

**Crisis Prevention and Management:
Any New Lessons from Argentina and Turkey?¹**

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A. Introduction

It was Sir Walter Raleigh who said that those who follow too close on the heels of history risk getting kicked in the teeth. No doubt he would have warned that it is still too early to draw definitive lessons from the most recent round of crises in Turkey and Argentina. That said, some of the implications for policy are already obvious. Many of these relate to dilemmas for the International Monetary Fund and the World Bank that have come in for extensive discussion in conjunction with efforts to strengthen the international financial architecture, but on which disappointingly little progress has been made.

B. Background

Argentina and Turkey were widely regarded as two of the poster boys of the Washington consensus. Following extended periods of monetary and economic turbulence, both brought down inflation in the context of exchange-rate based stabilizations and grew robustly for a period. To be sure, they differed in important particulars. Argentina had succumbed to full-blown hyperinflation, while Turkey's annualized inflation for the most part remained in the high double digits. Argentina stabilized earlier, in 1991, while Turkey made a concerted attempt only in 1999. Argentina's stabilization was cemented by the adoption of a dollar-based currency

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board, while Turkey opted for a crawling peg against a dollar-deutschmark basket. Argentine inflation quickly came down to low levels, while Turkish inflation remained in the middle double digits even after the 1999 stabilization.² Turkey's post-stabilization crisis came quickly, while Argentina's was longer delayed. Clearly, the countries were not simply two peas in a pod.

At the same time, the similarities in their experiences are striking. Both countries had endured extended periods of economic stagnation: Argentine growth was depressed in the 1980s by inflation and debt problems (market GDP fell by 1 1/3 per cent per annum between 1981 and 1990), while Turkish GDP per capita managed to grow at only 1 1/2 per cent per annum in the 1990s. Both then experienced post-stabilization booms as the reduction in interest rates toward world levels stimulated domestic demand, especially for durable and semi-durable consumption goods and private investment.³ Both saw exports surge once their economies stabilized and recovered. But in both countries, that export growth was insufficient to finance buoyant import demands, rendering them dependent on capital inflows.⁴ Both made concerted efforts to balance the public-sector accounts. Both pursued ambitious programs of privatizing public enterprise.

²Thus, Turkish inflation declined from 69 per cent as of December 1999, the initiation of the current IMF program, to 36 per cent in January 2001 (on the eve of the latest crisis). The end-2000 target for inflation was 25 per cent, but this was overshoot. In Argentina, in contrast, inflation came down to essentially zero.

³Argentina grew by more than 5 per cent per annum between 1991 and 1997, while Turkey grew by 7 per cent in calendar year 2000 (the year following its stabilization).

⁴Those capital inflows were the mechanism driving domestic interest rates down to world levels. The also financed the consumption and investment boom immediately following the stabilization.

Both took steps to strengthen their banking systems.⁵

With benefit of hindsight it is clear that the two countries also had similar vulnerabilities. In both cases, fiscal consolidation was incomplete. Political support for cuts in public spending was fragile and fragmented. So long as privatization revenues topped up the public accounts there was breathing space, but hard decisions could not be put off indefinitely. Moreover, using the exchange rate as an anchor for disinflation exposed both economies to competitiveness problems. Since inflation came down less quickly than the rate of currency depreciation, competitiveness problems built up.⁶ The consumption boom produced by the temporary fall in real interest rates (as nominal rates declined to world levels but inflation adjusted more slowly) was transitory by construction. But a one-time adjustment of the exchange rate designed to restore competitiveness would have threatened both the credibility of the government's commitment to disinflation (the exchange rate peg being the symbol of the stabilization program) and the stability of the banking system (banks having accumulated large dollar-denominated liabilities). Finally, financing the current account at prevailing exchange rates and levels of demand required sustained capital inflows. But given these other sources of fragility, investors

⁵The measures taken in Argentina to strengthen the banking system are well known. While banking-sector reforms in Turkey were less complete, there was still considerable progress in creating an independent bank supervisory agency and bringing prudential standards and accounting rules into line with international norms, notably the requirement to present bank accounts on a consolidated basis and strengthen loan classification rules. See Ertugrul and Selcuk (2001) and OECD (2001) for two optimistic accounts. After the crisis, of course, observers referred instead to the “ineffectual members of the Banking Regulation and Supervision Agency” (Boulton 2001).

⁶Argentina's real exchange rate appreciated by 15 per cent between January 1997 and mid-2001. Turkey's real appreciation over this period was a more modest 10 per cent, in part reflecting the depreciation of the lira in February 2001.

became increasingly reluctant to make long-term commitments. Maturities shortened, and as short-term foreign liabilities mounted, so did rollover risk.⁷

Consequently, both economies were vulnerable to deteriorating external conditions. Asia's crisis and Russia's default signaled that deterioration: while neither Argentina nor Turkey was rationed out of the international bond market, launch spreads ratcheted upward. Brazil's devaluation at the end of 1998 was a further blow to Argentine competitiveness; the Marmara and Bolu earthquakes were equally serious shocks to Turkey, albeit of a different sort. Then, in 2000 and 2001, higher oil prices, the further rise of the dollar, evidence of a global slowdown, and finally the events of September 11th cast doubt on the ability of both countries to export their way to growth.

In these circumstances, a domestic political disturbance that cast a shadow over the prospects for fiscal adjustment and economic adjustment generally could upset the apple cart. In Turkey the trigger was a spat between Prime Minister Ecevit and President Sezer over how to crack down on public-sector corruption which created doubts about the prospects for fiscal reform. In Argentina it was the disintegration of support for the fiscal cuts demanded by President De la Rúa's economy minister Jose Luis Machinea and his politically short-lived successor, Roberto Lopez-Murphy. As the future grew clouded, interest rates shot up, damaging the prospects for growth and creating doubts about debt sustainability. The IMF intervened with additional assistance, immediately in Turkey and after some months in Argentina.

⁷By mid-2001, Turkey's short-term external debt (with a maturity of one year or less) had risen to 100 per cent of reserves, Argentina's to 95 per cent. In Turkey, this problem was compounded by interruptions to privatization, which limited the scope for foreign direct investment.

