and 1973 real private bank lending grew 144%.[884] But the real boom in lending followed the first oil crisis. At the end of 1973, the Yom Kippur War triggered the first significant rise in oil prices. As the price of oil went on to quadruple in the following months, the bottom fell out of other commodity prices.[885] At first this caused a brief slowdown in the activities of the Eurocurrency market and sparked off several banking crises. These were addressed through domestic efforts and by bringing new powers to the BIS to regulate banks and establish guidelines for actions during liquidity crises.[886] The responses were successful, they greatly calmed the Eurocurrency markets and allowed a new optimism to lending markets.[887] When confidence returned, a flurry of international lending to developing countries followed.

The rise in oil prices meant that there was an increase in bank deposits, denominated in dollars, from oil producing states. Euromarket banks played a significant role in recycling these deposits, which became known as "petrodollars." As deposits to banks kept pace with the oil price increases, a boom in private bank lending followed suit. Between 1970 and 1975 private bank lending expanded from $3 billion to $12

[884] Michael P. Claudon, ed., *World Debt Crisis: International Lending on Trial* (Cambridge, MA: Ballinger Publishing, 1986), 10.

[885] James, *International Monetary Cooperation since Bretton Woods*, 254, O'Brien, "Introduction: A Perspective on Debt," 2.

[886] The most notable of these was the Franklin Bank crisis. For a further discussion of the 1974 banking crises see Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*, 171-5. and Joan Spero, "Guiding Global Finance," *Foreign Policy* 73 (1990).

[887] Helleiner, *States and the Re-Emergence of Global Finance: From Bretton Woods to the 1990s*, 173.

billion despite the oil shock during that period.[888] Over the course of the 1970s, lending to developing countries grew from approximately $29 billion to nearly $160 billion.[889] The structure of debt also changed considerably over the 1970s as bilateral government aid and loans declined to developing countries and loans from private banks increased. There was little concern about developing countries becoming more heavily indebted since the prices of commodities produced in developing countries were also rising, and oil prices seemed to level off. These conditions did not continue for long.

Trigger and Dynamics of Contraction

Cheap and plentiful credit disappeared briefly when the second oil shock emerged in 1979, but the debt crisis was still in the future. Lending markets responded to the second shock as they did to the first, nervously and cautiously causing overall lending to decline.[890] The United States decided four months after the second oil crisis to pursue a contractionary monetary policy.[891] This policy had global effects. Miller describes the scene well, "Both in 1973 and 1978, OPEC pushed on the accelerator. The United States

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[888] Organization for Economic Cooperation and Development, "Annual Report," (Paris: Organization for Economic Cooperation and Development, 1984).

[889] This number only includes the principle amount lent. Due to variable interest rates and rescheduling the amounts have changed considerably over time.

[890] O'Brien, "Introduction: A Perspective on Debt," 4.

[891] Morris Miller, *Coping Is Not Enough!: The International Debt Crisis and the Roles of the World Bank and the International Monetary Fund* (Homewood, IL: Dow Jones-Irwin, 1986), 38, O'Brien, "Introduction: A Perspective on Debt," 4.

in 1979 slammed on the brakes and the rest of the world, like unbuckled passengers, went through the windshield."[892]

The slowdown did not stop private lending significantly, but it did change the kind of lending that occurred. Capital was still plentiful, but the risks were growing so banks increased borrowing requirements and long-term borrowing was replaced by short-term borrowing.[893] Developing countries had little choice but to continue to search for loans. Banks were confident that investments in developing countries would continue to spur growth and that these governments would be able to repay loans. But developing countries began to be seen as risky investments. High real interest rates and a growing recession in developed countries coupled with a fall in commodity prices in LDCs led to decreased investments and a swift change in international capital flows in 1981.[894] The process became increasingly unstable as developing country governments tried to compensate for capital flight by further increasing their borrowing. Capital flight and increased borrowing became part of the same dynamic.

In retrospect it is easy to see that the system was strained and would break apart. It was a textbook case in crises. In Kindleberger's language, the euphoria and manic lending throughout the 1970s was stopped by the revulsion of the oil shocks. Though the system recovered from the first, the second would be a significant enough trigger to

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[892] Miller, *Coping Is Not Enough!: The International Debt Crisis and the Roles of the World Bank and the International Monetary Fund*, 39.

[893] O'Brien, "Introduction: A Perspective on Debt," 5.

[894] James, *International Monetary Cooperation since Bretton Woods*, 357.

create an exogenous force that changed lending patterns (from long to short term), caused capital flight and created far different expectations and risks. On August 12, 1982 the crisis emerged when the government of Mexico announced to the U.S. government and the IMF that its reserves were exhausted and it could not make the scheduled payments on its debt.[895] Argentina, Brazil, and Poland made similar announcements in the coming weeks. The crisis had begun.

The crisis immediately spread and affected a large number of developing country debtors across the globe. Many of these states were in the same economic position as Mexico, Argentina and Brazil–these were attractive markets with growth potential and they funded their development through foreign capital and loans. After 1979, they experienced significant capital flight as a global contraction began, they borrowed short term to offset that capital flight and found themselves unable to meet their debt requirements as the global recession deepened and foreign capital did not return. The scope of the debt crisis was extensive. Though Latin America was hit the worst, casualties emerged from all over the world including Africa, Asia and Eastern and Southern Europe. In the immediate aftermath foreign private lending completely ceased and after addressing the immediate problems in debtor countries, the most central concern was that the crisis would touch off a global banking crisis in core countries. A successful response required the restoration of global liquidity and credit movements, as well as a way for banks to absorb such enormous losses.

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[895] Ibid., 367.

Response

Understanding the responses to the debt crisis is a large undertaking because of the number of actors involved. First, in the first few months after Mexico's announcement, 34 states found themselves in default or arrears. Second, the loans to the developing world came primarily from private market actors, so the commercial banks that extended these loans were also tied into the crisis. Third, states where lending banks had their headquarters were involved in the crisis since bank failures would have their greatest effects on these states. Last, international organizations, such as the IMF and World Bank had also lent significant funds to the developing world for development projects. The crisis response therefore could have come from several sets of actors. In fact, as in previous periods, responses did come from a host of actors, including bilateral assistance between central banks or governments, private initiatives to reschedule loans or continue and extend credit arrangements, and multilateral institutions acting to coordinate responses as well as providing a response from their own resources. Although several levels of response emerged, the multilateral response through the IMF became the most prominent.

Responses to the acute crisis of 1982-84 were focused on the problem of trying to stave off a banking crisis in the developed world. Responses were therefore designed with far less concern for the long-term problems that debt burdens had caused for developing states. Given capital flows in the post-war period, but particularly in the 1970s, developing states had become more integrated into the global economy. Thus, a crisis in the developing world had significant effects in the developed world. The crisis could not be ignored since lending networks had made the system more densely interconnected, and unlike the Barings Crisis of 1890, the problem was not just between one developed state and one developing state, it was between the developed North and the underdeveloped South. Over time, continuing to deal with the aftereffects of the debt crisis and the inability of many states to get out of debt has led to other proposed solutions including debt forgiveness, but following the crisis' emergence in 1982 responses were more geared toward short-term solutions to the problem.

Having established itself as the center of the response system, the BIS response coalesced quickly. The BIS central banks offered a short-term bridging loan to Mexico of $1.85 billion.[896] It is important to note that the BIS response was of a different character than its previous swap network response that took place among the most developed countries. While both were ways of providing short-term capital, the swap network was a sort of accounting trick that could be used to manage the supply of foreign currencies that developed countries held in reserve regardless of what the markets did. The bridging loan offered by the BIS was simply a short-term loan given to sure up the immediate liquidity problems in Mexico. The purpose of it was to stabilize the situation long enough for the IMF to act.[897] In the post-war period, the BIS was the primary response system. With Mexico's default this changed. The bridging loan was a stopgap measure that solved the problem temporarily and created space for the IMF to provide the

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896 Lipson, "International Debt and International Institutions," 228.

897 Margaret Garritsen de Vries, "The Role of the International Monetary Fund in the World Debt Problem," in *World Debt Crisis: International Lending on Trial*, ed. Michael P. Claudon (Cambridge, MA: Ballinger Publishing, 1986), 114.

real response.[898] The BIS system, though activated first, was no longer the primary actors in response. As other states succumbed to the crisis throughout the 1980s, the role of the BIS system declined and the role of the IMF increased.

