The Crisis of (Confidence in) Global Capitalism

Barry Eichengreen¹ February 1999

In this book George Soros, investment tycoon, philanthropist and celebrity, lays out his life philosophy, delivers a stinging critique of modern economic theory, and comments on the health of the global financial system. He provides new information on his role and that of his investment partnerships, the Quantum Funds, in the crisis in Asia in 1997 and Russia's default and devaluation in 1998. And he proposes, somewhat surprisingly coming from our leading international financier, some stunningly ambitious proposals for protecting civil society from financial globalization.

Soros is a prominent public figure, and his opinions are taken seriously by the markets and by the congressional committees before which he is called to testify. It is therefore welcome to have those views in print.

Unfortunately, they come in a frustrating form. *The Crisis of Global Capitalism* (New York: Public Affairs Press, 1998) shows signs of having been rushed into print in response to what the author perceived as the last gasp of an expiring global financial system. Divided into two parts, one which lays out the author's conceptual framework and another which applies it to the present moment in history, the book in fact wanders back and forth between conceptual and historical material. Repetition is a problem. Together with the book's informal tone, this leads one suspect that portions are transcriptions of the author's conversations with his editor.

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The book's fatal flaw, though, is that it is inadequately grounded in the scholarly literature. This is, to be sure, a predictable criticism coming from an academic called upon to review a practitioner's book. But scholarly sniping aside, there is no question that Soros is led to commit some very serious blunders as a result of his ignorance or at least disregard of the relevant scholarly literature.

Soros in a Nutshell

At the core of the current approach to organizing economic activity, Soros argues, is a deep-seated belief that markets -- financial markets in particular -- are both stable and the best way of organizing economic and societal affairs. To the belief in laissez-faire of which he is so critical, Soros attaches the label "market fundamentalism." As the term leads one to expect, he argues that financial markets, contrary to the rigid beliefs of the fundamentalists, are in fact unstable and that important social needs cannot be met by giving them free reign.

The basis for this argument is the author's theory of "reflexivity." In natural sciences like physics, he observes, the concept of equilibrium is well defined. A pendulum, for example, will settle down to a stable resting point. This metaphor has been invoked by economists to describe the behavior of markets since at least Adam Smith, who argued that the self-interested actions of individuals will guide the economy to a stable, economically efficient outcome. Smith's notion was extended to the social domain by Frederich Hayek, who argued that the common social good was the unintended by-product of individuals acting in their self interest. It was formalized and refined, using the calculus, by the first postwar generation of welfare theorists, who took their cue from Paul Samuelson's *Foundations of Economic Analysis* (1947). The tools of the natural sciences and the professionalization of academia thus conspired to lend the doctrine and

techniques of neoclassical economics, built fundamentally on an inappropriate notion of equilibrium, a veneer of respectability.

Whatever damage this did to intellectual discourse, however, the damage to society, according to Soros, was far greater. This misguided theorizing encouraged countries, led by the U.S. under Reagan and the UK under Thatcher, to discard the regulated, mixed economy in favor of cut-throat capitalism. The result, according to Soros, has been to corrode the social fabric, heighten the incidence of financial instability, and threaten political support for the market.

Why, according to the author, do models characterized by stable, socially-efficient equilibria offer a misleading picture of the market system? The critical difference, in his view, is that markets, unlike the systems analyzed by physicists, are inhabited by conscious agents. While "physical objects move the way they move irrespective of what anybody thinks," financial markets are influenced by what market participants think other participants are likely to do. Expectations affect actions, and actions affect expectations. Soros distinguishes the passive function, when participants seek to understand the situation in which they participate, from the active function, when they seek to make an impact on that situation. "Reflexivity" arises when both functions are at work.

This interaction of expectations and outcomes can give rise to indeterminacy, Soros observes, since what happens will in general depend on what people think is going to happen. It can give rise to instability, as agents impulsively reject one belief in favor of another. When markets move as expected, participants' confidence in their understanding of the underlying dynamic will be reinforced, sustaining the initial trend. But when expectations are consistently violated, they will have to be revised, and that revision may precipitate a violent change in market

direction.