Turkey's February 2001 crisis came at the end of three months of volatility. This unsettled period opened with news the previous November of problems in the banking system resulting from gambling for survival by banks under growing competitive pressure.⁸ The banks in question, desperate for liquidity, engaged in fire sales of government securities, causing interest rates to shoot up and international investors to exit the market. The result was a credit crunch aggravated by the fact that the central bank was prevented from injecting liquidity into the financial system by its commitment to defend the currency peg. As the financial system came under severe pressure, the monetary authorities relented at the end of November and provided additional liquidity. But this only raised doubts about the stability of the exchange rate and prompted capital flight.⁹ The situation stabilized temporarily on 6 December when the IMF, confronted with a virtual financial meltdown, announced the availability of \$10 billion of financial assistance conditioned on the government's commitment to strengthen the financial sector, strengthen the budget to accommodate the fiscal costs of bank recapitalization, and accelerate privatization.¹⁰ The World Bank contributed \$5 billion, while the Turkish Treasury

⁸A number of mid-sized banks had taken highly-leveraged positions in anticipation of continued declines in interest rates, expectations that were disappointed by delays to the privatization program and worries about the mounting current account deficit.

⁹This sequence of events was complicated. Initially, interest rates shot up to 100-200 per cent, and the Central Bank of Turkey allowed net domestic assets to increase in excess of targeted rates. This led to the rapid loss of foreign reserves, and on 30 November the central bank announced that it would stop providing liquidity to the market. Rates then skyrocketed to more than 1,000 per cent. At this point the government requested access to the Fund's Supplemental Reserve Facility.

¹⁰The government agreed to sell a third of Turk Telekom, the country's fixed-line phone monopoly and 51 per cent of Turkish Airlines (allowing maximum 24 per cent foreign participation). Privatization remained politically controversial however, since the Turkish constitution stated that public services should be provided by public companies. In addition both

and the Banking and Supervision Agency for their part announced the take-over of the main problem bank and a temporary deposit and credit guarantee.

In the wake of these events, interest rates declined and financial stability returned but only temporarily. The above-mentioned dispute among politicians catalyzed doubts about fiscal and financial reform. Interest rates shot up (to several thousand per cent), forcing the government to devalue and float on 21 February. The lira quickly lost half of its value against the major currencies. The result, predictably, was a sharp acceleration of inflation, distress in a banking system with extensive currency and maturity mismatches, and explosive growth of the public debt (owing to high interest rates, the existence of indexed debt, and the costs of bank recapitalization). Real GDP declined precipitously in the second quarter, and the IMF responded in May with a revised program and another \$8 billion following the Turkish Parliament's passage of nine structural reform measures, including an important new banking law.¹¹ The World Bank earmarked an more \$2 billion for fast disbursement in 2001 and the same amount again in 2002.¹² To restore confidence, the parliament approved a supplementary budget that aimed for a primary surplus of 5.2 per cent of GDP and completed a voluntary debt swap of treasury bills and

companies, especially Turk Telekom, were large employers, and the privatization of Turkish Airlines might lead to the elimination of unprofitable domestic routes (including some valued by the military).

¹¹This brought total IMF support for Turkey to \$19 billion (including the original \$3.7 billion stand-by agreement of December 1999 and the \$7.3 billion supplemental reserve facility granted after the November 2000 liquidity crisis). The new banking law facilitated mergers and streamlined bankruptcy proceedings, as well as curbing the scope for loans to related parties.

¹²The majority of the World Bank funds is linked to banking and public-sector reform, the balance for agriculture (the replacement of crop subsidies with income support for farmers) and social assistance.

longer-dated treasury bonds into longer term U.S. dollar denominated and lira-denominated instruments. The key to the success of the program became whether interest rates would come down, which would determine both whether the public debt, which had risen to roughly 90 per cent of GDP, was sustainable and whether growth would resume.

In Argentina, the absence of growth, which had sputtered to a halt in 1998, together with mounting political opposition to policies of fiscal austerity, created doubts about debt and exchange-rate sustainability and led depositors to flee the banking system and the country in the first half of 2001. International reserves fell by almost 40 per cent in the first seven months of the year and by nearly a quarter in July alone. The authorities found it impossible to raise funds in the domestic credit market. To remove the resulting rollover risk, the government converted its maturing bonds and short-term debt into new long-term instruments bearing generous interest rates. Domingo Cavallo, Lopez-Murphy's successor as economy minister and architect of the Argentine currency board, proposed a zero-deficit law mandating that public spending (inclusive of interest payments) be cut to the level of revenues.¹³ The Congress quickly concurred. Compliance required sharp cuts in non-interest spending (some state salaries and pensions were cut by 13 per cent), and the predictable political backlash immediately raised questions about the sustainability of these measures.¹⁴ Confidence was slow to return, and interest rates were slow to fall. The IMF responded in August by accelerating a \$1.2 billion disbursement originally scheduled for September, and then by extending an addition \$8 billion of support (\$5 billion of

¹³And kept there continuously.

¹⁴The salary and pension cuts were met with widespread street demonstrations, and Peronist state governors objected strongly to reductions in transfers from the federal government.

which was effectively made available immediately to help the government replenish bank reserves) in return for a renewed commitment to rationalize intergovernmental fiscal relations and to explore the prospects for a voluntary, market-based debt exchange.¹⁵ As in Turkey before it, success hinged on the behavior of interest rates, which would shape consumer and investor behavior, the prospects for growth, and ultimately political support for the hard policy measures required for debt sustainability.