As the IMF responded to more states a pattern emerged. The first step was to negotiate IMF adjustment programs and standby agreements. Second, loan payments were rescheduled and any arrears with commercial banks and official lenders were cleared. Third, the IMF disbursed funds based on the conditions negotiated. This policy, though cobbled together after the Mexican announcement, not only emerged as the *de facto* system, but quickly became entrenched.[899] BIS bridging loans provided about $4 billion dollars of liquidity throughout the crisis, but all of these loans were on a short-term basis.[900] This short-term credit design was purposeful because the BIS was particularly concerned that it would be left to remedy and the BIS did not want this responsibility.[901] In order for the IMF to assume the main crisis response role, it needed to develop as an institution and expand its capacity.

The changes in the Fund's capacity actually started after the first oil shock in 1973 when it opened up two new sources of aid including an oil facility to assist

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898 The IMF also had more experience dealing with developing countries. When the BIS decided not to provide a long-term solution, the IMF was a logical actor to deal with the crisis.

899 Hobbs, "Debt Politics for an Evolving Crisis," 188.

900 Miller, *Coping Is Not Enough!: The International Debt Crisis and the Roles of the World Bank and the International Monetary Fund*, 179.

901 James, *International Monetary Cooperation since Bretton Woods*, 367.

developing states in their purchases of higher priced oil and a gold trust fund which created extra IMF liquidity by selling some of its gold reserves.[902] Fund capacity was increased again in 1983 when a 50% quota increase expanded IMF resources by $30 billion over three years.[903] The expansion of general IMF funds for dealing with the crisis was supplemented by the expansion of General Arrangements to Borrow funding from $6 billion to $19 billion in 1983. Restrictions on which states had access to the GAB were also broadened.

While the financial capacity of the Fund grew, the amounts at its disposal were still inadequate to really address the system wide crisis. It was not going to be able to increase its financial capacity much further because members were reluctant to contribute a greater share, so in order to be effective in responding to the crisis, the Fund needed to develop negotiating and supervisory capacities in conjunction with the expansion of its financial capacity.

These changes, more than the expansion of funding allowed the IMF to act as the central agent in providing a systemic response. The Fund exerted power on debtors by enacting austerity programs as a condition for obtaining assistance. It gave stand-by lines of credit to repay bridge loans or pay for urgent imports such as food in exchange for the successful negotiation and beginning implementation of conditions. Beyond promoting a free market solution to the problem, the centerpiece of the IMF strategy was to get capital

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[902] Miller, *Coping Is Not Enough!: The International Debt Crisis and the Roles of the World Bank and the International Monetary Fund*, 175.

[903] Ibid., 179.

flows restored to states in default. Although there was still significant liquidity in the global economy, lending to developed countries shut down after Mexico's announcement due to new risks. The IMF worked with the commercial banking community to assure credit arrangements for debtor countries in default.[904]

Thus the IMF became a liaison between commercial bankers and debtors and worked to reestablish credit for the debtors. It was very effective in this role and at times there was strong evidence that IMF pressured states and even banks into providing a sufficient amount of loans for debtor countries.[905] Finally, the IMF worked to reschedule loan payments with debtors so they could manage their debt. Acting in an administrative capacity, the IMF provided several responses that addressed the crisis, stabilized the system and prevented a massive banking crisis in the developed world. The IMF did not solve the debt problems of the developing world, but reduced their global impact.

The debt crisis moved the IMF into a role similar to that of the BIS in the previous period. It became the center of the response system. The IMF used its funds and fostered cooperation among actors to resolve the debt crisis. While established mechanisms such as bilateral central bank assistance, private funds and BIS loans were used to manage the debt crisis, the Fund emerged as the main response actor. It was responsible for negotiating the solution with creditors and debtors and assuring that funds would be in place to support the approved programs. The Fund also worked out

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[904] Hobbs, "Debt Politics for an Evolving Crisis," 189.

[905] A most public case was that of Brazil where the IMF pressured 42 commercial banks to provide credit to aid in the Brazilian recovery. James, *International Monetary Cooperation since Bretton Woods*, 382.

rescheduling arrangements between private actors and debtor countries. The result was that these duties caused a significant change in the institutional importance of the IMF globally. During the 1970s the resources of the Fund were eclipsed by commercial sources of credit that were plentiful, cheap and had no conditions attached. As a result, the IMF declined in importance throughout the decade. But developing the ability to coordinate policies between states and private market actors, as well as increasing its capacity, brought new importance to the IMF.[906] The IMF would have had no reason to develop these duties if the crisis did not require such a significant and global response.

The debt crisis created the space to allow a more significant role for the IMF, but relying on the Fund to supervise the response also changed the character of the responding actor. The BIS was a strong forum for multilateral cooperation among the most important economic actors in the system. It worked to facilitate policy coordination and provided the necessary responses for the powerful actors to address crises in their economies that threatened global financial stability. The IMF had a wider scope. With a larger membership, it was able to incorporate various actors in the solution, and its capability in addressing a crisis that bridged both the developed and developing world was an assets as well as a necessity given the global nature of the crisis. These attributes were not part of the institutions original design, but evolved when the BIS abdicated responsibility for responding to the crisis.

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[906] Charles Lipson, *Standing Guard: Protecting Foreign Capital in the Nineteenth and Twentieth Centuries* (Berkeley, CA: University of California Press, 1985), 232.

## The Key Crisis

I have identified the debt crisis as the key crisis in the Bretton Woods period. It will be recalled that a key crisis is a crisis where the response system fails. While the BIS centered system did not technically fail because it was overwhelmed, the states of the BIS were unwilling to extend their resources to the crisis states of the developing world and so the primary response actor failed to supply the main response. This created space for the International Monetary Fund to become the primary response actor in the debt crisis, a role that continues today.

Over the time period from 1945 until the debt crisis emerged, one can see a growing importance and reliance on the BIS forum as the centerpiece of the financial crisis response system. Though ultimately ineffective in the interwar period, central bank cooperation was embraced and strengthened in the post war period. The BIS was at the center of this system acting to provide responses to crises early on and a significant response when the dollar crisis emerged in the 1970s. The BIS forum proved to be a successful way to respond to crises, particularly crises in core countries. While the role of the BIS continued, there is no doubt that the IMF eclipsed the BIS as the primary actor in responding to the debt crisis. Perhaps the most important reason is that the BIS purposefully removed itself as a significant actor in the debt crisis response because it was concerned that the scope of the crisis would strain its resources to the point of bankruptcy.[907]

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[907] James, *International Monetary Cooperation since Bretton Woods*, 389.

At the same time the IMF was an actor searching for a role in the system. Early post-war problems in the international economy made the organization irrelevant at first and the failure of the peg destroyed the system that the IMF was supposed to be supervising, making the organization near irrelevant once again. But throughout this time period the IMF grew in importance as the secondary response system and provided tools for the developing world to deal with crises while the BIS strengthened its role in crisis response in the developed world. A two-tiered system emerged. The BIS addressed crises that could threaten global financial stability because it was the forum where developed world crises were managed through coordinated and formalized cooperation and the IMF had the primary response role in developing world crises.

The debt crisis is interesting however, because it was a crisis in the developing world that threatened the developed world. By gaining responsibility for crisis response at this moment the IMF became central to the entire response system, although core countries would still have more institutions and power to respond to crises that affected them. Multilateral cooperation was increased and formalized throughout this period, but after the BIS system backed away from crisis response in 1982, the IMF, a multilateral global public actor would become the center of the system.

## Crisis Response in the Bretton Woods Period

This chapter has examined the incidence of crisis and the development of responses from the end of World War II until the debt crisis in 1982. Responses to crisis evolved throughout this period to more heavily rely on multilateral cooperation that was consolidated on a global level. This section will discuss the implications for these findings with regards to the dissertation model.

In this period crises assumed a greater size because the financial system had increased in size, scope and density. The growth in the Eurocurrency market and the spread of investment capital in the form of loans to the developing world expanded both the size and scope of the financial system. In addition, the connections between markets increased dramatically as the monetary system became more integrated through capital and loan markets. Petrodollars brought available capital from new regions and lenders strengthened ties between banking centers and developing countries. These connections between the developed core and the underdeveloped countries were the most significant for increasing the density of financial interactions, but the role of the dollar as a key currency also assisted in tightening investment networks. As financial interactions increased, this also expanded the size of financial crisis.

The Bank for International Settlements response system was based on a regional multilateral public actor. This system was very successful in responding to financial crises throughout the 1960s and particularly successful in the dollar crisis of the early 1970s. This form of central bank cooperation evolved throughout the period. It became more institutionalized and worked with a wider web of credits through the swap network. The response system was centered on this form of multilateralism.

At the same time the IMF was developing as a response actor. Its role in the financial system was increased through the Gold Pool and the GAB, which were instruments that helped prevent and respond to financial crises in the period. However, the IMF did not become the primary response actor until the debt crisis emerged in 1982. Its role in this crisis, and the success that it had in preventing the spread to the developed country banking systems gave the IMF legitimacy in crisis response. It is perhaps necessary to note that developing countries saw IMF successes and legitimacy in a much different light than did the core.

