

## **Minsky's Theory of Financial Crises in a Global Context**

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Hyman Minsky's theory of financial crises was developed in the context of a domestic economy. Recent financial instability in the international economy, however, suggests that it would be useful to examine his theory in a more global environment. After briefly discussing the main themes of Minsky's domestic theory in the first section, this paper then attempts to identify how the theory would need to be modified to take account of the international setting. In the last section, institutional changes in the global economy are investigated and their relevance to financial crises is evaluated in light of the theory discussed in the second section.

### ***Main Themes of Minsky's Domestic Theory of Financial Crises***

For our purposes here, we will consider Minsky's theory under the following headings: the systemic development of financial fragility; the movement to the brink of financial crisis; the disruption of stability by a "not unusual" (surprise) event; and debt-deflation, including the ability to prevent the debt-deflation process.

#### *The Systemic Development of Financial Fragility*

Minsky's theory of financial crises is set within the context of an expanding economy. As the expansion develops, optimism increases, and conventions about the proper level of debt and risk begin to change. Prices of financial assets rise and the general level of speculation increases. Speculation is taken to be the attempt to bet on the future direction and psychology of the market (Keynes 1936, 158), and also the more general

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process of financing assets whose value depends on future developments (Minsky 1975, 120–23).

As attitudes about risk and proper liability structures change, the financial system becomes increasingly fragile. Minsky's view is that fragility grows as debt levels increase, the proportion of short-term debt rises, liquidity declines, and speculative and Ponzi firms (see below) increase (Minsky 1977, 142). The proportion of short-term debt increases as firms take advantage of a normal yield curve, in which long-term interest rates are higher than short-term rates. "With such a rate pattern, one can make on the carry by financing positions . . . in long-term financial assets by short-term, presumably liquid, debts" (Minsky 1986, 211).

The terms *hedge*, *speculative*, and *Ponzi finance* are used to indicate the relative difficulties that economic units have in repaying debt. The classifications revolve around the relationship between cash receipts due to normal operations and cash payment liabilities due to debt. A hedge firm is able to meet all cash payment liabilities with cash receipts. A speculative firm, however, has difficulty meeting some payment liabilities, usually those coming due in the short term. Typically, a speculative firm will have to refinance some short-term liabilities. A Ponzi firm has the most difficulties; it must borrow to meet current interest payments. Thus a Ponzi firm is continually increasing its outstanding debt.

### *The Movement to the Brink of Financial Crisis*

Minsky argued that there would be a tendency for speculative and Ponzi units to increase, in relation to hedge units, with an increase in interest rates: "speculative and Ponzi-finance units are vulnerable to changes in interest rates . . . increases in interest rates will raise cash-flow commitments without increasing prospective receipts" (Minsky 1986, 209). The Federal Reserve, by increasing interest rates in the context of tightening monetary policy, has thus been in the position of actually worsening financial conditions: "The Federal Reserve can bring a halt to an inflationary process only as it forces high enough interest rates so that units which need refinancing are found to be ineligible for financing . . . Since the mid-1960s the Federal Reserve has been able to force a contraction only as it has taken the economy to the brink of financial crisis" (Minsky 1982, 199).

### *The Disruption of Stability by a "Not Unusual" (Surprise) Event*

In such a vulnerable situation, a "not unusual" event is capable of initiating a financial crisis. Since the future is uncertain, if such an event, like a failure of a large company or bank, suddenly occurs, the optimistic expectations that had developed during the boom are subject to significant revision (Crotty 1994). These events are surprises in the sense that they cannot be predicted. However, "the fragility of the system makes the appearance of such a surprise event likely . . . the existence of such an event should best

be understood as an . . . endogenous reaction to the pressures building in the financial system" (Wolfson 1994, 147).

