Why Are There so Many Banking Crises?

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Abstract: *The last 25 years have seen an impressive number of banking crises all over the world. These crises have renewed interest of economic research on the causes of fragility of banks and the possible remedies to it. The justifications and organisation of public intervention in the banking sector have also been put into question. This article builds on this recent research in order to understand better the causes of banking crises and offer policy guidelines for reform of regulatory and supervisory systems. The main conclusions are:*

- *Although many banking crises have been initiated by financial deregulation and globalization, these crises were largely amplified by political interference.*
- *Supervision systems face a fundamental commitment problem, analogous to the time consistency problem confronted by monetary policy.*
- *The key to successful reform is independence and accountability of banking supervisors.* (*JEL* E58, G21)

1 Introduction

The last 20 years have seen an impressive number of banking and financial crises all over the world. In an interesting study, Caprio and Klingebiel (1997) identify 112 systemic banking crises in 93 countries and 51 borderline crises in 46 countries since the late 1970s (see also Lindgren et al., 1996). More than 130 out of 180 of the IMF countries have thus experienced crises or serious banking problems. Similarly, the cost of the Savings and Loans crisis in the USA in the late 1980s has been estimated to over USD 150 billion which is more than the cumulative loss of all US banks during the Great Depression, even after adjusting for inflation. On average the fiscal cost of each of these recent banking crises was of the order of 12 percent of the country's GDP but

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exceeded 40 percent in some of the most recent episodes in Argentina, Indonesia, Korea and Malaysia.

The map on the next page shows the universality of the problem.

These crises have renewed interest of economic research about several questions: The causes of fragility of banks and the possible ways to remedy this fragility, the justifications and organisation of public intervention. This public intervention can take several forms:

- emergency liquidity assistance by the central bank acting as a lender of last resort;
- organization of deposit insurance funds for protecting the depositors of failed banks;
- minimum solvency requirements and other regulations imposed by banking authorities;
- and finally supervisory systems, supposed to monitor the activities of banks and to close the banks that do not satisfy these regulations.

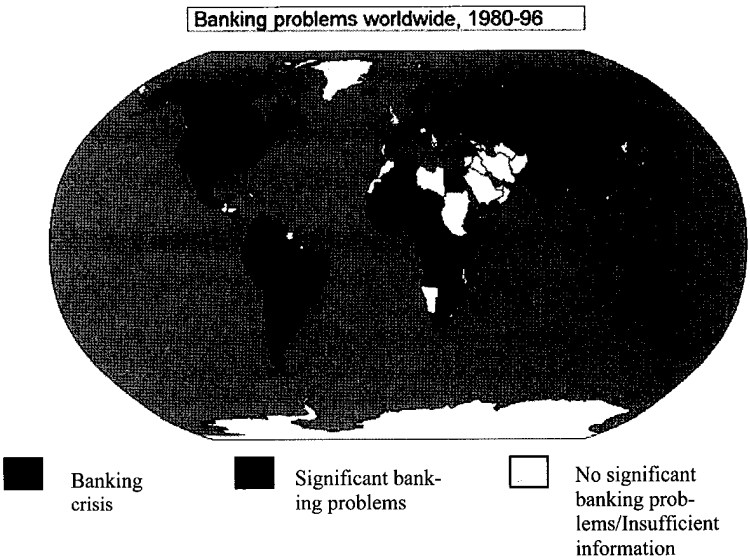
Important reforms have recently been introduced in banking supervisory systems. For example, the American Congress has enacted the Federal Deposit Insurance Corporation Improvement Act in 1991 after the Savings and Loans crisis. Several countries, notably the UK, have created integrated supervisory authorities for all financial services including banking, insurance and securities dealing. Finally, the G10 countries have harmonised in 1989 their solvency regulations for international active banks. This harmonisation, known as the Basel Accord, since it was designed by the Basel Committee of Banking Supervision, was later adopted at national levels by a great number of countries. The Basel Committee is currently working on a revision of this Accord, aiming in particular at giving more importance to market discipline.