Market movements have such a powerful impact on expectations, the author argues, because the world in which we live is complex. Not only is information about its structure incomplete, but our ability to assimilate the available data is bounded. Individuals therefore make use of generalization, metaphor and analogy (models, in other words) to impose order on this complexity. The stock they place in a model will be reinforced (or eroded) by the extent to which outcomes are consistent (or in conflict) with its predictions.

In the context of financial markets, the beliefs and actions of market participants are thus profoundly conditioned by "reflexive feedback." Imagine, for example, that investors are cautiously bullish about the stock market. If equity prices do rise, their bullishness will be reinforced, and they will adapt their behavior accordingly. Prices may then rise at rates totally out of relation to any discernible change in market fundamentals. Analogously, pessimism about future asset prices can be reinforced by a decline in their current level, leading investors to sell into a falling market. Since beliefs can be self-validating, markets can be highly volatile.

Soros adds structure to these observations by breaking the boom-bust cycle into stages: an initial stage at which the trend is not yet recognized, a subsequent stage of trend acceleration, and the stage of excessive exuberance when the trend is sustained by the reinforcement of initial expectations despite the accumulation of counter-evidence. Eventually, however, there comes the "moment of truth," when expectations are blatantly violated, and the trend reverses with a vengeance. In the worst-case scenario, a crisis ensues.

Social systems are prone to overshoot, Soros hypothesizes, in much the same way as markets. He observes that the Soviet system became increasingly rigid and authoritarian as a

result of the two-way interaction of the dogma and practice of bureaucratic planning. Similarly, in the United States the ideology of financial deregulation has enhanced the political power of the financial market participants to press for still further deregulation, resulting in the creation of a dog-eat-dog "transactional society."

Civic society has thus come under attack from both sides. While authoritarianism was long the more worrisome threat, the collapse of communism has left nothing to countervail market fundamentalism. Drawing on Karl Popper's book, *Open Society and Its Enemies* (1945), Soros argues that unfettered markets rend the social fabric and set the stage for an authoritarian backlash. They do not deliver the collective goods — the social justice, equity, cohesion, moral values, and support for strong families and intellectual achievement — that are the building blocks of an open society.

Popper's concept of open society, in juxtaposition to authoritarianism, was already prominent in Soros's earlier book, *The Alchemy of Finance* (1987). What is new here is his critique of market fundamentalism. Soros criticizes the Hayekian notion, popularized by works like Milton and Rose Friedman's *Capitalism and Freedom* (1982), that democracy and capitalism go hand in hand. To the contrary, he argues, unfettered capitalism will inevitably provoke a backlash against the depredations of the market. Here, clearly, Soros' views have been shaped by the failure of the market to reinforce viable democracy in the former Soviet Union. There, the unrestrained market has strengthened the hand of former enterprise managers, reinvented as capitalist robber barons, enabling them to manipulate politics to their advantage. Those who found themselves excluded from the benefits from the market system and deprived of the social services to which they had been accustomed under communism reacted by challenging the legitimacy of economic liberalization and democracy, placing the entire reform agenda at risk.

Unfortunately, Soros is vague when describing his middle way. An open society, he explains at one point, encourages critical modes of thinking "which explore the possibilities of change to the full." But he does not detail the specific institutional, political, social and economic characteristics of societies that encourage such thought. An open society, he asserts, is characterized by a coherent set of values which prevent expectations and outcomes from reinforcing one another in destabilizing ways and propelling society away from the middle ground. Such values, by anchoring expectations, anchor social arrangements. But how such values are constituted is never clearly specified. They arise, according to the author, out of the activities of a community of individuals, but how and why is not explained.

The Argument in a Vacuum

Not all of these ideas will be unfamiliar to readers of this *Review*. Sociologists will recognize the resemblance of Soros's argument about the need to mitigate market outcomes to the theme of Karl Polanyi's influential tract, *The Great Transformation* (1944), not cited here. They will recall how, in response to the rise of totalitarianism in Germany and Russia, Polanyi suggested that sustaining political support for free markets may require the development of a mixed economy to temper market outcomes in socially-acceptable ways. Economic historians will recognize the resemblance of Soros's boom-and-bust cycle with Charles Kindleberger's taxonomy of stages in financial speculation in his classic *Manias, Panics and Crashes* (1978), not cited here. Political scientists will find Soros's discussion of communal values reminiscent of Robert Putnam's (1993) influential work on civic traditions, not cited here. Soros's discussion of nomalous evidence

forces them to reject it will remind historians of science of the concept of the "paradigm" as used by Thomas Kuhn in his widely-read *Structure of Scientific Revolutions* (1970), not cited here.

