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[The page numbers cited in this review refer to the “Advanced Reading Copy” that was circulated in the early Fall of 1998.]

At one point in his new book, “The Crisis of Global Capitalism,” George Soros opines that the reader has most likely been attracted to the book by the author’s proven success as an international investor, rather than by either of his other two roles, as philanthropist or as public intellectual and analyst of international financial markets and social policy. This is true. The book is breathtaking in its intellectual ambition, with a scattering of good insights. Yet it is in fact of greatest interest as a potential source of information regarding the inter-relationship of Soros’ three roles.

Intro: A speculator introspects

One question is foremost in the mind of a reader. When Soros the speculator helps force a currency into crisis and devaluation, how does Soros the philanthropist think about the social or moral implications for the country under attack? The reader expects one of five possible answers.

- **Stop me before I speculate again.** This is the line one most expects. The author, as intellectual analyst, makes clear his view that, at the end of the 20th century, market values have grown undesirably prominent compared to social values; that financial markets have become excessively volatile due to positive feedback from price movements to speculators’ expectations; and that some sort of government intervention is appropriate. But the book in fact contains no proposal for a policy measure to slow down excitable financial markets along the lines of the turnover taxes proposed in the 1980s by Jim Tobin for foreign exchange markets or Larry Summers for securities markets. Soros’ proposal for an International Credit Insurance Corporation receives little explanation here, and sounds more like a device to increase capital flows than to slow them down [p.189]. (More on this below.)

- **As an individual speculator, I am too small to have an effect.** There would in fact be no logical contradiction in proposing a tightening of regulation of financial markets while at the same time exploiting for profit the existing regulations -- any more than there is a contradiction between proposing a change in the tax code while at the same time minimizing one’s taxes under the existing code. The logic holds particularly for individual speculators who know that they are too small for their investment positions to have a noticeable effect on the market price. Soros used to be in this category [and still sometimes claims to be]. But in one place in the book, he acknowledges that this is no longer true [footnote 27, p.204]. He
does move markets. Perhaps this footnote was added after the Russian experiment of last August (see below). In any case, it seems clear that his positions and utterances have a bigger effect on market prices than the effect his books and proposals will have on public policy.

- *My investment positions generally work to push the markets in desirable directions. It is the activities of many others that I view as potentially harmful.* The author could plausibly defend this claim, if he so chose. Hedge funds in general, and Soros in particular, tend to make bets based on economic fundamentals and arbitrage opportunities, rather than on simple trend-following behavior like the typical bank forex trader. His fund’s short-sales of sterling in 1992 arguably helped move Britain’s exchange rate toward its proper equilibrium, and its short-sales of the Thai baht in early 1997 should have signaled a coming problem of the same nature, if the Thai authorities had paid attention. This is how investors are supposed to operate in theory -- making markets more efficient -- and how they too often fail to operate in practice. But the author never comes out and says explicitly that everything would be fine with financial markets if other investors behaved as intelligently as he.1 [More on this below.]

- *Because I devote a large share of my profits to charitable activities, I make up morally for any possible negative effects of my speculative activities.* This claim too could be sustained were he to make it. Soros’ “Open Society” philanthropic activities in Eastern Europe and elsewhere are extraordinarily generous, and seem to be innovatively and efficiently conceived. But he does not attempt this sort of self-justification for his investment operations, perhaps to his credit.

- *My speculative self is completely divorced from my philanthropic self.* This seems to be the author’s preferred answer to the question. These are two distinct personalities that need not be consistent. “I try to be a winner as market participant and serve the common interest as a citizen and human being. Sometimes it is difficult to keep the two roles separate...” (p. 217) But elsewhere he claims to have made the synthesis, which after all is what one would expect given that his analytical self writes about the interconnection of markets and social values: “I have made a conscious effort to integrate the various aspects of my existence [business, socially-responsible and private personalities], and I am happy to report that I have been successful” (p.68). How precisely the personalities view each other remains a puzzle.

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1 This reluctance is unlikely to be due to modesty. (My favorite two sentences in the book are: “But there is a big difference between Einstein’s theory and mine” and “Marx proposed a deterministic theory that is diametrically opposed to my own.”)
Soros experiments on the ruble

The section of the book that will be most fascinating to those following recent developments in emerging markets is titled “A Real-Time Experiment” and concerns Russia. The author, on August 9, 1998, interrupts his work on the manuscript and -- in effect -- turns to the reader and confides I see things are heating up in Russian markets. Let me take time out to show you how it is done. He then relates to the reader developments in Russia and his real-time phone conversations over the next two weeks with Anatoly Chubais, Yegor Gaidar, David Lipton, Robert Rubin and others.