The objective of this article is to build on recent findings of economic research in order to understand better the causes of banking crises and possibly offer policy guidelines for reform of regulatory supervisory systems. In a nutshell, my main conclusions will be:

- banking crises are largely amplified, if not provoked, by political interference.

- Supervision systems face a fundamental commitment problem, analogous to the time consistency confronted by monetary policy;[1]
- and finally the key to successful reform is independence and accountability of banking supervisors.

The plan of this article is the following. I will start by studying the historical sources of banking fragility, then I will examine possible remedies: creation of a lender of last resort, and/or deposit insurance combined with solvency regulations. Then I will try to draw a few lessons from recent crises; And finally I will conclude by examining the future of banking supervision.

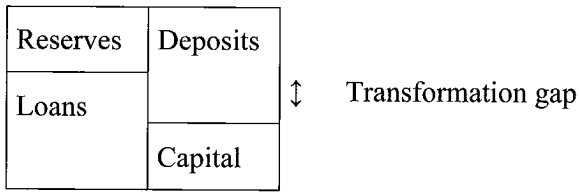


This map was constructed by the author from Table 2 in Lindgren et al. (1996).

[1] After finishing this paper, I became aware of an article of Quintyn and Taylor (2002), also presented in the Venice Summer Institute of CESifo (July 2002), that basically arrives to the same conclusions.

2 The sources of banking fragility

Historically, banks started as money changers. This is testified by etymology. "Trapeza", the Greek word for a bank refers to the trapezoidal balance that was used by money changers to weigh the precious coins. Similarly 'banco' or 'banca', the Italian word for a bank, refers to the bench used by money changers to display their currencies. Interestingly, this money changing activity naturally led early bankers to provide also deposit facilities to merchants using the vaults and safes already in place for storing their precious coins. In England the same movement was initiated by goldsmiths. Similarly, some merchants exploited their networks of trade-posts to offer payment services to other merchants, by transferring bills of exchange from one person to the other instead of carrying species and gold along the road. In both cases, early bankers realised very soon that the species and gold deposited in their vaults could be profitably reinvested in other commercial and industrial activities. This was the beginning of the fractional reserve system in which a fraction of demandable deposits are used to finance long term illiquid loans. This is represented below by this simplified balance sheet of a representative bank.



As long as the bank keeps enough reserves to cover the withdrawals of the depositors who actually need their money, which is much less than the total amount of the deposits, the system can function smoothly and efficiently. But this system is intrinsically fragile. If all depositors demand their money simultaneously, as they are entitled to (the situation is referred to as a bank run) the bank is forced to liquidate its assets at short notice, which may provoke its failure.[2] Whereas bank runs are often inefficient, bank closures are also necessary in order to eliminate inefficient institutions. Such closures correspond to what are known as fundamental runs, where depositors withdraw their money because the banks assets are revealed to be bad investments. This Darwinian

[2] A spectacular example of a bank run occurred in October 1995 in Japan where the Hyogo Bank experienced more than the equivalent of USD 1 billion withdrawals in just one day.

mechanism is useful to eliminate unsuccessful banks and incentivise bankers to select carefully their investments. But, unfortunately, bank runs can also happen for purely speculative reasons. A recent example of a speculative run occurred in 1991 in Rhode Island in the USA, where a perfectly solvent bank was forced to close after the TV channel, CNN, used a picture of this bank to illustrate a story on bank closures, which led the bank's customers to believe the bank was insolvent, whereas it was not.

As we will see, small depositors are now insured in many countries, which means that the modern form of a bank run is more what is called a silent run, where professional investors stop renewing their large deposits, or Certificates of Deposits as they are called, which is the case for example in the Continental Illinois failure in 1984 in the USA.

The mechanism of a speculative run is simple. If each depositor anticipates that other depositors are going to withdraw en masse then it is their interest to join the movement, even if they know for sure that the bank's assets are fundamentally safe. Given that these speculative runs are seriously damaging to the banking sector, several mechanisms have been elaborated to eliminate those speculative runs. The first example was the institution of a lender of last resort.