Economists will be particularly distressed by the portrayal of their discipline as one which assumes that individuals are hyper-rational and markets are characterized by stable equilibria. What may have been true of theorizing in Samuelson's or Alfred Marshall's day has no longer been true for many years. One might cite the work of behavioral economists like David Laibson at Harvard and Matthew Rabin at Berkeley on issues like inpulsivity, procrastination, and risk aversion. That Laibson and Rabin were both mentioned by The Economist Magazine, which takes it upon itself each decade to identify the ten most influential economists under the age of 35, hardly suggests that they are out of the mainstream. George Akerlof and Janet Yellen of Berkeley are famous for their models of "near rationality," which demonstrate that small departures from rational behavior can have profound macroeconomic repercussions. That Yellen was appointed by President Clinton to the Board of the Governors of the Federal Reserve System and currently chairs his Council of Economic Advisors hardly suggests that she is out of the mainstream. Joseph Stiglitz, formerly of Stanford University, made his name on the basis of models of asymmetric information (of situations in which not all market participants are equally well informed) to which standard arguments about the interaction of supply and demand do not apply. That Stiglitz is a former chairman of the Council of Economic Advisors and is currently Chief Economist at the World Bank hardly suggests that the mainstream of the economics profession would dismiss him as a crank.

To be sure, the undergraduate's first course is disproportionately preoccupied by models with unique equilibria, in which the allocation delivered by a decentralized market maximizes

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profits, output and the social welfare. But the student then moves on to models of imperfect competition and asymmetric information in which outcomes are neither efficient nor unique. As soon as he encounters oligopoly and the theory of repeated games, for example, he is brought face to face with the uncomfortable fact that equilibria are indeterminate. Thus, Soros's critique of economic theory, that it assumes ergodic processes in which markets quickly settle down to a uniquely-determined, stable equilibrium, reflects a blinkered understanding of the field.

The Foibles of Finance

That Soros has failed to appreciate the influence of this work on the development of scholarly research may reflect more than his failure to ingest scholarly articles written in the stilted language of the journals. For many years, financial economics, the subdiscipline with the most direct impact on his daily life, was slow to pursue this research agenda. Instead, specialists like Eugene Fama (1991) elaborated models of efficient markets, in which the same financial asset could not be traded at different prices on different markets because such price discrepancies would offer irresistible arbitrage opportunities to traders and investors, whose self-interested, profit-motivated actions (buying assets where their prices were low and selling them where they were high) would work to automatically eliminate the discrepancy. Taken to their extreme, efficient-markets models suggested not simply that price discrepancies could not persist but that they could not arise in the first place, since traders would act instantaneously to eliminate them.

The now-notorious hedge fund Long-Term Capital Management, to which Soros points as an illustration of the mischief that can be caused by efficient-markets theory, in fact testifies to the kernel of truth underlying these models. Long-Term Capital was founded by efficient-markets theorists (two of whom, it will be recalled, received the Nobel Prize in Economics for their work) in order to apply these models to markets in U.S. government securities. The explanation for Long-Term Capital's failure is nothing less than the power of the model: as the profits Long-Term Capital made arbitraging away price discrepancies were plowed back into yet additional arbitrage operations and other hedge funds, observing the success of this pioneering arbitrage fund, followed it into the field, the amount of money devoted to arbitrage activities exploded. As Alan Greenspan put the point, "it is the nature of the competitive process driving financial innovation that such techniques would be emulated, making it ever more difficult to find market anomalies that provided shareholders with a high return. Indeed, the very efficiencies that LTCM and its competitors brought to the overall financial system gradually reduced the opportunities for abovenormal profits" (Greenspan 1998, p.2). As Long-Term Capital ran out of price discrepancies to arbitrage away and branched into a variety of other, riskier investment activities about which its managers knew less. In the end, events which those managers failed to anticipate -- Russia's default and the subsequent "flight to quality" by international investors -- brought its portfolio crashing down. It is the ultimate irony, then, that the failure of Long-Term Capital, a firm whose investment strategies were predicated on efficient-markets theories of financial arbitrage, provides powerful evidence for the model.