IMF-World Bank assistance for these countries had a number of features in common. Official finance was designed to be sufficiently generous to effectively take both countries out of the financial market -- to insulate them from rollover risk while confidence was restored.¹⁶ Both governments were encouraged to undertake debt exchanges designed to remove short-term and soon-to-mature long-term debt from the market. In both cases, assistance was predicated on a major fiscal effort designed to ensure longer-term sustainability. Both rescue packages were subject to the prior adoption of institutional reforms: banking reform in Turkey and the zero-deficit law in Argentina.¹⁷ Finally, both programs assumed that the early restoration of

¹⁵The other \$3 billion for was general purposes, but its disbursement could be accelerated if it was used to help finance a voluntary debt exchange. The new program boosted total IMF support for Argentina to \$22 billion. The initial Stand-By Arrangement with Argentina, approved in March 2000 and augmented at the time of the second review in January 2001, had been regarded as precautionary.

¹⁶In the Argentine case, this take-out was complete; Turkey, in contrast, had to continue placing limited numbers of treasury bills, with the prospect of having to float considerably more in the final two months of the calendar year. To address the associated dangers, the IMF program allowed the central bank to lend the government international reserves received from the Fund, sufficient to satisfy a third of the public sector's financing requirements.

¹⁷Argentina imposed that zero-deficit law at the federal level but did not compel the provinces to adjust their current spending to match fluctuations in total tax revenues. Under the terms of an agreement reached at the end of 1999, a minimum of \$1.5 billion per month was

confidence would reduce interest rates, jump-starting growth.¹⁸

C. Lessons

The lessons of this most recent round of crises will be familiar to aficionados of the literature on international financial reform. They are eight in number.

1. The Risks of Exchange-Rate Based Stabilization. Both Argentina and Turkey pegged the exchange rate -- rigidly in the first case, within a band in the second -- in order to bring down inflation. The case for exchange-rate-based stabilization is well known (see e.g. Bruno 1993). Halting high inflation requires solving credibility and coordination problems. The government has to signal that it is committed to halting inflation and that it is prepared to stick to that commitment. Pegging the exchange rate, which ties the authorities' hands, is an obvious way of doing so. In addition, wage and price setters have to see evidence that inflation is coming down; here, the exchange-rate-induced stabilization of import prices is an obvious way of showing results. The after-you-Alphonse nature of the agreement to forego further wage and price increases requires a metric against which mark-ups and contracts can be gauged; a pegged exchange rate provides just such a measure. In contrast, other approaches to stabilization -- keying on reductions in the rate of money growth or on the central bank's inflation target -- are

transferred from the central government to the provinces to finance spending by the latter, irrespective of the level of tax revenues. Argentina's August 2001 program with the IMF was conditioned on the authorities' agreement to revise its intergovernmental fiscal relations to allow transfers to the provinces to fluctuate with the level of central government tax revenues.

¹⁸At the time of writing, it is still unclear whether these multilateral programs and the efforts of the two governments to restore stability and growth will succeed. The next sections are necessarily framed in light of this uncertainty.

harder to verify on a real-time basis and therefore less credibility-enhancing. Absent solutions to these credibility and coordination problems, stabilization may induce a serious recession and in turn undermine support for policies of disinflation. Fischer (2001a) observes that few if any countries have successfully brought down high inflations without first stabilizing the exchange rate.

At the same time, the fragility of pegged rates and the difficulty of exiting from a peg without precipitating a crisis became painfully evident in the 1990s. The few cases where countries succeeded in engineering exchange-rate based stabilizations and then moving to a more flexible rate without experiencing a crisis were widely commented upon. But the list of such countries is short. It is essentially just two in number: Israel and Poland. Moreover, these countries exited in favorable circumstances. It would appear that only if global economic conditions are propitious -- only if there are no external shocks like those enumerated in the previous section -- and only if everything else goes just right can a smooth exit be achieved.¹⁹ More typical is the case where the authorities resist abandoning the peg out of fear that exiting will damage their policy credibility, provoke capital flight, and cause a recession. But the longer the peg is retained, the more vulnerabilities build up in the financial system.²⁰ The country exits not smoothly but as the result of a crisis. Thus, exchange-rate based stabilization only buys

¹⁹See Eichengreen and Masson et al. (1998) for a discussion of experience with exits from pegs.

²⁰The association between pegged rates and financial crises is now well known. As Fischer (2001a) has observed, “each of the major international financial market related crises since 1994 -- Mexico in 1994, Thailand, Indonesia and South Korea in 1997, Russia and Brazil in 1998, and Argentina and Turkey in 2000 -- has in some way involved a fixed or pegged exchange rate regime.”

stability now at the price of instability in the future. From this point of view, the only mystery is why the multilaterals have not invested more heavily in alternatives to exchange-rate-based stabilization.

Argentina and Turkey illustrate these points. To lend credibility to its stabilization, Argentina adopted a dollar-based currency board. While this maximized the credibility of the commitment to price stability in the short run, it also exposed the economy to fluctuations in the relative value of the major currencies. The dollar's relentless rise in the second half of the 1990s thereby contributed to the country's competitiveness problems.²¹ Revealingly, the decision in 2001 to increase the flexibility of the peg in limited ways -- in April to replace the dollar with a dollar-euro basket once the euro rose to parity against the dollar, and in June to adopt a separate exchange rate for trade transactions until euro-dollar parity was achieved -- had negative effects on confidence that far outweighed any positive implications for competitiveness.

Turkey's inflation having been less extreme, that country could afford to make its new exchange rate regime less rigid. The crawling peg adopted in conjunction with its IMF program limited the lira's devaluation to 15 per cent a year. The "exit strategy" was that in June 2001, 18 months after the adoption of the crawling peg, the country would begin gradually widening the symmetrical band around the central parity.²² It is revealing to recall the rationale for adopting a band, despite what was already considerable evidence of its riskiness, and for programming a very gradual transition to greater flexibility. Turkish banks had large unhedged foreign

²¹As did the inability to adjust the exchange rate in response to Brazil's devaluation.