3 The lender of last resort

The lender of last resort, which consists of emergency liquidity assistance provided by the central bank to the bank in trouble was invented, so to speak, in the UK and the doctrine was articulated in 1873 by the English economist Walter Bagehot, elaborating on previous ideas of Henry Thornton. Bagehot's doctrine was influenced by the systemic crises that followed the failure of Overend & Guerney and Company in May 1866. Overend & Guerney was at the time the greatest discounting house, that is a broker of Bills of Exchange, in the world. During the previous financial crisis of 1825 it was able to make short loans, i.e. provide liquidity assistance to most of the banks on the London place and it became known as the bankers' banker. After the death of its founder, Samuel Guerney in 1856, the company was placed under less competent control. Experiencing big losses on some of its loans it was forced to declare bankruptcy in May 1866 with more than UKP 11 million in liabilities. As a result of this failure, many small banks lost their only provider of liquidity and were forced to close as well, even though they were intrinsically solvent. In order to avoid such crises, Bagehot recommended that the Bank of England be ready to provide liquidity assistance to individual banks in distress. The main points of Bagehot's doctrine were that the central bank should a) lend only

against good collateral, so that only solvent banks might borrow, and that the central bank would be protected against losses; b) lend at a "very high" interest rate so that only "illiquid" banks are tempted to borrow and that ordinary liquidity provision would be performed by the market, not by the central bank; and c) announce in advance its readiness to lend without limits in order to establish its credibility to nip the contagion process in the bud. The doctrine was first put into application by the Bank of England in the Baring crisis of 1890. It was then adopted in continental Europe, resulting in the absence of a major banking crisis for more than 30 years. In the USA, prior to the creation of the Federal Reserve System in 1913, commercial banks organised a clearing house system which served as a private lender of last resort for several decades.

Among more recent examples where Bagehot's doctrine was followed to the letter are the Bank of New York case of 1985 and the second Barings crisis in 1995. On 21 November 1985 the Bank of New York experienced a computer bug. It was a leading participant in the US Treasury bond market and the computer had paid out good funds for the bonds bought by the bank, but would not accept cash in payments for the bonds sold. This quickly led to a USD 22.6 billion deficit. Even if there was no doubt about the solvency of the Bank of New York, no single bank was in a position to cover such a huge deficit by an emergency loan. Similarly there was not enough time to organise a consortium of lenders. So the New York Fed solved the problem by providing an emergency loan against good collateral.[3] Similarly, on 24 February 1995, Barings (once again!) made it known to the Bank of England that its securities subsidiary in Singapore had lost USD 1.4 billion, three times the capital of the bank, due to the fraudulent operation of one of its traders.[4] The Bank of England decided that, since bilateral exposures were relatively limited and the source of Barings failure was a specific case of fraud, the threat of contagion in the UK financial system was not large enough to justify the commitment of public funds. As a result the bank failed on 26 February. However, the Bank of England clearly made public its willingness to provide adequate liquidity to the UK banking system in case of a market disturbance and, as matter of fact, the announcement itself was enough to avoid any such disturbance.

It is interesting to notice that in these two episodes the intervention of the central banks was triggered by different types of situations. It was a failure of the market to provide liquidity assistance to a solvent bank in the case of the Bank of New York, and in the Barings case, it was a desire to provide liquidity support to the market, and more specifically to the bank, that might have been

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3 This account is drawn from Goodhart (1999).