But in fact, the efficient-markets model is only one of several competing approaches to analyzing financial markets. There is now an extensive body of work which applies concepts like asymmetric information and near rationality to financial economics. The National Bureau of Economic Research, situated squarely in the mainstream of the field, runs a program in Behavioral Finance, directed by Robert Shiller of Yale University and Richard Thaler of that notorious bastion of neoclassical economics, the University of Chicago. Among specialists in finance, it is understood that asymmetric information can give rise to herding behavior and sharp market moves. Authors like Andrea Devanow and Ivo Welch (1996) provide formal models in which herding can arise even when all market participants are rational. They show that it can be in the self interest of investors to emulate the investment decisions of other investors when there exist information cascades (when investors infer underlying conditions from the actions of other investors), when there are payoff externalities (when the profits that accrue to one investor in, say, an internet company depend on how many other investors purchase shares in the same company), and when there is an incentive to engage in mimicking behavior (for example, when investors are uncertain about the quality of mutual fund managers, which gives inferior fund managers an incentive to mimic the behavior of other managers in order to avoid being found out).

And it is these alternative models that inform the advice that academic economists give policy makers. Theoretical models emphasizing the pervasiveness of asymmetric information are used to justify public provision of a financial safety net, in the form of deposit insurance and lender-of-last-resort services by the central bank, to prevent intrinsically fragile financial markets from seizing up. They justify prudential supervision of banks and other financial intermediaries to prevent portfolio managers protected by the presence of that safety net from taking on excessive risk. The fact that financial markets are fragile and volatile and that there is therefore a need to regulate banks, offer deposit insurance and provide the services of a lender of last resort is conventional wisdom among economists. That only the most extreme free-market ideologues would contemplate abolishing federal deposit insurance or the Federal Reserve System is indicative of how deeply ingrained has become the influence of the ideas whose existence Soros is at pains to deny.

It is similarly understood, not least within the corridors of the IMF, that information asymmetries are especially pervasive in the international markets that are Soros's special concern, where borrowers and lenders are separated to an exceptional extent by barriers of physical and cultural distance. These are the arguments that economists (and even the IMF) invoke when urging caution on governments contemplating the liberalization of international financial transactions (Eichengreen and Mussa, 1998). For the vast majority of the profession, Soros's conclusion that international markets may be particularly volatile will hardly come as a surprise.

The Man Who Broke the Bank of England

Some readers will suspect that these protestations are no more than an economist's lastditch defense of his discipline. They should consider the scholarly literature on the 1992 crisis in the Exchange Rate Mechanism of the European Monetary System, the episode that brought Soros to prominence, when he is said to have made more than \$1 billion in a matter of days by betting against the pound sterling, and that earned him the sobriquet "the man who broke the Bank of England." That literature, admittedly, is not monolithic. There is a first generation of currency crisis models, inspired by Paul Krugman (1979), that models such events in the kind of completeinformation, efficient-markets setting of which Soros is so critical. Scholars making us of these models have characterized the 1992 sterling crisis as the inevitable collapse of an overvalued currency. Krugman's approach suggests that Britain's inflation must have been too high, its international competitiveness too low, for the ERM parity to be sustained. Eventually, balanceof-payments deficits would have depleted the Bank of England's foreign-currency reserves, stripping it of all capacity to support the currency and forcing sterling to be devalued. In speculating against the Bank of England, Mr. Soros was merely anticipating the inevitable and accelerating the currency market's convergence to its stable equilibrium.