The IMF was able to address the crisis and was thrown into this role because its level of establishment was global. It had a large membership and could extend its reach beyond simply the developed core. The increases in global capital and the increased linkages between the developed and developing world put pressure on the BIS system because in order for it to work, it had to be extended to states that were a far higher risk of failing to pay. Unlike previous key crises, in this crisis the new response actor emerged because of the previous primary actor's unwillingness to play the part as the central responder.

Lipson argues that the problems rescheduling such massive debts from such a large number of institutions, along with the necessity of swift action to assure the integrity of the global financial system, facilitated the entry of public institutions into the process of response.[908] This dissertation has demonstrated that public response actors have been favored since the late nineteenth century. The debt crisis could have changed that trajectory since most of the lending and was through private lenders. Default had the potential to bankrupt private actors, not states. But public responses were more desired

[908] Lipson, "International Debt and International Institutions," 221-31.

since their goal was to stabilize the global financial system not simply to protect market actors.

Stabilizing the global financial system had become a global public good. Crisis response therefore was better managed through a multilateral public global actor with the legitimacy, reach, authority and capacity to respond. The IMF moved decisively and developed the necessary institutional capacity to respond to the debt crisis. Its success would place it at the center of the crisis response system and relegate the BIS to less of a response actor and more to a regulatory actor, where it would negotiate further banking regulations. While it remains an important global financial actor and an important actor should a crisis emerge in the core, just as state governments and central banks, the mantel of crisis response was passed to the IMF, and it arguably has remained there ever since.

Chapter 6

# CONCLUSIONS

## Introduction

The IMF moved into the role of central crisis response actor after the debt crisis in the 1980s. The success of the Fund forestalling a global banking crisis, even though conditionality and austerity policies have been extremely controversial, has led to continued reliance on the IMF. In subsequent crises and over time this reliance has deepened, but that has not happened without debate. Criticisms have been leveled against the Fund's ability and capacity to act as a crisis manager. Moreover its role managing and stabilizing the global financial system in an era of increased interdependence has prompted much writing about how the Fund should be redesigned this is a main theme in the NIFA literature. Have financial crises outgrown the ability of the Fund to adequately address them? Is there a new actor emerging to address financial crises or are former actors becoming more relevant? In other words, are we presently in the delegitimization phase of the process or the construction phase?

This chapter will speak to these questions and offer conclusions for this study. It will proceed in three sections. First, but it will begin by reflecting on the historical record of crisis response that has been presented to this point in order to make some conclusions about this study and the model. It will then turn to a discussion of the current period.

Without the advantage of time and perspective, it is difficult to be certain how the system is evolving. The slow evolution of the system has continued through several important crises. The two most important are the 1994 Mexican Peso Crisis and the 1997 Asian Financial Crisis. I will examine the responses to these two crises in some detail and suggest whether the model can speak to these responses. The chapter will then end by discussing the implications that this dissertation has for the future of understanding financial crises, policies for addressing crises and lastly, this study's relevance for the new international financial architecture literature.

## What History Teaches Us

The model presented in Chapter Two argued that financial crises, indicated by a sudden dislocation in the market and a contraction in credit, elicit responses. Since crises are contextual, emerging from the conditions of the global economy, institutions create or develop powers in order to adequately address the crisis. When a response actor is successful at addressing the economic problems caused by the crisis, or keeps the crisis from spreading, the actor or institutions that provide the successful response are strengthened and relied on in future crises. Institutions develop adequate powers and capacities to be more effective for both the present and possibly the next crisis.

Over time crises tend to change because the global economy is dynamic. Historically, financial interactions have expanded in size and geographical scope. As well, interconnections between states and markets have become more dense, resulting in a larger and more interdependent global political economy. As financial interactions increase, the capacity of the response actor to continue to address a financial crisis declines and the entrenched system becomes delegitimized and eventually overwhelmed. At such times a space is open for new actors to become primary in the response system or gain more capacity to address crises.

This general model identified a three-stage process in the evolution of responses. After a crisis emerges the first stage is response. This is where an actor provides some relief to reduce the ferocity of the crisis. Some actors prove more successful than others due to their capacity, or perhaps due to the authority or powers given to them by the state. Crises force moments of institutional innovation as states and private actors attempt to deal with a difficult problem and fragile system. Innovation can be expressed through either vesting more power in existing institutions or the creation of new ones.

When they are successful, the response actors that managed the last crisis or stabilized the economy become entrenched in the system and increase their primacy and importance. This leads to the second stage called reliance, where an institution grows to be the expected responding actor when another crisis emerges. Over time the reliance on specific institutions deepens and response duties are codified in the actors that have shown the ability to be successful in previous crises. Unfortunately, the ability for actors to remain successful in crisis response is hampered by the tendency of financial interactions to grow over time. This final stage is called expansion and is the phase that seems to drive change in the response system.

Even though institutions are created with the appropriate powers and capacity to address crisis, crises change over time. They become bigger because the financial system expands in size, scope and density. Since crisis response is rarely considered in times of calm, the response system will lag behind the expansion and pressures of the global political economy. Because of this, when expansion in the global economy significantly outpaces the response system, it will become overwhelmed, problematic or delegitimized. At this point the institution is likely to be unable to address the crisis successfully and it will either be relegated to a secondary role in crisis response, or less likely, completely lose relevance in the system.

This model was derived from the analysis of financial crises from 1800 onward. This analysis was presented in the three previous chapters. Historical evidence suggests that the primary response actor has changed in level of establishment and locus of control. In level of establishment, the response actor has grown increasingly multilateral. As crises have moved from being domestic events to global events, the response actor has moved from being a domestic actor with some bilateral interactions, to a regional multilateral system to finally a global multilateral system. At each stage, the number of states included in the response system has increased. In terms of locus of control actors have become public institutions. This issue was mostly decided by the late nineteenth and early twentieth century when private banking syndicate response systems were discredited and public institutions gained legitimacy. Responses have thus evolved from a mixed bag of public and private actors, to a domestic public or quasi-public actor (the central bank), through a time of increasing multilateralism centered on central bank cooperation in the core countries (particularly Europe), to finally a global public institution with near global membership.

Besides identifying a trajectory of response, this dissertation makes several other conclusions. The first is that financial crises have had a significant effect on the development of domestic and international financial institutions. In the long nineteenth century, crises had a significant effect on the development of the central bank. Early crises were responded to by a mixed group of actors including governments, private banks and primary banks. With each significant crisis primary banks of the crown were given more duties and responsibilities to stabilize the international economy and slowly evolved into modern day central banks. This institution then spread from state to state because it seemed that states with central banks were able to weather financial crises better than those without. By 1900, the United States remained one of the few major states without a central bank, but it too adopted one after the policy and academic communities blamed the American failure to recover quickly from the crisis of 1907 on its not having this institution.

In the second period, early crises helped central bank cooperation deepen and codify through the Dawes Plan, the Young Plan and eventually the creation of the BIS. Central banks shared information, coordinated procedures and became more reliant on each other's policies to manage the international financial system and remedy crises. Bilateral central bank cooperation transformed into multilateral cooperation as reparation networks brought states closer together financially. When crises emerged, central bank cooperation was deepened and relied on to stabilize the financial system. The crises of 1931 overwhelmed this nascent system of cooperation, and when it failed domestic central banks were not able to stop the crisis from deepening. The new actor was created during a period of increased financial integration, but its capacity was limited.

The multilateral central bank response system centered on cooperation through the BIS emerged more fully immediately after the war to deal with a series of crises in Europe. Coordinated responses, the creation of the Gold Pool and swap network solidified multilateral central bank cooperation and entrenched the role of the BIS system as the primary crisis response mechanism throughout the Bretton Woods period. Even the most significant crisis, the dollar crisis in 1971 was addressed successfully by relying on these networks. This regime-like actor had the appropriate capacity for addressing crises in the developed world but little political will and perhaps limited capacity to spread beyond this role. When the debt crisis emerged in 1982, the BIS system provided low levels of emergency aid, but quickly took a back seat to the IMF. The global nature of the debt crisis, and its epicenter in the developing world made a global actor more suited for response and the IMF emerged in the wake of the debt crisis as the primary response actor. Its capacity, authority and legitimacy were expanded to address the crisis.

Institutional innovation is evident in the wake of financial crises, and crises appear to be a driving force in institutional selection and improvement. Understanding which actors provided the response and identifying a trajectory in response actor change satisfies the first two of my three research questions. The third question asks what drives this change. I attribute the observed change over time to the expansion of the global economy. Therefore, the second conclusion that this dissertation makes is that the process of global expansion and integration drives changes in response actors.