4 This account is drawn from Hoggarth and Soussa (2001).

affected by the closure of a major participant. However, in both cases Bagehot's doctrine was followed and tax payers' money was not involved. This is unfortunately not always the case. There are indeed several reasons why the central bank might consider supporting insolvent institutions. The first is systemic risk, i.e. the fear that the failure of a large institution might propagate to the rest of the financial system. Given that the central bank is typically responsible for the overall stability of the financial system, it is conceivable that it considers assisting large insolvent institutions whose failure might propagate to other banks. This reason was invoked on several occasions, for example in the bailout of Johnson Matthey Bankers by the Bank of England in 1984, even if the BOE waited for more than a year before organising a consortium. A similar case is that of Continental Illinois in the USA, also in 1984. Incidentally, the bailout of Continental Illinois (which effectively amounted to subsidizing the bank's shareholders and uninsured depositors with taxpayers' money) led to the unfortunate notion of a bank that would be "too big to fail".

A second reason why insolvent banks might be bailed out is political interference. Let me take as an illustration the case of my own country, France, where it is interesting to contrast two episodes. The first episode corresponds to the failure in 1988 and 1989 of two Franco-Arab banks, Al Saudi Bank, and Kuwaiti-French bank, who were essentially recycling petro-dollars in loans to developing countries. They experienced important losses on their lending portfolios. The Bank of France decided not to intervene and the two banks were forced to close. By contrast the largest French bank at the time, the Credit Lyonnais, whose slogan was ironically "The Power to Say 'Yes'", started in 1988 a disastrous policy of bad investments which initially resulted in a spectacular increase of the size of its total balance sheet (30 percent in two years) and a 200 percent increase of its industrial holdings. However, very soon, heavy losses materialised: the equivalent of USD 0.3 billion in 1992, USD 1.2 billion in 1993 and USD 2 billion in 1994. After some time the French government felt compelled to intervene. The total cost of the three successive rescue plans that were implemented was estimated to USD 25 billion which, in per capita terms, is of the same order of magnitude as the total cost of the saving and loan crisis in the USA. A similar situation occurred in Japan during the Jusen crisis in 1995–99. Jusens were non-deposit taking subsidiaries of banks, created to provide affordable home financing for individual borrowers. The frenetic lending activity of these institutions contributed to the building up of the Japanese real estate bubble. When this bubble burst in 1995 the Japanese authorities had to inject the equivalent of USD 24 billion in order to avoid a collapse of the Japanese financial system. Japanese banks are also famous for several spectacular episodes of fraud. For example, in 1990 it was disclosed by Daiwa Bank that a security trader in its New York branch had been able to conceal a cumulative loss of USD 1.1 billion on the US Securities over 11 years. Simi-

larly, in 1996 Sumitomo acknowledged that one of its copper traders was responsible for fraudulent transactions that amounted to a cumulative loss of USD 1.8 billion over ten years.

Let me now turn to two other fundamental mechanisms of public intervention in the banking sector, namely deposit insurance and solvency regulations.

4 Deposit insurance and solvency regulations

In the USA the first federal deposit insurance fund was created in 1934,[5] when the FDIC was set up in order to prevent bank runs and to protect small and unsophisticated depositors. The initial coverage was USD 2,500 but it was gradually increased to the present figure of USD 100,000. In the UK the system is less generous, its coverage is only limited to 75 percent of the first USD 20,000. In continental Europe deposit insurance has long been implicit in the sense that losses were often covered ex-post by tax payers' money or by a compulsory contribution of surviving banks, what the Bank of France used to call "solidarité de place". A European Union directive of 1994 requires a minimum harmonisation among member countries, with the implementation of explicit deposit insurance systems having a minimum coverage of 20,000 euros, funded by risk based insurance premiums. It has been argued that these deposit insurance systems were partly responsible, paradoxically, for the fragility of the banking system, whereas in fact they were imagined, or designed, exactly for the opposite purpose. Several studies of the IMF tend indeed to show that countries that have implemented such systems are more likely to experience banking crises, surprisingly. The proposed explanation is that in such countries bankers feel free to take excessive risks, given that their insured depositors are not concerned by the possibility of a failure of their bank, since they are insured in all cases. In the absence of a deposit insurance system, like is the case in New Zealand, for example, bankers are disciplined by the threat of massive withdrawals when depositors become aware of any excessive risk taking by their bank. The doctrine in New Zealand since December 1994 is thus "freedom with publicity". Banks are not really supervised but are only required to disclose detailed information on their accounts to their customers, and bank directors are personally liable in case of false disclosure statements.