However, there is also a second generation of very different currency-crisis models that have been used to portray these events in a different light. Building on work by Robert Flood and Peter Garber (1984) and Maurice Obstfeld (1986), these models are characterized by equilibria that are neither unique nor stable. They suggest that currency traders like Soros were not simply anticipating the inevitable but rather precipitated a change in the exchange rate that would not have occurred in their absence. The story goes like this. The Bank of England had both an exchange rate problem and an unemployment problem in 1992. On the one hand, it could keep interest rates high to support the exchange rate and build the credibility of its commitment to currency and price stability. But those high interest rates would depress investment and do nothing to reduce the level of unemployment. Notwithstanding their discomfort, however, British monetary officials were prepared to maintain the status quo in the absence of an attack on the currency. That is to say, the enhanced policy credibility they enjoyed as a result of their policy of stabilizing the currency more than justified the costs associated with the persistence of unemployment. At this point, however, currency speculators sold the currency en masse. Defending it now required the Bank of England to raise interest rates to still higher levels, doing additional damage to investment and further aggravating unemployment. Suddenly, the benefits of the additional policy credibility no longer dominated the costs. The same policy that the Bank of England and the British government would have been happy to pursue indefinitely in the absence of adverse speculation was now abandoned in response to that very speculative pressure. This is an apt characterization of how the Bank of England reacted in September 1992, when it

briefly raised interest rates to 15 per cent in response to the Soros-led attack before concluding that the costs to the economy were too high, abandoning its defense of sterling, and cutting rates to lower levels than before.

Note that this is a model of non-ergodic processes and multiple equilibria. Outcomes in foreign exchange markets are contingent; they are neither stable nor unique. One outcome obtains if Mr. Soros attacks the currency, another if he does not, notwithstanding his rationality and the rationality of the Bank of England. It is fair to say that this is now the dominant academic approach to analyzing currency crises. It is how leading economists analyzed the crises in Mexico in 1994 (Radelet and Sachs, 1998) and Asia in 1997 (Krugman, 1999). There is more than a little irony that Soros's critique of the literature in economics represents a misreading of scholarly work on the very episodes in which he himself has been most directly involved.

The further irony is that what makes these models run is the precisely two-way interaction of markets and policy makers. In the present example, the Bank of England alters its stance in reaction to the actions of currency traders, and currency traders act in anticipation of the Bank of England's reaction. The name for this in the academic literature may not be reflexivity, but the phenomenon is the same.

Ideas in the Course of History

Soros reserves his harshest criticism for academics who have gone far in the other, postmodern direction, embracing deconstructionism and denying the existence of an objective reality independent of the observer's perception. The post-modern denial of objective truth implies the denial of universal values, which are for Soros the glue holding together the open society.

Soros ascribes great influence to ideas in altering the course of history, specifically to

neoclassical economic theory in propelling the process of economic and financial liberalization that swept the world in the 1980s and 1990s. Academics will be flattered by the notion that their scribbles have such power. But one suspects that academic theorizing has not been the sole or even the dominant factor behind the liberalization of markets, financial markets in particular. Technology too has played a role: the information revolution, in the form of computerized trading technologies that permit immense amounts of money to be moved across borders at the stroke of a key and facilitate the efforts of financial rocket scientists to concoct derivative financial instruments, has made it enormously more costly for governments to stop capital flows at the border (just ask Mr. Mahathir), leaving financial liberalization as the path of least resistance. In addition, Soros's emphasis on the influence of doctrine minimizes the capacity of governments and societies in industrializing countries in particular to learn from their experience. Having pursued policies of import substitution and financial repression and found them wanting while at the same time observing the superior growth performance of East Asia's newly-industrializing economies, Latin American governments drew the obvious conclusion. In other words, more than the rhetorical skills of the "Chicago Boys" (University of Chicago economists who took positions in Latin American governments in the 1970s and 1980s) lay behind the shift from financial repression to financial liberalization.

This is not the first time, of course, that the world has seen global capitalism. Uncomfortably for Soros (and for other critics of the trend toward greater financial globalization), the late-19th century world of internationally integrated financial markets did not obviously display the same unstable tendencies as today. Soros scores points for recognizing this paradox and addressing it. He lists three reasons why the 19th century global economy was more stable than its late-20th century successor. One is that the imperial powers, led by Britain, had a sufficiently large vested interest in the system to preserve it. Today, in contrast, there is no comparable hegemonic power. In addition, a key component of the classical gold standard was stable exchange rates between the currencies at its center, which prevented fluctuations there from causing dislocations at the periphery. The contrast with the yen-dollar rate today could not be more pronounced. Above all, the 19th century global economy was bound together by a universal system of shared beliefs and ethical standards (faith in reason, respect for science, and Judeo-Christian ethics). Again, a powerful if mysterious role is ascribed to ideology in the operation of the market system.