²²The band was to have reached 7 1/2 per cent (measured from edge to edge) at end-December 2001, 15 per cent at end-June 2002, and 22 1/2 per cent at end-December 2002.

exposures which threatened to give create serious financial problems if the exchange rate was allowed to fluctuate too freely. The 18-month transition was suggested to buy time for strengthening the banking system and for accustoming the banks to an environment of greater exchange-rate flexibility. But the downfall of this strategy was that the currency peg created moral hazard for both the banks and the government. Because exchange risk was socialized (that is to say, its strategy committed the government to preventing the exchange rate from moving and therefore to compensating the banks for their losses if the policy failed), the incentive to strengthen both balance sheets and supervision was diminished. As OECD (2001a, pp.27-8) put it, Turkish banks became “used to easy profits, via unhedged foreign borrowing to finance the purchase of high-yielding government paper, as well as domestic trading in that paper. These activities led to a significant build-up of off-budget positions in the form of open positions and ‘repos’, which respectively carried high exchange and interest rate risks...”²³ The banks’ net open positions nearly doubled during the first nine months of 2000 as they continued to make use of short-term foreign funding to lock in longer-term domestic nominal yields. More generally, stabilization-induced capital inflows arbitrated high domestic and lower world interest rates. These inflows, intermediated by the banking system, masked the weaknesses of the latter. All this weakened the incentive for the authorities to enforce the new bank regulations.

These same banking-sector vulnerabilities prevented the authorities from adjusting the exchange rate when it came under pressure. Its critics urged the IMF to insist that the lira be

²³Or, as Beattie (2001) put it, “Believing the peg would hold, Turkish banks borrowed dollars and bought lira-denominated government bills. Now the currency has plunged, and banks have been left with unhedged borrowings that may total \$10 bn...” On the eve of the devaluation, 67 of outstanding loans of deposit banks were lira denominated, while only 57 per cent of deposits were lira denominated.

devalued or floated as a condition for extending financial assistance to Turkey in December 2000, but the Fund resisted for fear of destabilizing the banking system.²⁴ Authors like Goldstein (2001) similarly insisted that the IMF should demand a devaluation of the peso as a precondition for extending additional assistance to Argentina the following August. Again it resisted out of fears that insisting that Argentina exit under pressure would only damage confidence and aggravate the crisis.

2. The Dangers of Short-Term Debt. By the second quarter of 2001, Turkey and Argentina had gone a long way toward “bullet-proofing” their economies against further financial difficulties. They had undertaken fiscal consolidation, shifting their primary budget balances from deficit to surplus. They had moved the current account of the balance of payments from deficit to surplus, eliminating their dependence on net capital inflows.

Yet not even these very substantial reforms sufficed to insulate their economies from crisis risk so long as investors harbored doubts about future policies, because the two countries had substantial amounts of short-term debt to be refunded. In Turkey, for example, 40 per cent of domestic-currency denominated debt was scheduled to mature between June 2001 and August 2002.²⁵ This exposed the country to the danger that investors would refuse to roll it over at customary interest rates. The need to then offer high rates in order to place it might raise doubts

²⁴As Rodrik (2000) put the point, “Were Turkey forced to float its currency, the consequences would be disastrous. The disinflation programme and its achievements would disappear overnight. The credibility of the economic and political leadership, which rests on the exchange rate commitment, would evaporate. Floating would aggravate the panic because it would essentially replace a well-understood monetary policy framework with a system of ‘anything goes’.”

²⁵Precisely, this was the per cent of domestic-currency denominated debt scheduled to mature in this period prior to the completion of that country’s June 2001 debt swap.

about fiscal sustainability, creating fears of a more general crisis. Thus, only when the IMF provided Turkey with funds that could be used to limit the country's dependence on the treasury bill market did that country receive even temporary relief from financial pressure. And only when Argentina removed its short-term *letes* from the market (converting them into longer term claims placed with banks and pension funds) did the severe sense of crisis recede.

There is some controversy about whether short-term capital flows are a distinct source of vulnerability, as argued by Rodrik and Velasco (1999), or simply a symptom of other, more fundamental policy problems, since rational investors will shorten the tenor of their commitments to problem countries. The experience of Argentina and Turkey suggests that the answer is "both." Countries should pay careful attention to the maturity structure of their obligations both because excessive short-term debt is a leading indicator of problems and because short maturities can aggravate the difficulty of coping with other sources of instability. In addition, outside intervention may be needed to break out of the vicious spiral where crisis risk leads to a shortening of maturities and the shortening of maturities heightens crisis risk.

3. How Debt Swaps Raise the Stakes. Reflecting this threat to fiscal and financial stability, both Turkey and Argentina undertook market-based debt exchanges to reduce this rollover risk. These were designed to remove the need to access the market as short-term obligations matured and thereby eliminate one source of uncertainty (namely, uncertainty about the interest rates at which new short-term obligations would be taken up). They were also designed to generate cash-flow savings by back-loading the interest charges. In the case of Turkey, the exchange of treasury bills and short-dated treasury bonds for longer-term treasury obligations generated substantial cash flow savings by extending the debt service profile from an

average of 5 months on the old exchanged bonds to 37 months on the new ones. It reduced interest costs for the second half of 2001 by about U.S. \$4.8 billion. Argentina's debt exchange lengthened the average maturity of the public-sector debt from 7.5 to 8.2 years and reduced the government's immediate interest costs by some US \$1.7 billion.

But by exchanging short-term obligations for longer-term instruments, the authorities merely traded problems now for potentially bigger problems down the road. While providing relief from immediate refunding needs, both debt swaps created heavy debt loads in the out years which would become economically and politically unsustainable if growth was slow to resume.²⁶ The problem was even worse to the extent that the debt swap saddled the two countries with "very high spreads that worsened...debt sustainability" (Roubini 2001).²⁷ It followed that if the resumption of growth was delayed, the situation could unravel. Investors would sell government bonds in anticipation of future difficulties, undermining the financial position of the banks and pension funds that held them and creating additional fiscal costs for the authorities.²⁸ And fears that these problems might develop in the future limited the immediate decline in interest rates.

Thus, the strategy followed in both cases for dealing with the country's immediate

²⁶Nearly half of the above-mentioned \$1.7 billion reduction in Argentina's interest and amortization payments was bunched in the second half of 2001 and in 2002, with the rest accruing in 2003-5. But there will then be a steep rise in the debt-service bill in 2006 as previously-capitalized interest charges have to be serviced and the U.S. dollar Global 2008 bonds begin to amortize.