Frustrated that his views on how to save Russia are not eliciting sufficient reaction from top policy-makers, he publishes a letter in the Financial Times. It includes the recommendation, “The best solution would be to introduce a currency board after a modest devaluation of 15 to 25 percent [p.175].” Then the world’s speculators, reading over their morning coffee that the financial wizard thinks the ruble is overvalued, and perhaps also inferring that Soros himself must have a large short position in rubles, flee from the Russian currency. To the author’s horror, he has precipitated the very crisis he set out to prevent. On August 26 -- with the ruble devalued, Russian debts in default, and Prime Minister Kiriyenko having been fired -- Soros in effect admits that his real-time experiment is a failure. He returns to writing the next chapter of his book (on how to reform the IMF so that it won’t continue to make mistakes).

Incidentally, market manipulation such as many observers suspected Soros of is perfectly legal in international currency markets, though it would be illegal in domestic securities markets. As it happens, Soros was in fact long in ruble assets, as he takes pains to explain to the reader. The funds that he oversees are reputed to have lost $2 billion on the Russian events of August. Clearly part of the explanation of the seemingly split Soros personality is that he is no longer fully involved in the day-to-day investment decisions of his Quantum Fund. One wishes he had included in the book a description of his next phone conversation with his fund manager following the Russian default/devaluation!

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The Soros critique of theories of finance

Economists are likely to be infuriated by Soros’ characterization of their models of financial markets. His dismissal of the niceties of rational expectations theory and the efficient markets hypothesis is disarmingly straightforward: “I have to confess that I am not familiar with the prevailing theories about efficient and rational expectations. I consider them irrelevant and I never bothered to study them...(p.66).” One sympathizes. But this attitude sits poorly alongside his instruction of the reader in what economic theory does and does not say.
The centerpiece of the theoretical framework with which the author wishes to leave his mark on intellectual history is his idea of reflexivity. “On the one hand, the participant seeks to understand the situation in which he participates....On the other hand, he seeks to make an impact, ... When both functions are at work at the same time I call the situation reflexive.” The core application is to the case of financial markets. Investors seek to form expectations or forecasts regarding the future value of a stock or foreign currency, in a way that depends systematically on the current market price (via their preferred models). At the same time, the market price depends on investors expectations (via their buy and sell orders). Both relationships must be taken into account simultaneously.

It is distressing for an economist to hear that this idea has been ignored and rejected by social scientists. The simultaneous determination of market prices and investor expectations is so elementary a notion that it is a feature of virtually all of the many hundreds of theoretical and empirical studies of financial markets published in academic books and journals in recent decades (actually, there are thousands of them). This includes theories in which market prices are set at levels justified by economic fundamentals (the majority of studies), as well as those in which they are not. It includes theories based on rational expectations (the heavy majority of studies), as well as those that are not.

One can infer that Soros actually has in mind by reflexivity something beyond the rather obvious simultaneity definition that he gives. He evidently has in mind instances when a movement in price causes participants to revise their expectations in the same direction as that last movement (p. 62). They extrapolate.

It is clear that he is in the category of those who believe that markets from time to time carry prices far away from the levels justified by economic fundamentals. An increase in price -- whether it originates in fundamentals or in a random blip -- generates expectations of further price increases in the future. Participants are likely to respond to their expectations of further capital gains by placing buy orders, thereby driving the price up further. This is destabilizing speculation. (In the most standard theory, by contrast, investors respond to a movement of a price above equilibrium by expecting a future reversal, placing “sell” orders to profit thereby, and thereby pushing the price back down. This is stabilizing speculation.) Thus a movement of the market price away from fundamentals becomes self-justifying. To capture this idea, theorists have developed models of bandwagons, rational speculative bubbles, fads, second-generation speculative attacks, multiple...

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2 My own feeling is that economists are as guilty as those who misrepresent their views, in that so little writing by academic economists is intelligible to outsiders. (And the impenetrability is not solely because the technical language is required by the intricacy of the economic phenomena to be explained.)
equilibria, and bank-runs.