The economic historian confronted with this account of the workings of the late-19th century international economy hardly knows where to start. For one thing, there is the fact that recent scholarship on the pre-World War I international economy is universally dismissive of the "hegemonic stability view" (Keohane, 1984) that the dominant power, Great Britain, actively stabilized the system. To the extent that Britannia's maintenance of open markets had a stabilizing influence, this policy was attributable more to self-interested lobbying by the export industries that understandably dominated politics in the first industrial economy, than to ideology or any conscious effort to stabilize the international system. There is little evidence, in the archives of the Bank of England or the Parliamentary record of debates over tariffs and trade, that Britain tailored her policies with the stability of the system in mind. In any case, surely the British economy was too small, only half the size of the United States circa 1913, to stabilize the world. Historical scholarship hardly suggests that Britain's financial strength was overwhelming. In the international support operations that sustained the gold standard's key currencies between 1890

and 1913, the Bank of England was typically the supplicant, not the hegemon; the Old Lady was the borrower, not the lender, of last resort. Finally, contrary to those who point to the instability of the dollar-yen rate when contrasting the ills of today with the supposedly more placid times a century ago, there is the fact that countries at the periphery of the international system repeatedly saw their exchange rates and balances of payments destabilized by sharp shifts in market conditions in the major market centers, in particular shifts in the London capital market's willingness to invest abroad (Fenoaltea, 1988, Fishlow, 1985). It is to bad for the author that historians are such sticklers for detail.

The Crisis in Emerging Markets

Soros cites the Asian crisis as a classic illustration of the operation of a positive feedback loop creating unsustainable market conditions. In the early 1990s, he observes, international investors and bankers, impressed by the "East Asian Miracle" (World Bank, 1993), got it into their heads that the economies of the region were profitable places in which to invest. That prophecy was self-fulfilling: the more money that was poured into Asia, the higher stock markets climbed, fueling investors' enthusiasm for the region and disguising its underlying weaknesses. At some point -- in the summer of 1997 as it turned out -- a critical mass of anomalous information hit the market, in the form of Thailand's devaluation, and it proved impossible to reconcile events with the dominent model of financial stability and miracle growth. Thailand's crash thus prompted a wholesale revision of expectations, leading panicked investors to stampede out of the markets of not just Thailand but its neighbors, and precipitating a full-blown economic and financial crisis.

This analysis bears more than a passing resemblance to Morris Goldstein's definitive

account of the Asian crisis (Goldstein, 1998) and in particular to his "wake-up call hypothesis," according to which the Thai devaluation set off alarm bells alerting international investors that conditions in the region were not entirely as advertized. More unexpectedly, Soros's account overlaps heavily with the official analysis of the International Monetary Fund (1998), the institution of which he is so critical elsewhere in his book.

In any case, Soros's account of the crisis begs as many questions as it answers. Markets are always prone to overshoot if the theory of reflexivity is to be believed. Why then should that overshooting have been so marked in Asia and should the reversal and its consequences have been so severe? Why was the punishment so seemingly out of proportion to the crime? To answer these questions, Soros is forced to appeal to factors outside his model. To account for the exceptional volume of funds that flowed into Asia, he points to the low level of interest rates prevailing in Japan and the United States, which rendered Asia's high yields attractive to international investors, and to the exchange-rate pegs operated by Asian governments, which gave those investors a false sense of security that their returns were free from exchange-rate risk. This was the "carry trade," in which international investors ferried capital from Tokyo, where interest rates were low, to Bangkok, where they were high, undeterred by fears of a change in the yen-baht exchange rate. It is the now-standard story of the Asian financial bubble.

Viewing events from this angle also offers an explanation for why Thailand's devaluation and the depreciation of other currencies were so devastating to the economies involved. Asian banks and firms, and not only foreign investors, had been misled by their governments into believing that the region's pegged exchange rate would not change. They had no incentive therefore to use currency forward and futures markets to purchase insurance against exchange rate fluctuations, instead incurring large amounts of unhedged foreign-currency exposure. When the exchange rate did change, they were smashed; for instance, a large share of the Indonesian corporate sector, burdened by a heavy load of unhedged foreign debts. was thrust into bankruptcy by the sudden depreciation of the rupiah.