²⁷Thus, the new Argentine bonds were issued at yields of between 14 and 16 per cent, as investors demanded a high premium in return for extending the duration of their bonds.

²⁸The general problem is familiar from the literature on borrowing to defend a fixed exchange rate, where it is shown that if that borrowing is at interest rates that significantly exceed the rate of economic growth, the additional reserves cum debt may accelerate rather than delay the timing of the crisis (see Buiter 1987).

financial problems raised the stakes. It made the early resumption of growth, to be achieved not so much by relief from immediate interest costs but more importantly from fiscal consolidation that promised to limit the need to issue additional debt in the future, all the more critical.

4. The Difficulty of Engineering an Expansionary Fiscal Consolidation. In both Argentina and Turkey, inadequate fiscal discipline helped to set the stage for the crisis. In Argentina, public spending as a percentage of GDP increased sharply starting in 1997 mainly as a result of increased spending by the provinces (Kigel 2001). The consolidated deficit reached 3 per cent of GDP on the eve of the crisis, and public debt grew strongly as a percentage of output.²⁹ In Turkey central government primary spending rose by 3 1/2 per cent of GNP between 1998 and 2000.³⁰ The central government consolidated budget deficit was nearly 12 per cent of GNP in 1999, and the public sector as a whole, including public banks and enterprises, ran a deficit of 23 per cent of GNP (including the “duty losses” of the state banks).³¹

Thus, allaying fears of instability required strengthening the fiscal balance. Both Argentina and Turkey made strong fiscal efforts. Turkey shifted its primary balance from a 2 1/2 per cent of GDP deficit in 2000 to (a projected) 6 1/2 per cent of GDP surplus in 2002. The change in Argentina’s primary balance in 2000-2001 was smaller, between 1 and 2 per cent of GDP, but no less impressive given the tendency for deteriorating cyclical conditions to move the

²⁹Reaching 50 per cent of GDP in 2000.

³⁰Central government primary spending as a percent of GDP rose by 7 per cent of GDP between 1985 and 2000 overall (OECD 2001a, p.26). Public sector real wages rose by a cumulative 40 per cent in 1999 and 2000 alone.

³¹These duty losses incurred as a result of subsidized lending operations performed on behalf of the government reached 8.2 per cent of GNP in 1999.

budget deeper into deficit.³²

But this reference to “deteriorating cyclical conditions” points to the problem, namely, that sharp cuts in public spending reduce aggregate demand and that less demand means less growth. The absence of growth in turn undermines the sustainability of the program by reducing the tax base relative to interest costs, which continue their relentless upward march, and by eroding political support for policies of austerity, no payoff from which is evident.

The only hope is that *ceteris is not paribus* -- that fiscal consolidation will not reduce demand and therefore not create or prolong a recession. Cases where dramatic fiscal consolidation in fact stimulated consumption and investment demand -- Ireland and Denmark in the 1990s are frequently-cited examples -- thus hold out hope that demand might rise rather than fall, allowing growth to resume and sustaining the adjustment program both economically and politically.³³

It is revealing to consider the preconditions and policies that allowed these countries to enjoy expansionary fiscal consolidations. First, the public finances of both Denmark and Ireland had clearly been on unsustainable path. The very fact that this situation could not continue (that is, that it was unsustainable) increased the likelihood that sharp adjustments would reassure consumers and investors.³⁴ Second, both countries recognized that the problem was an overlarge

³²By an additional 1.7 per cent of GDP in 1999, 1.0 per cent in 2000, and 1.3 per cent in 2001, according to Morgan Guaranty estimates (Werning 2001).

³³Giavazzi and Pagano (1990) is the seminal study of these experiences.

³⁴Elsewhere (Eichengreen 1998) I have used the analogy of a car speeding toward a brick wall: the more immediate is the danger of a collision, the greater the likelihood that stepping on the brakes will increase the passengers’ sense of security, causing them to revise up rather than down their estimate of how quickly the vehicle will continue proceeding down the road.

government budget, and they used expenditure cuts rather than tax increases to downsize the public sector.³⁵ Third, these adjustments were undertaken by strong governments with the political backing needed to stay the course. Alesina, Perotti and Tavarres (1998) show that coalition governments almost never succeed in implementing long-lasting fiscal adjustments of the sort that are likely to have short-run expansionary effects.³⁶ Fourth and finally, virtually every recorded case of an expansionary fiscal consolidation has been accompanied by devaluation of the currency, imparting immediate stimulus to export demand and in turn giving domestic demand time to recover. In most cases the exchange rate was then credibly stabilized, unilaterally or (in the Irish and Danish cases) in the context of the European Monetary System, which prevented devaluation from creating fears that there would be a loss of monetary control.

These preconditions for an expansionary fiscal consolidation shed light on why this result was so difficult to achieve in Argentina and Turkey. To be sure, some items on this list of favorable preconditions and policies were present. That both countries, with inefficient public sectors by the standards of other semi-industrialized economies, relied mainly on cuts in public spending to balance the budget should be confidence inspiring. Argentina relied on expenditure cuts for 90 per cent of the contribution of discretionary policy to the primary budget balance in 2000, and for 80 per cent of the further adjustments planned for 2001. Turkey's May 2001 program relied on cuts in non-interest expenditure for more than two-thirds of the

³⁵Tax increases, in contrast, would have just locked in the bloated public sector and done less to restore confidence.

³⁶Consistent with this presumption, Tutar and Tansel (2001) show that Turkish budget deficits have tended to increase with the number of parties in a coalition government. (The monthly data are more ambiguous.)

improvement in the central government primary budget balance.

