workers who had been encouraged to become home owners now saw themselves facing foreclosure and the loss of their property. This hardship helped to increase organizing for relief, culminating in the hunger march at the Rouge plant in the spring of 1932 that left four protestors dead. While the United Auto Workers grew greatly in strength in the late 1930s, the Ford Motor Company was able to forestall formal organizing until the spring of 1941. At that point, according to Barrow, the "Fordist" project of mass production supported by mass consumption through high wages became a joint project of the government, capital, and labor.

The "treaty of Detroit" coincided with a return of prosperity to the region in the immediate postwar era. The further spread of car ownership, investment in highways, and the ongoing relocation of production led to decentralization of economic activity well beyond Ford's project in Dearborn. Ultimately, the diffusion of auto production beyond the borders of the United States helped to end this era of prosperity. Barrow suggests that the failure of government, business, and labor to develop viable models of regional planning linking the city and the suburbs worsened the impact of the resulting deindustrialization.

Barrow provides a compelling account of these events and Ford's role in them. She skillfully weaves together the historical, economic, and geographic literature with archival sources, including workers' oral histories. Some of her discussion of more narrowly economic topics is imprecise or at times confusing: for instance, her rough equating of vertical integration with monopoly (p. 19), or her claim that increasingly bureaucratic, "welfare capitalist" labor policies transformed "an impersonal business interaction...into a relationship like that of an extended family" (p. 94). But Barrow is particularly adept at illustrating the contradictions and unintended consequences arising from Ford's efforts, including the way in which "the pursuit of the American dream promoted by Henry Ford prompted African American workers to challenge the hierarchy he intended for them" (p. 119), and the fact that, though Ford viewed the suburb as providing a connection to the rural past, it became the locus of many modern conflicts, including battles over racial integration and women's roles. Barrow's book will be of use to historians and economists, both students and professionals, interested in the history of Ford, Detroit, and Dearborn, and the interplay of economics and geography in that history.

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Strained Relations: US Foreign-Exchange Operations and Monetary Policy in the Twentieth Century. By Michael D. Bordo, Owen F. Humpage, and Anna J. Schwartz. Chicago: The University of Chicago Press, 2015. Pp. x, 442, \$97.50, cloth. doi: 10.1017/S0022050716000097

Ordinarily, the word "definitive" is overused, but not in this case. The authors have written an exhaustively-detailed history of intervention in the foreign exchange markets by the U.S. Treasury and Federal Reserve System. The account includes the Exchange Stabilization Fund, which began operation in 1934, the use of swap lines in the Bretton Woods era, the dirty floats of the 1970s after the breakdown of Bretton Woods, and the



attempts of the Plaza and Louvre Accords to mitigate first the rise and then the decline of the dollar. The authors summarize their findings as follows (p. 26):

Frequent intervention ended because it did not offer monetary authorities an independent instrument with which to pursue an additional policy goal. Intervention did not solve the trilemma. Instead, intervention and its associated institutions weakened the Federal Reserve's credibility for price stability.

The original statement of the "trilemma" is in John Maynard Keynes A Tract on Monetary Reform (1923 in The Collected Writings of John Maynard Keynes, vol. IX, "Essays in Persuasion." London: The Macmillan Press, 1972). Keynes argued in Chapter 4 that given the free movement of capital across international boundaries a country had to choose between stabilizing the internal value of its currency (price stability) and its external value (fixing the foreign exchange value). Like Keynes, Milton Friedman (1953, "The Case for Flexible Exchange Rates in Milton Friedman, ed., Essays in Positive Economics. Chicago: The University of Chicago Press, 1953) provided a quantity-theory framework that distinguished real from nominal variables. Friedman gave this framework predictive power in general and the trilemma hypothesis in particular through the assumption that "markets work." That is, markets do a good job of determining relative prices and associated market-clearing real quantities.