If one gives Soros both a careful reading and the benefit of the doubt, one suspects that he has in mind by reflexivity something more interesting and profound than the simple idea that the typical speculator forms expectations extrapolatively. Contrary to most economists’ theories, there is no such thing as the typical speculator, or “representative agent.” There are in fact different kinds of speculators operating in the marketplace, with different ways of processing information (i.e., different “models” of how financial markets work), thus producing different expectations of future prices. After all, if there were not such a diversity of expectations, then there would not be the tremendous volume of trading in financial markets that there is ($1 ½ trillion per day in the world’s foreign exchange markets alone); it’s the difference in opinion that makes a horse race. The interaction of different kinds of speculators, of different models, gives the market interesting dynamics.

Some participants form estimates of what they think a currency or stock should be worth based on economic fundamentals such as growth rates, interest rates, and inflation rates. They are stabilizing speculators: if the market price is observed to rise above the level dictated by fundamentals, they sell, which works to push the price back down. In normal times, and especially in the long run, their views dominate the determination of the market price, at least roughly. But a large proportion of participants eschew economic fundamentals, believing them to be irrelevant, at least, for market movements at the short-term horizons where their interests lie. Many subscribe instead to technical analysis, for example.

Soros argues that there has been a noticeable shift in the weight that the market gives to technical analysis, at the expense of fundamentalism [p.79]. There is evidence to support this view. 3

Such a shift has important implications. If traditional models based on economic fundamentals say that the stock market is overvalued, those investors who respond by selling stocks put downward pressure on the market, thereby dampening the extent of the overvaluation. But if the fundamentals models are gradually accorded less weight over time, then the pressure on the sell side diminishes over time. As a result, market prices continue to rise. A self-confirming market bubble is born. To produce this result, the technical analysts or other non-fundamentalists need not even subscribe to extrapolative models.

The shift in weight away from fundamentals is not wholly irrational. Investors are simply responding in a reasonable way to the observation that the market rise has repeatedly proven fundamentals models wrong and technical analysis right. Every month that the fundamentalists’ predictions of doom are unrealized, investors decrease the weight they place on the fundamentals

view of the world. It is not that they necessarily decide that the market is correctly valued. It is rather that they observe that they lose money if they do not go along with the herd. It is little use “being right” if everyone else persists in being wrong. By the time the bubble reaches its peak, those who favor selling short based on fundamentals have been proven wrong so many times that there is little wonder that they have lost credibility. The market is operating far from equilibrium (p.79), outside the range that their models specified. Of course this may be precisely when the momentum -- the switch to technical analysis -- is spent, and market sentiment begins to turn."

**What kind of regulation for international financial markets?**

There are indeed indications that financial markets do not always work quite as perfectly as the happy majority view of the economic theorists suggests. Most salient are such recurrent disruptions as the 1982 international debt crisis, 1992-93 crisis in the European Exchange Rate Mechanism, 1994-95 Mexican peso crisis, and 1997-98 Asian financial crisis. It does not seem that investors have punished countries when and only when the governments are following bad policies.

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4 Frankel and Kenneth Froot, “Chartists, Fundamentalists, and Trading in the Foreign Exchange Market” (AER, 1990), in Frankel, On Exchange Rates, MIT Press, 1992. This is only one of a number of models relevant to the Soros view of financial markets. An important example is J. Bradford De Long, Andrei Shleifer, Lawrence Summers and Robert Waldmann (1990), "Noise Trader Risk in Financial Markets" Journal of Political Economy 98-4, 703-38. [Their model features a class of traders who follow irrelevant noise, and yet who prosper over time, contrary to the classic Milton Friedman argument that destabilizing speculators would be driven out of the market.]
First, large inflows often give way suddenly to large outflows, with little news appearing in between that might explain the change in sentiment. Second, contagion sometimes spreads to countries where fundamentals appear strong. Third, the recessions that have hit emerging market countries in such crises have been of such magnitude that it is difficult to argue that the system is working well.