The global economy expands based on three criteria: size, scope and density. Size suggests that the amount of capital in the system has increased, scope that investment goes to more places geographically and density suggests that the connections between markets get tighter. I have presented these changes as an indispensable dynamic in global finance, but also I have also identified the specific role that the integration of markets plays in the process. This is what I term the global integrative dynamic (GID). This dynamic is defined as a process by which there are deepening ties between markets in the global economy. The GID is meant to identify an on-going process of global integration. As this process continues, the financial system not only expands in size, but a more complex financial environment is created. The complexity of the interactions creates a new environment for crisis where they can spread more easily along investment channels, and therefore tend to become bigger and more global events.

In each period I examine there is a rationale behind the growth in financial interactions. In the nineteenth century, the integrative dynamic is commonly called industrialization and is expressed as a period where innovations in transportation, communications and mechanization drove global investment. As well, global capital was attracted to industrial investments so capital movements helped industrialization. Thus there is a mutually reinforcing relationship between increased industrial capacity and investment. In the interwar period this process is often ignored because the size and scope of investment seem to be missing, but the integrative dynamic is expressed through the growth in reparations and loan networks. These financial transfers created a far more integrated and complicated environment and spread disruptions faster and to further locations. In the post-war period, the integrative dynamic is seen in a widening of investment, and particularly loans to the developing world. This creates a financial system where the connections between developed and developing countries can quickly destabilize financial networks in both areas. Therefore a truly global system is created in this last period.

I believe this dynamic continues to be seen today. In the current period the integrative dynamic has garnered the name "globalization." While this is a highly disputed term, it generally refers to an expansion and deepening of financial, political and social interactions driven by the widespread acceptance of global capitalism and technological innovation. This has the effect of including more markets in the global economy as well as increasing the aggregate level of investment.

The third conclusion that this dissertation makes is that some crises seem more important for the response system than others; basically, not all crises are equal. Most crises further refine and entrench the response system as small changes are made to give the primary institutions more capacity or administrative capability to deal with the or next crisis. But some crises are moments when the response actors fail to provide a response. These crises are identified as key crises. Key crises are defined as crises where the response system fails to provide an adequate response. These crises are important for understanding punctuated response change.

All crises can be seen as happening in the context of two phases in the evolution of a crisis response system. The first phase is the creation stage where response actors are identified as being successful. This success is translated into actively vesting the successful response actors with more power and duties for crisis response or actively creating a new system, or "architecture" for response. The second period is the delegitimization stage where the actor that had been successfully responding to crisis begins to lose credibility to another response system or actor. This can happen quickly or suddenly, or like the creation phase, the delegitimization phase can happen over a protracted period. Since financial connections and the financial system are continuously being created and recreated the response system is caught up in the same process.

Although the conclusions and trends presented in the model and throughout this dissertation are compelling, the history of financial crisis response is a complex process. This project attempts to understand the most salient trends and simplify them. After all, this is the goal of model building and theory building. However, the reality of historical analysis is that each of the crises that I have examined took place within complex financial systems, and I do not want this point to be overlooked. With each expansionary period in the global economy more financial and political actors are added to the mix. While a pattern or trend is observable, the transition from one primary response system to another is neither linear nor clear-cut. Old actors do not simply disappear and the new actors do not simply emerge victorious and with lots of power and responsibilities.

The actors and systems created along the way do come back to contribute to the response, but often in specific roles and with specific duties. Central banks, for example have not disappeared in the crisis response system, in fact they have proliferated in the post-World War II era and domestically manipulate money supplies to fix crisis conditions. But they have different international duties to address crises as time goes on.

Often older actors reappear to address specific parts of the crisis, especially in signal and key crises where the primary actor either requires the assistance of other actors or where there is no heir apparent. However, the trends still suggest that international crisis response over the last 200 years has become the duty of increasingly global, public and multilateral actors. This trend and the findings of this dissertation are summed up in Table 6.

## Current Period Responses

While this dissertation identifies an important pattern, it would be most helpful to examine the current period to determine whether this trend appears to be enduring. But the last time period presents some analytical problems. The evolution of the crisis response system is surely continuing in some direction, but it is hard to understand trends fully without the luxury of time to evaluate the system's progression. If the model that has been presented to this point continues to be relevant in the current era, crisis response should rely on multilateral and public actors. Without the luxury of time, I believe the preliminary evidence from the 1982-1997 period is mixed. The IMF remains central to the system, but other response actors are being considered for more significant crisis response roles in the future. This section looks more carefully at this period.

Table 6.1: The Evolution of Crisis Response

| **Period** | **Period I**<br>**1800-1914** | **Period II**<br>**1918-1939** | **Period III**<br>**1945-1982** |
|---|---|---|---|
| **Global Integrative Dynamic** | Financing for industrialization and transportation investments | Inter-war Loans and Reparations | Expanded Investment to Underdeveloped World |
| **Key Crisis** | 1873 | 1931<br>Credit Anstalt/European Currency Crises | 1982-85<br>Debt Crisis |
| **Changes/Results** | • Domestic Lender of Last Resort established<br>• Central Bank gets Lender of Last Resort Responsibilities<br>• States imitate central banking systems to avoid and minimize crises | • Expanded role for central bank policy coordination<br>• BIS created to coordinate central banking actions | • BIS acts as regional clearing bank<br>• Swap Network provides liquidity regionally |
| **Primary Response Actor** | Prior to 1873: Governments (public, domestic) and Private Banks (private, domestic)<br><br>After 1873: Central Bank | Central Bank (public unilateral and limited Central Bank Coordination (public, bilateral) | Bank for International Settlements System<br>(Public, multilateral, regional) |
| **Emerging Actor** | Central Bank<br>(public, domestic actor) | Expanded Central Bank Coordination through Bank for International Settlements System<br>(Public, multilateral, regional) | International Monetary Fund<br>(Public, multilateral, global) |

Current International Financial Flows

The global economy has gone through many changes since the debt crisis in 1982. The most substantial of which has been the advent of deeper financial integration and the rapid transfer of information through new technologies; the phenomenon often described by the word "globalization." The amount of capital moving globally and aggregate increases in the amount of trade have dwarfed previous economic expansions. This has not eliminated financial crises; instead financial crises appear to be thriving in these new conditions and fears about their ferocity and contagiousness are increasing.[909] This section will briefly consider crisis response in the current period. It will first provide an overview of the global economic landscape since 1982. The most significant characteristic of the current period has been the growth in global capital, particularly since 1990. After discussing this trend, I will consider the two most significant financial crises that have occurred since 1982. Finally, I will assess these data points to gain some understanding about the trends in crisis response since the transition to the IMF as the primary response actor in 1982.

After the Mexico's default announcement in 1982, capital and credit available to the developing world dried up. The risks associated with lending to less developed economies were too great for private banks to continue the practice. But by the end of the 1980s this trend reversed and global capital flows grew to new highs. The composition of financial flows from 1990 onward also reflects a decrease in the amount

[909] For example see Stephany Griffith-Jones, *Global Capital Flows: Should They Be Regulated?* (New York: St. Martin's Press, 1998).

of official aid, due to the end of the Cold War, and an increase in global equity investment, particularly to the developing world.[910] Many factors contributed to the expansion of global capital, including regulatory changes, more investment opportunities, financial market liberalization and declining American interest rates.[911] The most significant growth in capital markets happened in the 1990s. Between 1990 and 1998, capital assets in mature capital markets[912] more than doubled to over $30 trillion, an amount nearly equal to the world gross domestic product.[913]

While the flow of capital between mature markets makes up the greatest percentage of international capital movements, the changes in the amount of capital invested in emerging markets provides the most dramatic evidence of the expansion. Capital to emerging markets averaged approximately $130 billion per year between 1990 and 2000, more than tripling the average between 1980 to 1989.[914] Developing and transition economies received about $8.1 billion in net capital inflows in 1970 compared to amounts ranging from $140-220 billion in the 1990s, with investments peaking in

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[910] Eichengreen and Fishlow, "Contending with Capital Flows: What Is Different About the 1990s."

[911] Ibid., 47.

[912] Mature capital markets consist of developed country transfers, particularly United States, Japan and the European Union

[913] International Monetary Fund, *International Capital Markets: Developments, Prospects, and Key Policy Issues* (Washington, DC: World Economic and Financial Surveys, 2001), 47.

[914] Malcolm Knight, "Developing Countries and the Globalization of Financial Markets," *Working Paper of the International Monetary Fund* WP/98/105 (1998): 5.