But, except for the devaluation of the Turkish lira in February 2001, few of the other items on this list were present. Argentina was precluded from devaluing by its convertibility law, which was regarded as a sacred contract between the government and the public whose abrogation would have dealt a sharp blow to confidence. In Turkey, the benefits of devaluation were more limited than in Denmark and Ireland because after February there was no nominal anchor to tie down exchange-rate expectations (Barbieri and Cevik 2001).³⁷ In both cases, the agent of reform was a coalition government, political support for whose policies was uncertain.³⁸

The standard recommendation for governments in this bind is to lock in reform by strengthening fiscal institutions. Eliminating distortions to the policy-making process, as opposed to simply strengthening current policies, should reduce the perceived probability that policies will again worsen in the future. Recommendations for institutional reform to achieve this end include vesting more agenda-setting power with the finance minister or prime minister (who will rein in the tendency toward excessive outlays by the spending ministries), eliminating large vertical fiscal imbalances between the federal government and the provinces (whose existence may encourage the latter to over-spend in anticipation of a bailout from the center), and

³⁷Denmark and Ireland were different because they were members of the European Monetary System, which meant that they could simply realign their currencies rather than simply cutting them free.

³⁸In Turkey, fiscal consolidation was undertaken by a three-way coalition government of the Democratic left Party, the Nationalist Action Party, and the Motherland Party. While the three-party coalition had a substantial majority in the parliament, defection of any of the three parties could suffice to bring down the government. In Argentina, the Alianza government that took office in December 1999 had a working majority in the lower house of the Congress, but the Senate and the majority of the provinces were controlled by the opposition.

imposing a hard ceiling on the overall size of the deficit (to limit free riding by competing interest groups).³⁹ Both Turkey and Argentina took this advice to heart. Argentina imposed a hard cap on the federal budget by adopting a zero deficit law and set out to reform revenue-sharing arrangements between the federal government and the provinces. Turkey widened its tax base, sought to eliminate the use of extra-budgetary funds and to suppress the quasi-fiscal activities of the state banks, and attempted tackle the deficits of state-owned enterprises (ultimately relying on privatization to impose hard budget constraints). It is thus disappointing that neither Turkey nor Argentina was able to provide the markets with the requisite reassurance. Evidently, institutional reform did not suffice given the weakness of the governing coalition and the fear that even significant changes in institutions could be rolled back by the next government.

Thus, the idea that these countries could have engineered expansionary fiscal consolidations on the model of Denmark and Ireland was over-optimistic.

5. The Difficulty of Saying No. The political backdrop to the IMF's recent aid packages for Turkey and Argentina was a drumbeat of criticism in the United States and Europe of the frequency and magnitude of multilateral rescue packages. Bodies as diverse as the International Financial Institutions Advisory Commission (of independent experts appointed by the U.S. Congress and Clinton Administration -- also known as the Meltzer Commission) and the Independent Task Force on Safeguarding Prosperity in a Global Financial System (of the U.S.-based Council on Foreign Relations) criticized repeated multilateral rescues as a source of moral

³⁹See Eichengreen, Hausmann and von Hagen (1999) and Poterba and von Hagen (1999). The applicability of these insights to Turkey, one of the crisis countries that is the focus of this paper, is documented by Tutar and Tansel (2001), who show that budget deficits are an increasing function of the number of separate fiscal authorities (whose number in fact varied quite significantly over time).

hazard.⁴⁰ They argued that a pattern of financial assistance that enabled governments to pay off their foreign creditors encouraged market participants to lend without proper regard to the risks; that is, it created moral hazard for investors. Debatably, it also encouraged moral hazard for governments, providing partial insurance against financial risks and thus encouraging the authorities to adopt riskier policies than might have been the case otherwise. The Meltzer Commission recommended that IMF assistance be extended only to countries that had taken prior action to strengthen their financial systems, to eliminate fiscal imbalances, and to abandon soft currency pegs but which were suffering financial problems not of their own making. The Council on Foreign Relations task force recommended instead imposing a hard ceiling on the size of IMF programs, of 100 of quota in a year and 300 of quota over the life of a program.

While the particulars of these recommendations were not universally accepted, their sense was. The change in IMF leadership following the Asian crisis and the change in U.S. administration following the November 2000 presidential election were widely seen as heralding a more discriminating and conservative approach to multilateral assistance, under which aid would be provided only to countries with solid fundamentals and the size of packages would be limited.

Argentina and Turkey were obvious candidates for this new approach. It was argued that Argentina had a solvency problem, not a liquidity problem -- absent growth, in other words, it lacked the economic and political capacity to pay. The IMF should not lend another dime, the institution's critics insisted, unless Argentina first devalued the lira and restructured the debt

⁴⁰See International Financial Institution Advisory Commission (2000) and Council on Foreign Relations (1999).

(Goldstein 2001). It should not lend to Turkey, they argued, because the government had not done enough to fix the banking sector and the budget.

Yet, when push came to shove, the IMF and its principal shareholders found it impossible to say no. This reflected fears of contagion: that these crises (and especially Argentina's) might spill over to other countries (like Brazil) dependent on the same sources of finance. U.S. Treasury Secretary O'Neill insisted that he would "urge the IMF to show restraint if there weren't clear signs of a financial contagion" (Vogel 2001), but fears that instability might spread from the market in Argentine bonds to emerging market debt securities as a class led O'Neill and his colleagues to back down and agree to lend.⁴¹

Moreover, this decision to reluctantly assist Argentina reflected the realization that alternative, market-based solutions were not viable.⁴² Not lending presumably meant that the Argentine government would be forced to suspend debt payments and restructure -- in other words, to be declared in default on their debts. But this well might lead angry bondholders to file lawsuits in an effort to attach the foreign assets of Argentine corporations. Argentina's trade would be disrupted; its exports would plummet. Not only would the Argentine economy be severely damaged, but other emerging markets would suffer as dedicated emerging market

⁴¹The new IMF facility established in 1999 to protect countries with strong economies and finances from the spread of instability -- the so-called Contingent Credit Line (or CCL) -- was of no help in limiting fears of contagion. Even after terms of access were simplified in 2000, no country applied for a CCL, reflecting fears that doing so would be taken as a sign of financial weakness.