If one were to bite the bullet, and ordain some regulation of international financial markets, what sort would it be? A small tax on all foreign exchange transactions [Tobin]? On all domestic securities transactions [Summers, pre-Treasury]? Tax penalties on short-term capital inflows [Chile]? Quantitative restrictions on capital outflows [Malaysia]? High reserve requirements on bank borrowing from abroad [Argentina]? Regulation of hedge funds? These are very different proposals, with very different implications. Yet most commentators do not distinguish. This problem applies to the supporters of government intervention almost as much as to the opponents. The debate over the desirability of measures to slow down international capital flows has been sterile. It generally consists of arguments for and against the virtues of free and unfettered capital markets. On the one hand, proponents of introducing “sand in the wheels” of international financial markets point to evidence of inefficiencies, anomalies, bubbles, speculative attacks and crashes. On the other hand, opponents (which, at least until recently, has included the heavy majority of academic economists) argue that any measures to weed out alleged destabilizing short-term capital flows would inevitably also inhibit desirable long-term capital flows. Neither group bothers much to distinguish among the details of the various possible measures.

Most readers will come to the book expecting some sort of proposal to regulate international financial markets. But there is in fact little way of telling which of the many possible measures Soros would favor. While his judgment that these markets should not be left to themselves is much in evidence, he devotes only brief passages to specifics [such as controls on capital inflows, or controls on hedge funds]. Without knowing what measures he is proposing, one cannot begin to ask such standard questions as how they would be enforced, or how they can be expected to weed out destabilizing capital flows while still “weeding in” desirable stabilizing flows.

Consider one possibility, proposals to regulate hedge funds. In the page-long discussion, Soros argues for fundamental regulation. But the proposed regulation is of a nature unspecified and is, in degree, to fall on hedge funds as heavily as everyone else, but no more heavily.

Hedge funds in general, and Soros in particular, have recently acquired in the popular imagination an image as speculation at its most excessive. Currency collapses from London to Kuala Lumpur are blamed on them. But there is danger of scapegoating. Hedge funds tend to be smaller players than other categories of speculators, such as international banks and who constitute most of the volume of trade in foreign exchange markets, or local residents of countries who try to get their money out ahead of feared crises. More importantly, there is a case to be made that hedge funds are more often a source of stabilizing speculation rather than destabilizing. As noted above, they tend to place their bets based on economic fundamentals and arbitrage opportunities, not on trend-following.
Significantly, some recent volatility in foreign exchange markets seems to result from hedge funds withdrawing from the market -- forced to unwind positions because high leverage does not permit them to continue renewing a bet until such time as the market price catches up where they think it should be -- not because the fund has placed a bet on a trend away from fundamentals. Assume that regulators were to succeed in clipping the hedge funds in some way (and it is not clear how, since funds like Soros’ are registered offshore, precisely to avoid regulation). It is possible that the weight of stabilizing speculation in the market would thereby shrink, and deviations from fundamentals equilibrium thereby grow.

Soros persuasively argues that there are two respects in which some hedge funds may merit their reputation as a potential source of volatility. [In these regards, Soros points out the distinction between Long-Term Capital Management and Soros Fund Management.] First, he argues that LTCM relied too slavishly on efficient-markets theory. One aspect of this theory, rational-expectations statistical methodology, does indeed appear to have been part of the problem. Under this methodology, statistical estimates based on whatever pattern of movements of financial market prices happened to hold during a recent historical period (means, variances, and correlations) are assumed to hold in the future. But this approach can give the wrong answer if an unusual event happens not to have occurred during that period. [An extreme flight to quality -- wherein US treasury bill rates fall at the same time that most other U.S. interest rates rise -- is sufficiently rare historically that hedge funds were caught by surprise when it occurred in August 1998.] Second, some hedge funds have become extremely leveraged, in essence placing their bets on margin, i.e., borrowing from their banks to raise the stakes. Bets that go wrong, often because the market has not yet caught up with the economic fundamentals, then threaten the entire system. This calls for regulation of the banks -- as it is here where the public interest is most clearly involved -- more than regulation of the hedge funds.