1997.[915] A large percentage of the capital going to developing economies was through private foreign direct investment and portfolio investment and not through bank or official government loans.[916] Numerous changes, including the expansion of equity markets and portfolio investment as a larger portion of foreign investment, have helped create the dramatic increases. As well, new financial tools such as derivatives and diversified portfolios have changed the nature of investment and have made the recipients of investment capital more susceptible to volatile capital movements.[917] All of these conditions have contributed to larger amounts of capital being committed globally in a technologically faster marketplace.

## Crises of the Period

The expansion in global capital markets and greater global integration has not happened without the occurrence of crisis. Since the debt crisis of the 1980s, Kindleberger identifies four financial crises: the U.S. stock market crash in 1987, the Nikkei crash in 1990, the Mexican peso crisis of 1994 and the Asian financial crisis of 1997.[918] Two of these crises, the U.S. crash of 1987 and the Nikkei crash of 1990 were

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[915] Ibid.: 4.

[916] Dobson and Hufbauer, *World Capital Markets: Challenge to the G-10*, 7.

[917] Knight, "Developing Countries and the Globalization of Financial Markets," 8.

[918] Interestingly, Kindleberger does not identify the European Exchange Rate Mechanism crisis of 1992 and he provides no reasoning behind his choice to exclude this crisis. Because of this I am leaving the ERM crisis out of my dataset. My understanding of this crisis leads me to believe that it was an internal event on the path to European political and monetary integration. Although clearly a speculative mania and a contagious crisis,

mostly domestic events where powerful central banking establishments contained the problems, therefore they will not be considered here. Of greater global significance were the crises that erupted in the 1990s, the first in Mexico in 1994, and the second in East Asia in 1997. Both of these crises received international responses from various global actors. Therefore, they can help provide a sense of the direction of crisis response in the current period and suggest where the response system may be heading.

The 1994 Mexican Peso Crisis

The 1994 Mexican Peso Crisis was the first significant financial crisis of the 1990s. In January 1994 Mexico, the United States and Canada signed the NAFTA agreement. Both the anticipation of signing this agreement and the actual event brought foreign capital into the Mexican market. In fact, the available credit for Mexico increased over 200% between 1989 and 1994.[919] As a result the Mexican government became highly dependent on short-term capital. In 1994 Mexico was running a $20 billion per year current account deficit that was mostly financed by short-term portfolio

it was caused by unique European rules to promote integration that encouraged speculative attacks on European currencies. In a more detailed understanding of the current era, this crisis would require further analysis, but since the purpose of this chapter is to identify broad trends give a brief treatment of the current era, it is beyond the scope of this chapter to give a greater detail to these events. Because of the context in which it emerged and the fact that it did not spread outside of European Union members, I believe the crisis is not a significant event in terms of global finance, though its importance for European integration cannot be disputed.

[919] Andres Velasco and Pablo Cabezas, "Alternative Responses to Capital Inflows: A Tale of Two Countries," in *Capital Flows and Financial Crises*, ed. Miles Kahler (Ithaca, NY: Cornell University Press, 1998), 151.

capital.[920] Much of the short-term capital was denominated in *cetes*, which were peso denominated short-term bonds. The Mexican government was aware of the importance of foreign capital and needed to take measures to continue to attract investment, but this was not an easy task. Political uncertainties following a PRI presidential nominee assassination, increasing interest rates in the United States, which should have raised interest rates in Mexico, brought fears of a peso devaluation and investors began selling their *cetes*.

The answer to gaining and retaining foreign capital came in the form of *tesobonos*. These were dollar indexed short-term government bonds that represented a commitment of the Mexican government to exchange rate stability. Because they were dollar indexed, the government promised to pay dollars instead of pesos if they were cashed in. This tied *tesobonos* to the Mexican hard currency reserves. Short-term investors bought into these bonds and believed *tesobonos* to be safe and attractive investments. The numbers show the trends. Between January and December of 1994 the value of tesobonos increased from $1.4 to $30 billion and the value of *cetes* fell from $22.7 billion to $5.4 billion.[921]

Unfortunately, *tesobonos* created an unsustainable economic position for the government. By November, political problems and another increase in U.S. interest rates

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[920] Michael Veseth, *Selling Globalization: The Myth of the Global Economy* (Boulder, CO: Lynne Rienner Press, 1998), Chapter 4.

[921] Rogelio Ramirez de la O, "The Mexican Peso Crisis and Recession of 1994-1995: Preventable Then, Avoidable in the Future?," in *The Mexican Peso Crisis*, ed. Riordan Roett (Boulder, CO: Lynne Rienner Press, 1996), 16.

heightened fears for investors. In addition, *tesobonos* began to come due and investors removed their dollars from Mexico. This drained hard currency reserves from the Bank of Mexico. Since currency value is tied to the amount of reserves that a country has, a speculative attack on the peso emerged. Though the Mexican government was committed to maintaining the value of the peso, this was no longer economically possible. With reserves dwindling and a banking crisis looming, the Zedillo government announced the float of the peso on December 20, 1994.[922]

The immediate consequence of the announcement was a 40% decrease in the value of the peso and enormous capital flight as investors attempted to remove their investments before the price of the peso fell further. The conditions in Mexico were dire. The peso was devalued and interest rates increased. There was a short-term liquidity problem and long-term current account deficits. There also emerged concerns about the crisis moving to other markets as confidence in Latin American currency values became stressed.[923] Although serious problems never did emerge in other states, a decline in capital flows and other economic indicators to Latin American and Central and Eastern

[922] Veseth, *Selling Globalization: The Myth of the Global Economy*, Chapter 4.

[923] There was particular concern in Brazil and Argentina. Brazil announced a new currency valuation called the *Real* Plan after the crisis. Argentina received assistance $8.2 billion in bond flotation assistance from the IMF, World Bank, Asian Development Bank and Inter-American Development Bank. While there was no crisis in Argentina, these funds helped restore confidence and preempt a possible crisis. See Roberto Bouzas, "The Mexican Peso Crisis and Argentina's Convertibility Plan: Monetary Virtue or Monetary Impotence," in *The Mexican Peso Crisis*, ed. Riordan Roett (Boulder, CO: Lynne Rienner Press, 1996).

European countries did follow the Mexican Crisis. This has been termed the "Tequila Effect."

Responses to the Peso Crisis came from both domestic and international sources. The Mexican government made some policy decisions that tried to restore confidence in the government's economic plan. These included tightening monetary and fiscal policy as well as some assistance to Mexican banks and firms to forestall a banking crisis.[924]

The most significant assistance came from international sources. Three different bodies contributed $48 billion to assist the Mexican economy. First, the International Monetary Fund provided an immediate $7.8 billion credit to Mexico at the end of January 1995, and guaranteed an additional $10 million to be drawn upon at a later time. This was provided in the form of stand-by credits to be used as needed by the Bank of Mexico to stabilize the currency value. At the time, the initial $7.8 billion credit represented the largest financing package that the IMF had ever granted.[925] The second response came from the United States in the early spring of 1995. The United States Government assured $20 billion from the Exchange Stabilization Fund (ESF)[926] and created the Exchange Stabilization Agreement (ESA) with Mexico. Essentially this credit provided

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[924] Carlos Sales-Sarrapy, "The Mexican Experience with International Capital Flows," in *Capital Flows, Capital Controls, and Currency Crises: Latin America in the 1990s*, ed. Felipe Larrain (Ann Arbor: The University of Michigan Press, 2000), 262-3.

[925] "IMF Approves US$17.8 Billion Stand-by Credit for Mexico," *International Monetary Fund Press Release*, 1 February 1995.

[926] The Exchange Stabilization Fund was established in 1934 as an instrument of the U.S. Treasury Department to purchase or sell foreign currencies. To activate the ESF, the Secretary of the Treasury must give consent, but a portion of the funds are held in the Federal Reserve Bank of New York in order for the Federal Reserve System to make

short to medium term swap lines for the Bank of Mexico to use to stabilize its reserves. These swaps were available for up to ten years, but all of the lines were closed by January 1997. Mexico drew about $10.5 billion from the ESF. The third response came from the Bank for International Settlements, which guaranteed $10 billion. In total, Mexico drew about $26.5 billion of the $48 billion credit in 1995.[927]

The Mexican response has been hailed as a successful "bail-out."[928] While economic indicators declined for about two years, growth resumed by 1997. More importantly, while there was a Tequila Effect and growth declined for several transition and developing economies, the crisis did not spread to other states. This, of course would not be the same story for the crisis in 1997.