In most other countries the reaction to banking crises has been on the contrary, to reinforce banking regulations and in particular solvency regulations. This started at the international level where the Basel Committee of Banking Super-

[5] State deposit insurance funds were created much earlier, starting in 1829 (New York State). For a good history of deposit insurance in the USA, see FDIC (1998).

vision enacted in 1988 a regulation requiring a minimum capital level of 8 percent of risk weighted assets for international active banks of the G10 countries. The different weights were supposed to reflect the credit risk of the corresponding assets. This regulation was later amended to incorporate interest rate risk and market risk. It was also implemented with small variations at the domestic level by the banking authorities of several countries. In particular in the USA, the reform of the Federal Deposit Insurance Corporation system introduced an important notion, that of prompt corrective action which is some form of gradualism in the intervention of supervisors in order to force them to intervene before it is too late. This is based on a full set of indicators known as CAMELS Ratings.

Let me now discuss the justifications for these solvency regulations, which are essentially two fold. First, they provide a minimum buffer against losses on bank's assets and therefore decrease their probability of failure. The second justification is to provide incentives to bank stockholders to monitor the bank manager more closely, because these stockholders have more to lose in case of failure. This was the spirit of the Basel Accord of 1988 which was however severely criticised for being too crude and encouraging regulatory arbitrage by commercial banks. It was argued in particular that it was responsible for a credit crunch in the 1990s because banks found it profitable to substitute government securities to commercial and industrial loans in their portfolios of assets.

5 Lessons from recent crises

Let me try to draw some lessons from the crises of the last 25 years, which have provided very useful evidence for research. Economists have examined several questions. For example, the evaluation of the social cost of these crises is not easy. Hoggarth et al. (2001) criticise the use of fiscal costs, that is the amount transferred from taxpayer to creditors of failed banks, as a true measure of the economic cost of banking crises. Indeed those fiscal costs are more a transfer than an aggregate cost to society. So they propose instead to evaluate the output loss, i.e. the amount of wealth that would have been provided or produced in the country in the absence of a crisis. They find that this estimated output loss is large, around 15 to 20 percent of the annual GDP and even larger in the case of a twin crisis, that is to say a currency crisis occurring simultaneously with a banking crisis. This confirms previous studies of Kaminsky and Reinhardt (1996, 1999) who also show that a different pattern seems to emerge in, respectively developed countries and developing countries. In developed

countries, banking crises alone are already very costly whereas in developing countries it seems that the cost is significant only in the case of a twin crisis.[6] Other economists, like Bell and Pain (2000) or Davis (1999) have tried to establish common patterns of banking crises and derive indicators for predicting those crises. Davis argues in particular that the East Asian crisis that started in 1997 exhibited features very similar to earlier crises in Scandinavia or Japan, namely vulnerability to real shocks, such as export price variations and foreign currency exposure. However, the East Asian crisis had very little impact on the securities market of the OECD countries by contrast with the Russian crisis of August 1998. The reason seems to be that the moratorium on Russian public debt generated an unwinding of leverage positions on US Treasury markets – USD 80 billion for LTCM alone, more than USD 3,000 billion for commercial banks altogether. By contrast, the Asian crisis only resulted in bank runs instead of affecting markets and so the consequence was only failure of several domestic banks.

Also, economists have tried to assess the characteristics of banking systems that were more likely to be associated with a large probability of crisis or a large cost of resolution. Honohan and Klingebiel (2000) show in particular that pre-crisis provision of liquidity support, which is often used by governments to delay the recognition of a crisis is the most significant predictor of a high fiscal cost, once the crisis erupts.