⁴²As Kahn (2001) put it, "For days, Mr. O'Neill pressed I.M.F. officials, Mr. Marx and his staff to find a way to solve Argentina's problem without new loans...Ultimately, the administration was backed into supporting new aid just to control matters. The aid buys time for Argentina and the I.M.F. to pursue the creative long-term solution that Mr. O'Neill sought."

investors sold off the securities of other countries in a desperate effort to raise liquidity.⁴³ In effect, Secretary O'Neill discovered that it was much easier for outside critics to insist that the Fund should stand back and let market forces run their course than for the stewards of the world economy to actually do so when that course was so uncertain.

Thus, in Argentina and Turkey, as on many prior occasions, the IMF and its shareholders found themselves between a rock and a hard place. Lending threatened to fuel moral hazard, but not lending exposed the world economy to risks too great for the politicians to countenance. Moral hazard, they ultimately concluded, was the lesser of these two evils.

The clear implication is the need to carve out alternatives to a pattern of bailouts, on the one hand, and devastating disruptions on the other.⁴⁴ There have been many proposals along these lines: these include the idea of amending the IMF Articles of Agreement to give the institution the authority to shelter a government from disruptive legal action by disaffected creditors, and mandating the adoption of collection-action clauses by emerging market issuers so that minority creditors lose the right to sue. But the efficacy of these initiatives is disputed, and progress has been slow.⁴⁵ The most recent crises thus underscore the need for institutional reform if the multilaterals are to be able to avoid having to choose between meltdown and moral hazard.

⁴³The likelihood of which was heightened by the fact that Argentine issues accounted for fully a quarter of all emerging-market debt securities.

⁴⁴Thus, former IMF First Managing Director Stanley Fischer, in his farewell press conference in August 2001, identified this need to develop alternative institutional mechanisms for resolving debt crises as a critical unresolved issue.

⁴⁵Two surveys of the issues and proposals are Roubini (2000) and Kenen (2001).

6. Limitations of the Catalytic Approach. The alternative to a concerted, involuntary restructuring is to catalyze private lending to relieve the country of its liquidity crisis. The multilaterals regularly distinguish the “concerted” and “catalytic” approaches to crisis resolution. The former is appropriate for a country with a solvency problem, while the latter is appropriate for addressing the financial difficulties of a country that is solvent but illiquid (Roubini 2001). In both Turkey and Argentina, the multilaterals made a judgment that the government was committed to keeping current on its external obligations if the immediate liquidity crisis could be surmounted. They therefore adopted the catalytic approach.

A multi-pronged strategy was pursued to catalyze private lending. Governments adopted the fiscal and financial reforms detailed above. The multilaterals provided official finance to give the authorities breathing space and the markets time to react. Finance ministry officials embarked on road shows to convince investors of their resolve, while the IMF made use of the contacts of its Capital Markets Consultative Group to drive home the message of reform and support.

But the main lesson of the Turkish and Argentine experiences is that the markets are likely to disappoint official hopes. In the climate of uncertainty that invariably surrounds a crisis, waiting has option value. Investors have an incentive to wait and see whether the commitment to reform is sustained instead of being first to provide new money. New money may increase the likelihood of success -- interest rates will come down, making it more likely that growth will resume -- but organizing the provision of those funds must surmount the free rider problem in which each investor prefers other investors to be the source of the additional liquidity. And as syndicated bank loans and short-term bank credits are superseded by an atomistic bond market

inhabited by a large number of different investors, this problem becomes more severe.

In the case of Turkey, the IMF expressed disappointment in the markets' lack of support for the catalytic approach. In July 2001, the IMF's First Deputy Managing Director went so far as to conduct a conference call with journalists in which he argued that "the Turkish authorities are not getting the credit they deserve."⁴⁶ Another interpretation is that investors were aware of the reforms undertaken by the Turkish authorities but that they had no incentive to commit additional funds until they saw that other investors felt likewise and that the government was prepared to stay the course. This points up the intrinsic difficulty of the catalytic approach and the need to for institutional alternatives.⁴⁷

7. The Limitations of Contingent Credit Lines. A similar implication follows from Argentina's experience with private contingent credit lines, which the multilaterals have urged on emerging markets as a way of buying insurance against liquidity crises.⁴⁸ The idea is to solve the first-mover problem, in which no one investor wants to be first to provide new money, by contracting for that money in advance. The limitation of this solution is that the government's counterparties, while attracted by the up-front commitment fees associated with such lines, do not want to have to actually lend into a crisis. They have every incentive to attempt to wriggle

⁴⁶IMF (2001a). In his opening statement to the journalists, Fischer emphasized that "this program will not succeed if it does not recover market confidence...[a]nd if interest rates stay as high as they are right now, then some changes will have to be made in the program. The Turks cannot continue with interest rates at very high levels, particularly if inflation is coming down, and therefore a restoration of market confidence will be needed."

⁴⁷Here the obvious candidate is an officially sanctioned standstill to provide a "time out" during which investors can collect their whits (as recommended by the Bank of Canada and Bank of England, 2001).

⁴⁸See for example World Bank (2000), Chapter 4.

out of them ex post.

When the Argentine crisis reached its August 2001 peak, there was much discussion of the possibility that the government would draw on the repo lines that it had prearranged with a consortium of private banks. Credits from these banks had to be collateralized under the provisions of the contracts by specific Argentine government securities. Under the terms of these agreements, the banks would purchase specific Argentine securities, which would eventually be repurchased by the government, closing out the credit line. Unfortunately, many of the government securities in question had been retired from the markets as a result of the debt exchange conducted earlier in the year. The limited supply of eligible collateral thus reduced the contingent credits on which the government could draw to a fraction of those it had originally negotiated. Market participants estimated that this constraint could reduce the amount that could be drawn through this facility from some US \$4.5 billion to US \$1.5 billion or even possibly less.