## The 1997 Asian Financial Crisis

The other significant crisis in the current period is the Asian Financial Crisis. This is a much more complex story than the Mexican Crisis and has received a large amount of scholarly attention. While the reasons for the crisis are still disputed, the course of events and the responses that materialized are relatively straightforward. The crisis began in the summer of 1997 with the dramatic 30% devaluation of the Thai Baht. Crisis conditions then moved throughout South East Asia to Malaysia, Indonesia, the Philippines, Hong Kong, South Korea and Singapore, devaluing all of these currencies.

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[927] Sales-Sarrapy, "The Mexican Experience with International Capital Flows."

[928] There are of course issues of moral hazard that have led to criticisms of the Mexican response.

By 1998 the Russian government was forced to devalue the ruble. Just a few months later in 1998, Brazil appeared to be heading toward a crisis.

The economies of South East Asia that fell into crisis got a lion's share of global capital prior to the crisis in 1997.[929] These economies received over 30% of the amount of capital that went to emerging markets in the two years prior to the crisis (1995 and 1996) and this capital inflow represented nearly 6% of the GDPs in these countries.[930] Economic growth was also impressive. GDPs were steadily averaged between 6% and 9% throughout the region until 1997.[931] All of these indicators suggested that there were few reasons to assume the expansion and growth in this region was coming to an end.

The influx of foreign capital created excess funds that fueled a boom in credit, which set the stage for speculation. For example, in Thailand the credit boom increased real estate asset prices far beyond their market price and those assets became the basis for extensive short-term loans. Banks seized on this opportunity to borrow cheap capital from abroad and lend to local property and equity speculators. This created an upward spiral increasing land prices even more. But the spiral reversed. As capital to these

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[929] The theoretical debates regarding the reasons for growth in global capital, especially the enormous inflows into the developing world are summarized nicely in Carmen Reinhart and Peter Montiel, "The Dynamics of Capital Movements to Emerging Economies During the 1990s," in *Short Term Capital Flows and Economic Crises*, ed. Stephany Griffith-Jones, Manuel F. Montes, and Anwar Nasution (Oxford: Oxford University Press, 2001).

[930] As compiled from IMF estimates, reported in Dobson and Hufbauer, *World Capital Markets: Challenge to the G-10*, 8-17.

[931] As compiled from BIS statistics, reported in Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*, 164.

countries dried up, speculative attacks ensued on the currencies, real-estate prices fell and the banks were left with non-performing bank loans and the liabilities of short-term loans abroad coming due. Banks were forced to use their liquidity to defend the currency from speculative attacks and that left little for servicing their short-term demands.[932] Explanations for the crisis considered domestic policies that created unstable conditions and also considered international conditions that had created volatile foreign short-term capital movements.[933]

As the Thai Baht came under pressure, the central bank of Thailand used its reserves to defend its currency, but the pressure was simply too strong and Thailand was forced to devalue. As the crisis spread throughout Asia, first hitting Indonesia, then Malaysia, the Philippines, Singapore and Taiwan. Each of these countries experienced stock market crashes and sharp (20-35%) devaluations of their currencies. By October of 1997 the stock markets in Hong Kong and South Korea were in crisis. Russia and central Europe were in crisis by the summer of 1998 and it was clear that none of the domestic central banks in Asia or central Europe had the resources to calm their own markets and defend their currency. Nor did any central bank have the capacity to calm international

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[932] Goldstein, *The Asian Financial Crisis: Causes, Cures and Systemic Implications*, 7-14, Marcus Noland et al., *Global Economic Effects of the Asian Currency Devaluations* (Washington, DC: Institute for International Economics, 1998), 1-11.

[933] For domestic explanations see Goldstein, *The Asian Financial Crisis: Causes, Cures and Systemic Implications*. For international capital market explanations see Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*, Kenen, *The International Financial Architecture: What's New? What's Missing*, Radlet and Sachs, "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects."

market. Two responses emerged, one from the IMF and another regional response in Asia.

The International Monetary Fund was on the front lines of response. It provided the fastest and the largest amount of relief. The IMF began responding to the crisis in July 1997 when a delegation arrived in Thailand with both a significant loan and structural adjustment-like requirements to address problems in the. A $4 billion stabilization package was approved for Thailand. The IMF then provided credits and loans to all of the countries in crisis in Asia, except Malaysia, and continued its response by providing credits to Russia and Brazil. Many scholars have been quite critical of the IMF's policies and have argued that they were designed to deal with problems that were not relevant for the Asian Crisis.[934] This criticism is consistent with the enormous role the IMF assumed during the crisis. It committed nearly $120 billion to Asia and perhaps more significantly, caused tremendous changes in the domestic economies. IMF responses were mostly in the form of traditional emergency stand-by loans to the economies in crisis.

A rival response to the IMF was considered in Asia through a combination of Asian actors and organizations. This regional response had some effect on the Asian crisis but it was quickly abandoned in favor of a global response.[935] Three actors were

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[934] Martin Feldstein, "Refocusing the IMF," *Foreign Affairs* 77 (1998), Jeffrey D. Sachs, "The IMF and the Asian Flu," *The American Prospect* 37 (1998).

[935] Japan proposed an Asian Monetary Fund to address the problem. This was a for a regional facility that would have the capacity to disburse emergency stabilization funding in the case of a financial crisis. This policy faced strong opposition from the U.S. government, who favored an IMF response. See David Rapkin, "The United States,

central in the regional Asian response: the Association of Southeast Asian Nations (ASEAN), the Asian Development Bank (ADB) and the Asia-Pacific Economic Co-operation (APEC). In addition to these actors, the Japanese government tried to organize an Asian Monetary Fund, which was abandoned.[936] The three remaining actors responded in two significant ways. First, they successfully coordinated policy responses among themselves. ASEAN became the organization focused on long term recovery through fostering and promoting the Asian Free Trade Area. APEC worked on the same long-term recovery solutions but moved beyond trade to address financial liberalization as well. The Asian Development Bank provided the most immediate assistance and response for the crisis situation. It floated loans to most of the crisis countries to stabilize their markets and to cushion the social impact of the crisis. Since the response to a financial crisis overwhelmingly focuses on the immediate provision of liquidity to stabilize the economic systems of countries in crisis, the ADB handled the most traditional response role among the regional actors.[937]

The second important response dynamic was regional institutional innovation. A meeting of regional central bankers in 1997 was the first in a continuing series of central bank meetings to coordinate central bankers in these countries. Much like the central

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Japan and the Power to Block: The APEC and AMF Cases," *The Pacific Review* 14, no. 3 (2001).

[936] Kenen, *The International Financial Architecture: What's New? What's Missing?* , 30, Rapkin, "The United States, Japan and the Power to Block: The APEC and AMF Cases."

[937] Michael Wesley, "The Asian Crisis and the Adequacy of Regional Institutions," *Contemporary Southeast Asia* 21, no. 1 (1999).

banker meetings with the Bank for International Settlements or G-7, these meetings focused on creating a more formal response among central banks. ASEAN began work to monitor and analyze capital flows and create an institutional structure to better implement this monitoring on a consistent basis.

The role of regional institutions closely followed the template that the IMF and other global financial institutions have been following; an increase in surveillance and attempted policy coordination are the heart of a regional or global system to mitigate financial crises. In addition, the Asian regional response included last resort lending and the provision of emergency liquidity. In terms of rhetoric, regional actors in Asia saw their response as complimenting the role of global responses,[938] not in creating a response system of their own. The crisis however, did not remain in Asia and once it moved, regional responses were less effective. For example, no regional response coalesced around the crisis in Russia and Eastern Europe or in Latin America. In the final assessment of regional role in the Asian Financial Crisis the role of even the most prominent regional actors (ASEAN, APEC and the ADB) had little real influence on global outcomes.[939] Since the crisis, regional solutions have been discussed as part of a promising way to deal with crises in the future,[940] but during the crisis they provided little in terms of response.

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[938] Ibid.

[939] Ibid.

[940] Bird and Rajan, *The Evolving Asian Financial Architecture*, Eichengreen, "Strengthening the International Financial Architecture: Where Do We Stand?."

Summary of Crisis Response in the 1990s

What do the responses to the Mexican and Asian crises suggest for the continued evolution of the financial crisis response system? In Mexico, the response was twofold consisting of swaps from the U.S. Exchange Stabilization Fund and an immediate infusion of liquidity from the IMF. While the United States response was a higher dollar amount, the IMF response came sooner in the crisis and its credits were used up before the United States response coalesced. In Asia, the IMF again provided the swiftest response and was the central response actor but regional responses that coordinated central banking activity in Asia also emerged. Both cases indicate that the Fund remains the primary crisis response actor, and both cases suggest the continued relevance of the model that has been presented in this dissertation.