Finally, the Scandinavian banking crisis (1988–93) was much more dramatic in Finland and to a lesser extent in Norway than in Sweden. The common causes were the deregulation of financial markets, an economic boom and an asset market bubble (accompanied with a spectacular increase in USD denominated foreign debt) followed by a real shock. In the case of Finland it was the collapse of the Soviet Union. After the rise in European interest rates in 1989, Finland and to some extent other Nordic economies, faced a serious competitiveness problem partly due to their indebtedness. An attempt to defend fixed exchange rates led to very high interest rates and deflation. The final result in Finland was a massive devaluation, followed by an asset bubble burst. Some large commercial banks and the entire saving bank sector had to be taken over by the government. Non-performing assets were separated and transferred to a bad bank. Public support to all of the banks was provided, but the stockholders of the banks were not expropriated and some managers remained in charge. As a result the cost was huge, of the order of 8 percent of GDP.

If you compare with Norway (it is even more compelling in the case of Sweden) the causes were the same as in Finland except that the real shock was

[6] For a thorough analysis of currency crises and international financial architecture see Tirole (2002).

more an oil price decrease than the collapse of the Soviet Union as for Finland. But the symptoms were similar: three large commercial banks and two regional saving banks had to bailed out by public funds because they incurred large losses on their loan portfolios, and as a result became under-capitalised. But the Norwegian government was tougher: it injected money only in exchange for drastic reduction in loan portfolios, import and cost cuts, and shareholders were fully expropriated, which was not the case in Finland. Of course the shareholders of failed Norwegian banks later required compensation arguing that the banks were not actually closed, but they lost the case. Bank managers and directors were almost systematically replaced and as a result the cost of the crisis was much smaller, less than 3 percent of GDP.[7]

6 The future of banking supervision

Let me now conclude by trying to assess the possible future of banking supervision, starting with the remark that the traditional approach to banking supervision was very paternalistic. In the 1960s and 1970s, banks were in many countries protected from competition through entry restrictions and price controls, in exchange for accepting to follow the detailed prescription of supervisors. This quid pro quo between banks and governments is not viable anymore, for several reasons.

First of all, globalisation and deregulation have made competition very fierce, in particular by non-banks, i.e. firms that are not regulated. Also, the increased complexity of financial markets and banking activities implies that supervisors are not any more in a position to monitor closely the activities of all banks. This feature is illustrated by the failure of the Basel Committee to impose the standardised approach to market risks. Instead, the Committee was obliged to accept that large banks use their own internal models. It is expected that in the future few banks will follow the standardised approach, since they will probably prefer to use one of the models developed by the large banks.

The proposed reform of the Basel Accord is supposed to rely on three "pillars". The first pillar is a refined capital requirement with very complex weights, designed to be more in line with market assessments of risks. The second pillar is a more pro-active role of banking supervisors, and finally the third pillar is an increased recourse to market discipline. The problem is that supervisors have a general tendency to interfere too much when the banks are well run and intervene too less when the banks have problems. Too much

[7] The rebound of oil price due to the Gulf war may also have helped the crisis resolution. I thank Jon Danielson for this remark.