### *Debt-Deflation*

In Minsky's view, the financial crisis leads to an increased unwillingness to finance investment. The decline in investment spending negatively affects profits, which only worsens the difficulties in meeting debt payment commitments. At this point the possibility arises of a debt-deflation process, in which defaults on debt payments lead to a decline in aggregate demand, which reduces prices, increases the real value of outstanding debt payment commitments, and accelerates the interacting downward spiral (Fisher 1933).

The debt-deflation process, however, has not taken place in the United States since the Great Depression. According to Minsky, two developments have kept the debt-deflation process at bay: a big bank and a big government. The Federal Reserve, by intervening as a lender of last resort, has been able to stabilize financial markets and keep the financial crisis from worsening. And increases in the federal budget deficit, by stimulating aggregate demand and sustaining business profits, have prevented the debt-deflation process from developing.

Minsky emphasized, though, that lender of last resort operations and prevention of the debt-deflation process are not sufficient. In order to reduce the likelihood of a financial crisis and potential debt-deflation from reappearing, policymakers need to rein in the financial innovations, practices, and attitudes that had led to the past bout of exuberant financing. "If the lender-of-last-resort interactions are not accompanied by regulations and reforms that restrict financial market practices, then the intervention sets the stage for the financing of an inflationary expansion, once the 'animal spirits' of business people and bankers have recovered from the transitory shock of the crisis" (Minsky 1982, 198-99).

### ***Minsky's Theory in a Global Context***

How would Hyman Minsky's theory of financial crises have to be modified to take account of the international economy? In what follows, this issue is addressed.<sup>1</sup> Throughout, the exemplar for a global financial crisis is taken to be the Asian financial crisis, although financial crises involving the international financial system can develop in other ways as well.<sup>2</sup>

Obviously, a key issue in extending the domestic theory is the possibility that money from one country can be lent or invested in another country. In the prelude to the Asian financial crisis, lending and investment to "emerging markets" became the hot new area in the 1990s. Partly as a result of the recession and falling interest rates in the United States and other developed countries in the early 1990s, billions of dollars

flowed to countries in Asia, to lend to Asian banks and businesses and to invest in Asian financial markets. As profits grew, expectations of further profits expanded, which led to further flows of funds, in a speculative, endogenous development of expectations, confirming Minsky's perspective. As debt was extended and speculative investment expanded, financial fragility in the Asian countries increased. However, without the ability to cross national borders, it is unlikely that financial fragility would have developed as rapidly as it did.

Of course, the importance of the ability of funds to cross national borders can be reduced if there are limited opportunities for investment of foreign funds in domestic financial markets. Thus what is also necessary for financial fragility to develop in this way is a lack of regulations and laws limiting foreign financial investment.

As funds poured into Asian markets, few investors thought it was necessary to hedge these investments, since exchange rates in these countries had been stable. The speculative bet that exchange rates would remain stable proved to be an expensive error. Thus, in addition to the characteristics of domestic financial fragility mentioned by Minsky, we should consider exchange-rate risk to be an aspect of financial fragility in the global environment.

For Minsky, an important component in the development of financial fragility is an increase in speculative and Ponzi finance. One important source of the financial vulnerability implied by speculative and Ponzi finance is the increasing attraction of "making on the carry" by borrowing at relatively low short-term rates and lending at high long-term rates. Financial institutions used this device in the Asian financial crisis by borrowing in countries in which interest rates were low, such as Japan, and lending in other Asian countries, in which interest rates were higher. It was termed the "carry trade."