The most current crises however, do not give us a sense of whether the IMF centered response system is becoming more or less relevant for responses. In other words, it is difficult to determine if we are in a creation phase, where the IMF should be gaining more powers and responsibilities, or a delegitimization phase where the IMF is losing relevance and ability within the system. Evidence exists to draw both conclusions. Debate around how to reform or recreate the financial architecture continues, but no significant moves have been made to vest either the IMF or another actor with more managerial capabilities or powers. In addition, while the IMF has come under tremendous criticism for its handling of the Asian crisis, no other actor has been created nor has the IMF been stripped or constrained in its stabilization function.[941] This inactivity should be expected since policy decisions regarding crisis response rarely coalesce in periods of stability.

Suggestions of global central banks, a reconfigured IMF with new powers, regional responses, and even arguments that multilateral institutions should be abandoned in favor of state regulation, are all part of the discussion and suggest possible paths for policymakers to pursue. In this complex financial and political environment it is likely that many actors will be a part of the response system, but the most recent cases suggest the IMF continues in its centrality. The Asian financial crisis has opened debate over the use of regional institutions, and this could suggest a retrenchment to these kinds of arrangements. At the same time, the Asian crisis confirmed the IMF as the primary response actor. Future crises will help us better understand whether the response system will continue to evolve toward privileging a multilateral global actor or will move toward regional actors.

## Implications

This study identifies a pattern in the evolution of crisis response over the last 200 years. On the surface, crisis response always seems to be *ad hoc*. When a financial crisis emerges, institutions, states and private actors are forced to act in usually unanticipated ways. But beneath this superficial reading of the situation, it is clear that a response

[941] Evidence of this exists in the role the IMF has recently played in the Argentinean financial crisis over the last two years.

system is functioning, and that that system had privileged actors who assume responsibility for the swift resolution of the crisis. This study concludes that responses to financial crisis have become more multilateral and public over time and that this change is driven by the growth and interdependence of international financial interactions. There are two implications of this dissertation for the study of international political economy and international relations. First, this study speaks directly to the new international financial architecture literature and second, this study contributes to the literature on multilateralism.

Discussions of the construction of the NIFA are central to the study of IPE. As will be recalled, this scholarship assumes that financial systems are created structures that can be recreated in order to better achieve efficiency or to better manage problems. Deciding what institutions should look like and what functions they should perform is the main task in constructing a financial architecture. Policy recommendations regarding the best mix of institutions have come from all points of the political and economic spectrum. These recommendations include privileging state level actions, especially capital restrictions,[942] strengthening existing or creating new international institutions,[943] and

[942] Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*, Jeffrey Frankel, "How Well Do Markets Work? Might a Tobin Tax Help?," in *The Tobin Tax: Coping with Financial Volatility*, ed. M. ul Haque, I. Kaul, and I. Grunberg (Oxford: Oxford University Press, 1996), Radlet and Sachs, "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects."

[943] Sebastian Edwards, "Abolish the IMF," *Financial Times*, 13 December 1998, Garten, "In This Economic Chaos, a Global Bank Can Help.", Henry Kaufman, "Preventing the Next Global Financial Crisis," *The Washington Post*, 28 January 1998, George Soros, "Avoiding a Breakdown: Asia's Crisis Demands a Rethink of International Regulations," *Financial Times*, 31 December 1997.

strengthening regional financial measures.[944] The NIFA literature has therefore been very focused on the role of global financial institutions for managing the financial system and for addressing financial crises.

This dissertation argues that the global financial system has evolved over a long period of time to privilege and rely on public, multilateral actors in order to address crisis. Those actors have increasingly required global capability and scope as financial crises have become bigger events. It also suggests that this choice has not been based on some kind of fuzzyheaded idealism, nor has this choice been random, but it has been based the reality that other kinds of response actors have been unable to address crises appropriately.

A better understanding of the reasons that these institutions have become primary in the response system helps suggest institutions that will be most successful in the NIFA. Since a process of institutional selection has been occurring over time that privileges public, global, multilateral actors, it is likely that these actors are the ones most suited for the conditions of the global economy. Therefore, it is likely that these actors will be the most relevant for any international financial architecture. This is not to suggest that specific actors should be privileged; the International Monetary Fund is the not only institution that can be successful in a response role. Instead, what this does suggest is that there are characteristics about this organization that need to be characteristics in any other successful institution. Actors with global capabilities, scope and membership are more suited for the job.

[944] Bird and Rajan, *The Evolving Asian Financial Architecture*.

An interesting corollary is that financial institution innovation lags behind changes in the global economy. In other words, just like in war, where states always prepare to fight the last one, in international finance, we always seem to have institutions more suited to resolve the last crisis then ones ready to take on the next. Recognizing the trajectory of responses does not predict what will come next, but understanding the patterns help us also understand likely successful policies and plan better for the next wave of crisis. This means that policies that endorse a role for multilateral global organizations are probably better suited for addressing the problem of international financial crisis. This suggests where the emphasis should be placed in trying to (re)construct the international financial architecture. This dissertation, by drawing attention to the role of integration and financial connections over time helps to identify a common theme in international relations: that transnational problems require cooperative and multilateral solutions.

The second set of implications of this study deal with the issue of multilateralism. I have used the term multilateral throughout this dissertation as a way to describe the fact that response actors have included an increasing number of states cooperating. An institution is usually considered multilateral if there are more than three states involved in coordinating their actions. There is a small literature that suggests multilateralism is an important dynamic to notice in international relations because it is a distinct form of international cooperation. This dissertation not only argues that multilateralism has evolved and increased over time but it also suggests that there is a rationale behind why that is the case. This dissertation therefore contributes to a better understanding of multilateralism. To make this point clearer, a brief discussion of the scholarship on multilateralism is necessary.

The issue of multilateralism received a great amount of attention in the early 1990s when a book entitled, *Multilateralism Matters* was published.[945] This book provided a volume of articles that discussed the importance of recognizing multilateralism as an ordering form in the international system. Strangely, this book also represents one of the few attempts to explain the concept of multilateralism, though the word is used constantly in IR scholarship. While authors have argued multilateralism is central for understanding how international problems will be managed in the future, the literature has not gone far beyond suggesting the importance of this topic.[946]

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[945] For example see John Gerard Ruggie, ed., *Multilateralism Matters: The Theory and Praxis of an Institutional Form* (New York: Columbia University Press, 1993).

[946] There is of course an enormous amount of literature that covers topics related to multilateralism. For example there is the literature on neo-liberal institutionalism which argues that state behavior must be understood in terms of the institutions that condition and constrain state actions. See Robert O. Keohane, *After Hegemony: Co-Operation and Discord in the World Political Economy* (Princeton: Princeton University Press, 1984), Robert O. Keohane, ed., *International Institutions and State Power: Essays in International Relations Theory* (Boulder, CO: Westview, 1989). There is another literature on regimes, regime theory and its permutations (e.g. epistemic communities). This literature argues that the creation of norms, rules and decision making procedures helps order international relations. For example see Stephen D. Krasner, ed., *International Regimes* (Ithaca, NY: Cornell University Press, 1983), Volker Rittberger, ed., *Regime Theory and International Relations* (Oxford: Clarendon Press, 1993), Oran Young, *International Cooperation: Building Regimes for Natural Resources and the Environment* (Ithaca, NY: Cornell University Press, 1989). One could also argue that the literature on collective action that examines the pros and cons of trying to cooperate is part of this larger theme. For example see Peter Gourevitch, *Politics in Hard Times* (Ithaca, NY: Cornell University Press, 1985), Rogowski, *Commerce and Coalitions: How Trade Affects Domestic Political Alignments*, Duncan Snidal, "The Limits of Hegemonic Stability Theory," *International Organization* 39 (1985). This dissertation is focusing on the issue of multilateralism because multilateralism suggests a specific type

The most significant contributor to multilateralism literature is John Gerard Ruggie. Ruggie argues multilateralism is a "generic institutional form of modern international life," and in the twentieth century, the creation and growing importance of institutions strengthened this already existing form.[947] Ruggie defines multilateralism as being the coordination of behaviors between three or more states on the basis of generalized principles of conduct.[948] As such, multilateralism represents a defining characteristic of international relations that privileges multi-state cooperation. Other generic institutional forms, such as bilateralism and imperialism also exist, but bilateralism privileges the coordination of actions between two states and is exclusive to others, and imperialism suggests cooperation at the cost of sovereignty.

According to Ruggie, multilateralism is not simply an adjective to describe an organization, but a kind of ordering principle of international relations. The idea of multilateralism has been furthered, especially in the twentieth century, by the creation and deepened reliance on formal and informal institutions and organizations, but

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of institutional form. Institutionalists, and regime theorists suggest that these concepts are important, but they do so without considering the specific form the institution takes. Another vein of multilateralism literature focuses on the question of whether or not the United States should pursue multinational foreign policies. One excellent current examples of this literature is Patrick Stewart and Shepard Forman, eds., *Multilateralism and US Foreign Policy: Ambivalent Engagement* (Boulder, CO: Lynne Rienner Publishers, 2002).