The section on capital controls contains a short, but good and sympathetic, discussion of the penalty on short-term capital inflows that Chile imposed in the early 1990s, in the boom phase of its financing cycle (p.202). Statistical evidence suggests that the composition of inflow is a significant leading indicator of the probability of currency crashes occurring. The higher the reliance on foreign-currency borrowing that is short-term or intermediated through banks, the higher the probability of crisis. [The higher the reliance on foreign direct investment, the lower the probability of crisis.] The theory is that bank flows in particular are more vulnerable to moral hazard problems than are other modes of finance such as foreign direct investment and sales of longer-term securities, and that a mismatch of short-term bank liabilities with longer-term bank assets (e.g., real estate) leaves a country vulnerable. This conclusion lends support to proposals for controls that would seek to change the composition of capital inflows. A common interpretation of Chile’s experience is that the controls have succeeded in changing the composition of the capital inflow, in the direction of longer-

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5 For econometric evidence, see Frankel and Rose (1996).
term maturities, while having little effect on the total magnitude.\(^6\) While Chile’s removal of some of its inflow controls in 1998 have been described by some as evidence against their utility, it could instead be interpreted as an appropriate recognition by Chile that the controls should be maintained only in the phase of the cycle when inflows are potentially excessive. One promising variant is the idea of placing higher reserve requirements on banks’ short-term borrowing from abroad in foreign currency (as Argentina has essentially done).

But Soros’ total discussion of capital controls is only two pages. It contains the frustrating passage: “It should be possible to curb speculation without incurring all the harmful side-effects of capital controls...This is about as far as I want to go in prescribing solutions. Perhaps I have already gone too far.”

The chapter “How to Prevent Collapse” contains a single sentence referring the reader to the author’s January 1998 *Financial Times* op-ed, where he proposed what most people think of as the Soros plan: an International Credit Insurance Corporation. There is no explanation of the ICIC proposal here, only a statement that this point in history would be an ideal time to enact the plan because this new institution would encourage greater flows to emerging market countries, which is precisely what is needed. This seems to contradict the argument in the rest of the book, which is more consistent with the belief that capital flows tend to be excessive.

The proposal [in the *FT*] is to set up an authority that would guarantee international loans for a modest fee. It could be part of the International Monetary Fund, or a new agency. Up to an amount set by the authority, the ICIC guarantee would mean that a borrowing country could access international capital markets at prime rates. Beyond this, creditors would have to beware.

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\(^6\) References include Velasco and Cabezas (1997), Edwards (1998), Agosin and Ffrench-Davis (1996, Valdes-Prieto and Soto (1996), and Chucamaro, Laban, and Larraín (1996), who use regression analysis to confirm a relationship between the observed decline in the share of short-term capital inflows into Chile and the deposit scheme.
Perhaps it is only during the “bust” part of the cycle, as now, that the ICIC would act to increase the level of funding for emerging markets. It is probably intended that during the “boom” part of the cycle (e.g., 1991-96), the institution would somehow limit lending. This would in fact be the case if Soros has in mind that the international community’s support would be limited to the ICIC, and that the support for all loans would disappear as soon as the national aggregate borrowing went over the approved limit. But it might not be the case otherwise, especially if the ICIC guaranteed only specific loans, with further loans left to the mercy of the market place. The famous moral hazard problem, which many believe to be the crux of the malady afflicting the international financial system now, could remain, in enhanced form. In the first place, public statements that no loans would be bailed out in the bust phase, beyond those insured, would be no more credible than statements under the current system that loans in general will not be bailed out. When a crisis hit a systemically-critical debtor, the international community would ex post feel the need to come to its rescue as much then as it does now. In the second place, countries would have an incentive during the ex ante boom phase to assign to the guarantee those borrowings that are politically-favored, and to save their most credit-worthy projects to go up against the market test. In that case, the ICIC guarantees would exacerbate the moral hazard problems that currently exist, rather than diminishing them.

The lesson?

The book’s real overarching theme may be that it is tough work being brilliant when everyone else is not. It is of little use for an individual speculator to diagnose correctly that a currency is overvalued and to take a short position accordingly, if simplistic trend-following behavior by other speculators leaves the currency even more overvalued when the time comes to close out his position. This is the bandwagon. But the media and policy-making communities embark on self-reinforcing wrong turns as often as does the financial community. Soros laments that enlightened thinking is no more likely to predominate in the political process than it does within the market process. Policy-making is afflicted by problems of unintended consequences, self-interest, voter disaffection, money-dominated politics, and candidates promising what voters want to hear. As a result, politics regularly carries the policy-making process far away from the sensible path, on bandwagons analogous to those afflicting the financial community. Indeed, ultimately, “the political process is less effective than the market process in correcting its own excesses (p.207).” A picture that is accurate, but that is not likely to inspire a clarion call to public action.