However, if loans are extended by financial institutions in one country to borrowers in another country, what becomes increasingly relevant for borrowers is the stance of monetary policy, and the direction of interest rates, in the country from which the loans are being made. Apparently, the rumor of increasing interest rates in Japan was a precipitating factor in the Asian financial crisis, as profits from the carry trade were threatened.<sup>3</sup>

In addition to increases in interest rates in foreign countries, changes in exchange rates can also make it more difficult to repay debt. If international loans are made in hard currency, then a fall in the domestic currency against the hard currency can increase the amount of domestic currency borrowers must earn in order to repay their loans. Although the Asian countries went to great lengths to keep their currencies from falling, the pressure put on the currencies from capital fleeing from Asia ultimately broke the pegs.<sup>4</sup>

As financial fragility worsens, Minsky contended that a "not unusual" event is capable of initiating a financial crisis, which Minsky identified with the forced selling of assets to raise cash and sharp declines in the price of assets (Minsky 1977, 140). In the context of the global economy, a development of interest is the spread of financial crises

from one country to another. In Asia, the financial crisis began in Thailand. However, since financial fragility had developed in other Asian countries as well, when investors fled Thailand, it was perhaps to be expected that they would flee the other countries as well. This "contagion" effect proved to be the initiating event for financial crises in the other countries.<sup>5</sup>

As investors fled financial markets in Asia and as exchange rates fell, the pressure on domestic borrowers to repay debts in hard currency intensified, as noted above. As falling exchange rates increased the real value of debt repayment in hard currency, more borrowers were unable to meet debt payment commitments, and more loans were defaulted. As loan defaults mounted, the momentum to flee intensified. Loans were not rolled over or renegotiated, investors fled financial markets, and the exchange rate fell further. Thus an interactive process developed that ultimately spiraled downward and intensified the crisis, a process very much like the debt-deflation process at the domestic level.

As discussed above, Minsky observed that one way to stop a debt-deflation process was by means of a big bank acting as a lender of last resort. The obstacle, however, to central banks in Asia acting as a lender of last resort was the need to repay loans in hard currency. Although Asian central banks could act as a lender of last resort in domestic currency, this would not help borrowers who had debt obligations in US dollars or yen. Because there was not a central bank that was prepared to act as a lender of last resort on a global level, the debt-deflation process in Asia intensified.

In Minsky's theory of financial crises, the other intervention that helps to restrain the debt-deflation process is big government. Of course, at the international level, there is no central government. By coordinating macroeconomic policy to stimulate aggregate demand, though, governments could approximate the role that Minsky suggests.<sup>6</sup> However, this did not happen after the Asian financial crisis.

The primary response to the Asian financial crisis at the international level was the intervention of the International Monetary Fund. But, as Jan Kregel (1998a) pointed out, the IMF's intervention only made the situation worse. Rather than providing a floor to aggregate demand, the IMF mandated policies that reduced aggregate demand.

We can summarize the above argument as follows: Minsky's theory can be modified so that, *in a global context*, financial fragility is increased by *the ability of funds to cross national borders and invest in domestic markets; an increase in exchange-rate exposure; and global interest-rate speculation*, such as the "carry trade." The movement to the brink of financial crisis can come about from *increases in foreign interest rates and decreases in exchange rates*. The "not unusual" event can be *contagion*, and debt deflation can take the form of a *debt-exchange-rate interaction*. The debt deflation can be worsened by *the absence of a global central bank, the absence of coordinated macroeconomic policy, and intervention that reduces aggregate demand*.

### ***The Institutional Setting of Minsky's Global Theory***

Hyman Minsky, as a Post Keynesian institutionalist, took the institutional setting of his theory seriously. Therefore it would be useful to consider some of the changes that have taken place in the institutional environment of the international financial system that are relevant to Minsky's theory of financial crises in a global context. Three are especially important.

First, there has been a wholesale removal of capital controls in the global economy and, second, there has been a significant increase in the financial deregulation of domestic financial markets. Both of these developments are an aspect of the neoliberal agenda of eliminating regulations and promoting the mobility of capital (Wolfson 2000). However, since it was noted above that financial fragility is increased by the ability of funds to cross national borders and the ability to invest foreign funds in domestic markets, it is clear that opening up countries to foreign capital has likely led to increased financial crises (see also Gray and Gray 1994).