[947] John Gerard Ruggie, "Multilateralism: The Anatomy of an Institution," in *Multilateralism Matters*, ed. John Gerard Ruggie (New York: Columbia University Press, 1993), 7. See also John Gerard Ruggie, *Constructing the World Polity* (London: Routledge, 1998).

[948] Ruggie, "Multilateralism: The Anatomy of an Institution," 8-11.

multilateralism can be argued to have existed prior to the creation of institutions. For example, Rittberger suggests that multilateralism is evident in practice of nineteenth-century conference diplomacy where the formal organizational and institutional formations are not clearly established.[949]

Ruggie also suggests that there are three qualitative characteristics of the multilateral form that are important for understanding how this form operates: generalized principles, indivisibility and reciprocity. First, generalized principles of conduct are norms that specify the appropriate conduct of states and these norms supersede particularistic interests. Second, Ruggie argues that multilateralism is indivisible in that relationships with the whole are more important than relationships between individual members. Caporaso extends part of Ruggie's argument by suggesting indivisibility is a scope variable that suggests costs and benefits are spread over a group of actors.[950] Though not discussed by Caporaso or Ruggie, indivisibility also suggests the spreading out of risks. Last, multilateralism includes the idea of diffuse reciprocity. This qualitative characteristic is the belief that over time multilateral arrangements will yield roughly equivalent benefits and costs to those who are members. Caporaso contends that these three qualities of multilateralism cannot be separated out from the

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[949] Volker Rittberger, "Global Conference Diplomacy and International Policy-Making," *European Journal of Political Research* 11, no. 2 (1983).

[950] James Caporaso, "International Relations Theory and Multilateralism: The Search for Foundations," in *Multilateralism Matters*, ed. John Gerard Ruggie (New York: Columbia University Press, 1993), 53-5.

concept, that they together represent the multilateral form along with the nominal requirement of coordinating national policies in groups of three or more states."[951]

Ruggie essentially argues that multilateralism is an "architectural form" that organizes international political (and I would add, political economic) life. But his multilateral framework is inadequate for understanding why states engage in multilateralism. In fact Ruggie is clear on this point and notes, "while numerous descriptions of this "move to institutions" exist, I know of no good explanation in the literature of why states should have wanted to complicate their lives in this manner."[952] He does direct attention to a possible answer when he argues a "permissive domestic political environment" allowed states to pursue multilateralism in the specific cases of accepting the gold standard and liberalizing trade.[953] States were unable to maintain stability in their domestic economies through individual action, and because of this multilateralism became legitimate. Ruggie attributes the multilateralism of the gold standard and international trade to a political environment that realized solutions had to come internationally. Thus, Ruggie touches on, but then refuses to acknowledge systemic variables that have led to multilateralism. If problems are transnational in nature, multilateralism becomes more legitimate.

The lack of reasons that multilateralism develops is perhaps the greatest failing of this literature. While there is an argument that multilateralism matters, and that it is

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[951] Ibid.

[952] Ruggie, "Multilateralism: The Anatomy of an Institution."

[953] Ibid., 21.

increasing, authors have failed to examine the central question of what is the driving force behind multilateralism.[954] And specifically, why does it matter more now then it did in the eighteenth or nineteenth century? Ruggie is clear to point out this institutional form has existed since the beginning of the modern state system but he also argues that multilateralism is a more prevalent in the twentieth century. Craig Murphy suggests a possible line of inquiry that may shed light on this issue.

Murphy examined the creation of institutions and the growing reliance on institutions in the twentieth century by trying to understand the specific dynamics that led to those organizations being created. He argued that world organizations had a dialectical relationship with the expansion of industry and global capitalism. The emergence of lead sectors in the economy, usually tied to technological advances in communication, led to the creation of organizations around managing these new industries and then to the proliferation of other organizations.[955] Organizations managed global economic relationships, helped create and foster these relationships, and also were created by these relationships. In times of peace or prosperity, these institutions have acted as to advance

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[954] There is a literature that examines the benefits of decreased transaction costs, better information, and reduction in uncertainty. Both regime literature and liberal institutionalism discuss these reasons for the creation of organizations, but both also neglect the actual makeup of the organizations and why multilateral membership is more legitimate or desirable than other kinds of organizational structures. See Keohane, *After Hegemony: Co-Operation and Discord in the World Political Economy*, Krasner, ed., *International Regimes*.

[955] Murphy, *International Organization and Industrial Change: Global Governance since 1850*, 7.

accumulation and regulation. And in times of crisis, it is organizations that have helped move the system to greater stability.[956]

Murphy makes an important contribution to the multilateralism literature because he begins to posit an answer to the question of why multilateralism has increased over time. Looking at the history of organization and arguing from in a Gramscian framework, Murphy sees crisis (both economic and political) as a driving force in the creation of organizations. In fact, the general thesis of the book is that international organizations emerge from the needs of the capitalist world order, and they then serve specific purposes that help preserve that world order. Murphy chronicles the changes in several time periods: the interimperial world order (1850-1914), the interwar period, and the free world order. In each period Murphy looks at how the increase in organizations eventually made the system destabilized and that crisis brought new institutionalism.

This dissertation presents a similar argument as Murphy's in that it suggests that crisis drives institutional innovation. Therefore, crisis has been an instrumental part of states choosing to cooperate and enter into multilateral arrangements to address financial crisis. In addition, this dissertation argues that the choice of a multilateral institution is driven by the necessity for larger forms of cooperation to be required to address problems in the international financial system. By engaging these debates, this dissertation may help further an answer to why multilateralism has been chosen in this sector of international finance.

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[956] Ibid., 9.

## Future Work and Conclusions

To this point, I have discussed where this dissertation has led us in terms of understanding financial crisis response. To close this study it is important to note the places where more work needs to be done and suggest where we go from here to understand financial crisis. I believe the model that has been presented identifies some important patterns and trends, but more work is necessary to better understand and refine these conclusions. In this section I want to suggest places three paths for future study.

First, more work needs to be done on refining and better understanding the global integrative dynamic. The GID is presently defined in terms of broad trends that indicate integration has increased over time. It has been defined this way because much of the empirical work to measure integration and even aggregate global capital movements is not available. This is the case particularly for the nineteenth century. Better measurement would help us understand the more specific role that capital movements and expansions, and credit movements and expansion have on the global political economy in terms of causing crisis and in terms of shaping responses. Scholarship needs to focus on indicators of integration and better long-term aggregate measures of global economic activity, particularly in capital movements and cross border portfolio investment.[957]

Another aspect of the GID that could use attention is weather it accelerates at certain times. Global integration, as measured through capital movements, is a continuous long-term trend that increases over time. However, there are low points and

[957] Some of this work has been done on a country-by-country basis, but aggregate measures are still difficult to come by. This is most pronounced in the early periods, but is even problematic in later periods.

high points in the levels of capital crossing borders. It is unclear if these affect general assessments of integration, but these moments could affect the severity of the crisis and perhaps even determine when a key crisis was most likely. Prior to each key crisis that I identified in this dissertation there is a spike in global investment that seems to accelerate and intensify the interactions among states. A more thorough understanding of how these spikes contribute to crisis would help us better understand responses. More data collection and analysis of aggregate capital movements would help us further explain the trends observed and would also contribute to more specific conclusions and correlations between capital movements, integration, crisis and response.

The second area where there is more work to be done is on the issue of institutional change and development. This dissertation has suggested that financial institutions have become more multilateral out of necessity to deal with an expanding global economy, but this conclusion would probably benefit from a better understanding of the scholarship on institutional development. Studies that could tie the conclusions in this work to the theoretical understanding of institutions and institutional development could give a broader theoretical base for explaining change in response actors and the evolution of multilateral institutions.

Finally, future work needs to be done broadening this study to consider how non-western countries respond to crisis and to consider the connections between global integration and crisis in these parts of the world. Expanding our knowledge of crises in Latin America and Asia would be helpful for understanding financial crisis and response as a global phenomenon.

As the global economy continues to draw states and markets into closer relationships the incidence of crisis and the ease with which crises can spread will be one of the most important issues for scholars of international relations and international political economy to explore. Our knowledge of global crises in the political and humanitarian arenas and institutional responses to these crises already captures our attention. Global financial crises should also be our concern since both political and humanitarian crises can grow out of financial decline. Our scholarship should be expanded to consider financial crises and financial crisis response.

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