Soros also portrays events in Russia as the consequence of the operation of a violently unstable financial market. Initially, international investors, irrationally exuberant about Russia's prospects and irresistibly attracted to the high yields on GKOs (treasury securities), poured money into the country. For a time, this tidal wave of liquidity papered over Russia's financial problems. But eventually, in the summer of 1998, it became impossible to deny that the country's budget and debt-servicing problems were insurmountable. Panicked investors rushed for the exits, bringing down Russia's financial markets and those of other innocent emerging-market bystanders.

This skeletal account omits a critical ingredient, as Soros subsequently acknowledges, namely moral hazard. Having been shielded from losses on their holdings of Mexican treasury bills by the U.S. and IMF-led rescue of that country, and having been sheltered from losses on their short-term assets by the IMF's bailouts of the Asian crisis countries, international investors found high-yielding Russian securities irresistible precisely because they anticipated that the United States and the IMF regarded Russia as too big and too important to fail. (It is revealing in this connection that in the first half of 1998 international bankers regularly referred to Russian investments as "the moral-hazard play.") When investors discovered that the IMF was not in fact prepared to avert Russia's default, all bets were off.

Stabilizing Unstable Markets

Thus, while unregulated financial markets are dangerously unstable, the way the international policy community has intervened, administering ever-larger IMF bailouts, has only compounded the problem by creating moral hazard. IMF intervention may have averted a meltdown in Mexico but, as Soros observes, by giving investors confidence that the Fund would again rush to the scene of future difficulties, it encouraged them to recklessly pour money into Asia, Eastern Europe and Latin America, setting the stage for even uglier future crises. With the seizing up of these markets in the second half of 1998, the chickens came home to roost.

To jump-start the flow of finance back to developing countries, Soros proposes the creation of an International Credit Insurance Corporation. This new international agency would insure investors against debt defaults. Countries would pay a fee when floating loans in order to underwrite the cost of insurance. Each country's debts would be limited to a ceiling set by the IMF on the basis of its assessment of the country's macroeconomic and financial condition. Loans in excess of the ceiling would not be insured, and the IMF would not aid countries having difficulty servicing uninsured loans. Insurance would give investors the confidence they require to once more lend to emerging markets. And the hard-and-fast rule against IMF assistance to countries which encountered difficulty in servicing their uninsured loans would limit moral hazard.

The logic for this scheme is questionable. To assert that the international community will be able to stand aside in the event of default on uninsured loans, in disregard of the systemic consequences, is to assume a solution to the problem. In practice, those worried that debt problems in one country might spread contagiously to others, endangering the stability of the international system, are sure to be worried most about uninsured bonds. Information about uninsured issues will be least, accentuating the tendency for their prices to move together. Uninsured issues will be perceived as especially risky, causing their prices to suffer most in periods of generalized financial turbulence. Institutional investors that specialize in holding uninsured issues will have the greatest need to meet margin calls in a crisis, forcing them to liquidate their holdings in other countries.

Nor is it clear how the IMF would determine the cutoff for the loans that qualified for insurance. Not only do bureaucrats lack a convincing model of the optimal level of debt, but it is far from clear that the decision would be taken on the basis of economic rather than political considerations. The Fund would presumably insure more borrowing by countries with sound economic and financial policies and use that fact as leverage to encourage policy reform. But what would happen when a less reform-minded government took office or policy otherwise took an unexpected turn? Would the Fund then lower the ceiling for insured loans? Would insurance for previously insured loans be revoked? Would insurance be available only for foreign-currency loans, or would loans denominated in the home currency also qualify? If the demand for foreign funds exceeded the ceiling, what would determine which loans were insured? Would insurance be allocated on a first-come-first-served basis? Who would decide which of several competing loans was insured and which was not?

Above all there is the question of why the world needs a public insurance corporation. If the idea is so attractive, why can't financial market participants themselves, such as Mr. Soros, set it up as a self-financing operation?

As Soros admits toward the end of his volume, "I wonder if you would be reading this book if I had not gained a reputation as a financial wizard." Indeed. Still, his book is worth a look as a way of better understanding how at least one wizard views the world. Devenow, Andrea and Ivo Welch (1996), "Rational Herding in Financial Markets," *European Economic Review* 40, pp.603-615.

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