The third development concerns the role of the multinational agencies, especially the International Monetary Fund. The IMF is in the position of being able to intervene with hard currency in the wake of crises. With that ability, it could conceivably function as a lender of last resort. However, as noted above, the policy prescriptions imposed by the IMF as a condition of receiving funds have required the receiving countries to reduce aggregate demand, through monetary and fiscal austerity. As Kregel (1998b) demonstrated, these policies misidentified the financial crisis in Asia as a balance-of-payments problem and only served to worsen the debt-deflation problems of the Asian countries.

But an important aspect of the role of the IMF has been to enforce the neoliberal agenda. Policy prescriptions in the 1980s and 1990s, and continuing into the present, have aimed at reducing government's role in the financial system and introducing "market friendly" policies wherever possible. Minsky's view consistently has been that a free market capitalism is likely to lead to financial crises and, indeed, even to debt-deflations and depressions: "A sophisticated, complex, and dynamic financial system such as ours endogenously generates serious destabilizing forces so that serious depressions are natural consequences of noninterventionist capitalism: finance cannot be left to free markets" (Minsky 1986, 292).

Does this conclusion also apply when Minsky's theory is modified to take account of the global context? To the extent that institutional changes in the international economy have reduced restrictions on the free market, it may be the case that we are approaching a situation in which the global economy can be considered a closed system of capitalist finance. Greater capital mobility, and the increasing ability to lend and invest anywhere in the world, have eroded some of the important differences between domestic and international dynamics. Thus we would expect that, despite a need to still take account of differences in exchange rates and national macroeconomic policies, the

systemic processes of a capitalist financial system, as analyzed by Minsky, would be evident on the global stage.

Minsky, though, was hopeful that regulations and appropriate policies could restrain the worst excesses of a free-market economy. That was the premise, of course, of one of his major books: *Stabilizing an Unstable Economy*. As he noted in that work, "the financial instability theory points out that what actually happens changes as institutions evolve, so that even though business cycles and financial crises are unchanging attributes of capitalism, the actual path an economy traverses depends upon institutions, usages, and policies" (Minsky 1986, 174-75). Based on the analysis above, we would expect that reforms along the lines of capital controls, regulation of domestic financial markets, and a true global lender of last resort would be in order.

However, policy makers at the IMF, World Bank, US Treasury, and other centers of power have continued to resist this message, despite rising worldwide protest and some high-placed dissent.<sup>7</sup> Rather than using the opportunity following the Asian financial crisis to restrain the excesses that had led to the crisis, policymakers pushed ahead with their free-market agenda. Ultimately, then, the implication of Minsky's theory in a global context is that financial crises and debt-deflations will be the continuing legacy of the attempt to eliminate all restrictions on the free market.

### Notes

1. The intention is not to present a fully developed theory of global financial crises. Rather, the more modest aim is to suggest some issues that would need to be considered in order to begin to develop a more global theory.
2. For example, failed foreign-exchange speculation by the Franklin National Bank, with headquarters in Long Island, New York, disrupted the Eurodollar interbank market in 1974 (Wolfson 1994, 56-59). Also, given the international interconnectedness of banking and financial markets, especially with the growth of derivatives, a disruption in any part of the system has the possibility of having global ramifications.
3. Also, actual increases in interest rates by the Federal Reserve in the early 1980s were instrumental in negatively impacting Mexico's ability to repay commercial bank loans in 1982, and ultimately bringing about the Latin-American debt crisis.
4. It is probably necessary to put decreases in the exchange rate in context. A gradual decline is not likely to be as disruptive as a pegged exchange rate that is suddenly abandoned. Also, the effect of a decline in the exchange rate on the trade balance, and thus the ability to earn foreign exchange, should be taken into account.
5. A similar effect was observed following the stock market crash in the United States in 1987. Soon stock markets around the world were affected by a similar contagion effect.
6. Peter Gray and Jean Gray (1994) suggested that an international hegemon could act to restore stability, but currently there is no country playing that role.
7. Even Nobel laureate Joseph Stiglitz was unable to sway these policymakers (Stiglitz 2000).

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