With respect to the price level, the central bank can follow a rule that separates the determination of the price level from the determination of relative prices. At the same time, the related assumption that markets also determine a unique value for the real terms of trade implies that the central bank's rule must either determine the value of the price level and let the exchange rate vary in order to validate the real terms of trade or it must determine the value of the exchange rate and let the price level vary in order to validate the real terms of trade. In the latter case, the price level varies as part of the operation of the price system. Friedman's "markets work" assumption challenged the Keynesian assumption of "market dysfunction," which holds that fixed nominal prices make real variables move with changes in aggregate nominal demand.

Strained Relations documents the experiments that the "monetary authorities [provided in treating the foreign exchange value of the dollar as] an independent instrument." The Friedman hypothesis was that such attempts would be destabilizing not stabilizing. During the Bretton Woods system, countries like Britain that pursued independent monetary policies stumbled from one foreign exchange crisis to the next despite capital controls. Inflationary monetary policy in the United States exported inflation to the other Bretton Woods countries, which pegged to the dollar.

In the 1980s, after the dollar had retraced its dramatic rise in the first half of the 1980s, the United States, Germany, and Japan entered into the Louvre agreement. The United States wanted Germany and Japan to stimulate their economies. Japan did not want the dollar to depreciate further against the yen thereby lessening the competitiveness of its export industries. Germany feared dollar appreciation, which meant mark depreciation and inflationary pressures in Germany due to the higher price of imports. The authors document the large amounts of yen and marks the Fed accumulated in an attempt to stabilize the dollar. Concerned that increases in the funds rate would give the central banks of Japan and Germany an excuse to raise their own rates and back off stimulus, the Fed held off in 1987 when the economy strengthened. The end result of



the attempt to use the dollar as a weapon to push Germany and Japan into stimulating their economies was widespread inflationary monetary policy, which required monetary contraction starting in 1989 (see Robert L. Hetzel, *The Monetary Policy of the Federal Reserve: A History.* Cambridge: Cambridge University Press, 2008, Ch. 14).

Policy makers at the New York Fed especially believed that speculators drove exchange rates and they, the policy makers, could intervene in a way that returned foreign exchange rates to values consistent with fundamentals. As the authors' detailed analysis makes clear, however, interventions produced the desired movement in exchange rates no more often than would have occurred by chance. That fact should give pause to proponents of macroprudential regulation who want the Fed to determine when asset values are out of line with fundamentals and adjust the funds rate in response.

Why is learning so hard? Was not everything made clear in Keynes' *Tract*? The problem arises because at times markets do not work. In recessions, individuals who want to work cannot find work. Milton Friedman's answer was that the price system does work provided that the central bank follows a rule that controls money creation in order to prevent unanticipated changes in the price level. Such changes are disruptive because they force an uncoordinated change in all relative prices.

Economists divide over whether the shocks that precipitate recessions originate in market forces or in the interference in the operation of the price system by the central bank. The latter creates the monetary emissions and absorptions that force unforecastable changes in the price level. This identification of the source of shocks as real or monetary requires characterization of the evolution of monetary policy. With that characterization, one can inquire whether a necessary condition for recession is frustration of the working of the price system by the central bank.

Unfortunately, central bankers do not document what is systematic about their behavior. Their preferred language of discretion crowds out any record of the systematic character of policy. That is why a book like *Strained Relations* is so important. Its methodical recording of a key aspect of Fed behavior provides documentary evidence on the nature of monetary policy. When central banks make mistakes, they bring down the world economy. Surely, the returns to the systematic study of the historical experience of central banking are very high. *Strained Relations* sets a high bar for the quality of such research.

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ASIA AND EURASIA

Investing in Japan: Foreign Capital, Monetary Standards, and Economic Development,
1859–2011. By Simon James Bytheway. Harvard East Asian Monographs 370.
Cambridge, MA: Harvard University Press, 2014. Pp. xiv, 286. \$39.95, cloth.
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After centuries of isolation, Meiji Japan underwent a significant economic and social transformation. *Investing in Japan* argues that access to foreign capital was a fundamental driver of this far-reaching change. Major investments like railroad construction



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