attention in my opinion has been devoted to the first pillar, namely the design of a very complicated system of risk weights. In my opinion it is not the job of the regulators to tell the banks what they have to do when they are not in trouble. On the contrary, their job is to take care of ailing banks. Thus, I believe more attention should be devoted to the two other pillars of Basel II, namely supervision and market discipline. In particular, it should be stated precisely when and how supervisors will intervene and which instruments should be used to generate market discipline. Several US economists, for example Calomiris (1998) and Evanoff and Wall (2000), have proposed such an instrument, namely compulsory subordinated debt. Without going into the details, let me just mention why subordinated debt can sometimes be a good instrument for generating market discipline. It can indeed provide direct market discipline since the cost of issuing new debt increases when the risk profile of the bank increases. Thus, if the bank is forced to issue subordinated debt on a regular basis, it will have incentives not to take too much risk. But there is also indirect market discipline because the price of subordinated debt in secondary markets decreases when the risk of failure of the bank increases. So the secondary market price of subordinated debt provides additional information to the regulator on the perceived risk of failure of the bank. But the real concern is supervision, not regulation. One needs to be sure that supervisors impose corrective measures or even close the bank before it is too late. The core of the problem is that any bank is always worth more alive than dead. This is so in particular because the informational capital of the bank is lost in case of a closure. So, even a competent and benevolent planner would always find preferable ex-post to provide liquidity assistance to a bank in distress. But of course, if this is anticipated by bankers ex ante, this can be the source of moral hazard. Proper incentives can only be provided if stockholders and top managers are truly expropriated in case of problems, like the Norwegian case is a good illustration. Empirical evidence on the resolution of bank defaults suggests that failed banks are more often rescued than liquidated. For example, Goodhart and Schoenmaker (1995) show that the effective methods of resolving banking problems vary a lot from country to country, but in most cases they result in bail outs. Out of a sample of 104 failing banks, Goodhart and Schoenmaker find that 73 resulted in rescue and only 31 in actual liquidation.[8] This is confirmed by other studies. For example, Santomero and Hoffman (1998) show that in the USA the discount window, that is the lender of last resort facility, was often used improperly to rescue banks that subsequently failed. So market discipline can be useful in two respects: by directly penalis-

[8] The "Purchase and Assumption" method, whereby the failing bank is merged with a safe bank is often used in the USA. This allows to some extent a preservation of the failed bank's "informational capital".

ing the banks who take too much risk without the need for an intervention by supervisors; by indirectly providing new objective information, like private ratings, interest rate spreads or secondary prices of debt that can be used by supervisors. But market discipline can also be dangerous. In particular, market prices become erratic during crises and diverge from fundamentals. Co-ordination failures may occur between investors whereby each of them has a good and justified opinion of the solvency of a given bank but refuses to buy its subordinated debt because it anticipates that other investors will not lend to the bank. This is what game theoreticians call self fulfilling prophecies. The theoretical analysis of this was done by Morris and Shin (1998) for currency crises and later Rochet and Vives (2002) developed an extension for banking crises.

But there are other dangers of market discipline. For example, it is proposed by the reform of the Basel Accord to condition capital requirements on private ratings. But can we really trust rating agencies? They often have less information than the supervisors and sometimes even less than other banks. Secondly, the market for ratings is not really competitive and conflicts of interests between auditing and consulting activities may occur as was exemplified by the recent Enron-Andersen case. Finally, market discipline can be the vehicle for contagion. It could be a good disciplining device during good times, in particular subordinated debt, but it can also be the source of systemic risk during crises.[9]

However, the main difficulty is to obtain credibility of regulation and to get rid of political pressure on banking supervisors; The source of this difficulty is not only corruption and regulatory capture, but more fundamentally the absence of commitment power of governments. It is a classical time consistency problem, that is even more severe in the case of democracies than in the case of corrupt regimes. I therefore argue in favour of independence and accountability of banking supervisors like has been done for monetary policy. So, instead of discretionary power given to bank supervisors, sometimes referred to as constructive ambiguity proposal, I advocate in favour of an explicit mandate given to banking supervisory agencies. This is of course difficult to design and is a challenge for further research. For example, it would be useful to define objective criteria for deciding when a bank has to be bailed out for systemic reasons; and also how to organize ex-post accountability with sanctions on supervisors if they don't perform well.

To summarize, I believe the main reason behind the frequency and magnitude of recent banking crises is not deposit insurance, is not bad regulation, is not

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9 A theoretical analysis of this is provided in Rochet and Tirole (1996).

incompetence of supervisors. It is essentially the commitment problem of political authorities who are likely to exert pressure for bailing out insolvent banks. The remedy to political pressures on bank supervisors is not to substitute supervision by market discipline, because market discipline can only be effective if absence of government intervention is anticipated. So, the crucial problem is credibility of political authorities and the way to restore this credibility is to ensure independence and accountability of bank supervisors. More work needs to be done for specifying the precise institutional reforms that are necessary to achieve this goal.

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