It seems unlikely that the Argentine authorities were unaware of this issue when undertaking their debt swap. More likely, they attached little probability to the prospect that they would ever draw those lines, on the grounds that doing so would only alarm investors (by signaling the extent of the country's financial difficulties) without providing additionality.⁴⁹ Banks forced to extend new credits under the terms of the contracts would simply sell other holdings of Argentine bonds, and the consequent collapse of bond prices would only deepen the country's financial difficulties. As Canorero and Segura (2001, p.17) observe, the consideration given to use of the repo line in August was a surprise. "We always thought that despite the

⁴⁹Of course, this raises the issue of why the authorities ever negotiated these lines in the first place.

existence of the repo line, it would not to [sic] be used. Potential withdrawals from this line were expected to create the need for increased hedge by the participant banks, which would result in a new sell-off in the bond market.”

In this sense, Argentina’s experience confirms the shortcomings of private contingent credit lines. That the Argentine authorities apparently contemplated drawing on the repo lines still available to them may reflect the IMF’s insistence that it do so, in order for the institution to be able to point to “private sector involvement,” more than any real contribution of those lines to resolving the crisis.

8. Difficulty of Bailing in the Private Sector. This experience with private contingent credit lines is a specific illustration of the more general difficulty of bailing in the private sector. Since the Mexican rescue of 1995, the multilaterals and their critics have devoted much attention to the need for private-sector involvement in crisis resolution (IMF 2001b). At an immediate level, the need to secure a private-sector contribution reflects the rapid growth of international capital flows, which vastly outstrip the liquidity available to the IMF, an institution that relies on the contributions of its member governments and is not authorized to borrow on private markets. More fundamentally, ensuring that market participants take a hit or make a positive financial contribution to resolving the crisis (seeing that they are “bailed in” rather than being “bailed out”) is seen as essential for limiting investor moral hazard and ensuring that their lending decisions are taken with due regard to the risks.

Steps to bail in the private sector in Turkey were “of the softest nature” (Roubini 2001). They involved limited monitoring of the positions of international banks, designed to discourage the latter from curtailing their credit lines, and a vague commitment by some of those banks to

maintain their exposures. These measures did little to deter U.S. and German banks inclined to cut and run. Argentina's program was explicitly tailored to take the country out of the capital market through the end of 2001. That is to say, it allowed creditors with maturing claims to exit without losses. It was the opposite of a bail in.

This is not heartening for those who see Argentina's August 2001 crisis as the first serious test of the commitment of the new U.S. government and new IMF managing director to develop a market based alternative, or at least supplement, to the traditional approach of multilateral financial assistance. This ambition came head to head with the limitations of the voluntary approach -- namely, that getting market participants to write down existing debts and/or provide new money voluntarily is greatly complicated by the free-rider and first-mover problems detailed above. Something along these lines had been possible in South Korea in 1997-8, but there the principal creditors had been a relatively small number of large international banks, not a large number of relatively small bondholders, and there was less question about the depth of political support for the hard measures needed to restore external credit worthiness. In Argentina, the creditors were reluctant to agree to a voluntary restructuring precisely because it was voluntary; they preferred to wait and hope that the multilaterals would cave in and provide additional assistance. The wish for a market-based solution similarly forced the authorities to face up to the limitations of the involuntary approach, specifically, that a suspension of debt-service payments that forced the creditors to involuntarily take losses might lead to messy lawsuits, disrupt Argentina's export trade, interrupt its financial-market access for an extended period, and sour investors on emerging-market securities as a class. In the end, it was fears that the costs of these approaches would exceed the benefits that led the U.S. government to

reluctantly agree to another loan.

The innovation of the Argentine package was an agreement that the IMF would accelerate its disbursement of the last \$3 billion of assistance if the government developed a plan to use it to underwrite a voluntary debt exchange. This can be thought of a sweetener designed to facilitate a market-based solution to Argentina's debt problem. \$3 billion is no small potatoes, but it was dwarfed by the country's more than \$120 billion of external debt. \$3 billion of official funds was hardly sufficient collateral, in other words, to induce the bondholders to voluntarily exchange these claims for longer-dated securities bearing lower interest rates.

A meaningful debt exchange therefore required the country to leverage the Fund's \$3 billion. (Market commentary referred to the need for a total of \$20-30 billion.) One conceivable source of these additional monies was the IMF, the World Bank, Interamerican Development Bank, and bilateral creditors. This, however, would have amounted to using official guarantees to induce private creditors to accept lower interest rates. It would not have been a step in the direction of a market-based solution, and it would not have addressed the moral-hazard problem.

From this point of view, it would have been preferable to obtain the additional funds from market sources. But here again there were collective-action problems. Private funds to provide collateral for a new tranche of bonds issued in a debt exchange would have been subordinated to the claims that were exchanged. (The providers of collateral are paid back last, by definition.) In the midst of a crisis, no one wanted a new junior claim on Argentina. It is not surprising from this point of view that the effort to arrange a voluntary debt exchange, even a subsidized one,

bore no immediate fruit.⁵⁰

The bottom line is that creditors are not inclined to volunteer new money or to accept a debt write-down so long as they hold out hope that another solution might turn up. And as long as the official community is reluctant to contemplate involuntary solutions, because default is seen as too messy, disruptive and painful and too threatening to the international system, they have good reason to think that the official community will again bail them out at the end of the day.

D. Implications for the Unfinished Architectural Agenda

This most recent round of crises makes clear that the official community still has some way to go in redesigning the international financial system to make the world a safer financial place. On the crisis-prevention front, progress is still needed to rationalize exchange rate arrangements and to encourage countries to abandon crisis-prone pegs. Turkey may be the last nail in the coffin of crawling pegs, and the progress of developing countries in bring down their inflations provides some reassurance that few new pegs will be added to as the result of future exchange-rate-based stabilizations. At the same time, Argentina's crisis serves notice that even a currency board is no guarantee against speculative pressure motivated by expectations of devaluation. Countries unwilling to float their exchange rates may have to go one step further, to euro-, yen- or dollarization. Turkey's crisis has led many market participants to the same conclusion; they now regularly suggest that the country's future options are greater exchange rate

⁵⁰In addition to this economic constraint, there were legal constraints on a market-based debt exchange, notably negative pledge clauses that prevented the Argentine authorities from issuing new securities that would have been senior to existing issues.

flexibility (anchored by an inflation-targeting regime once conditions normalize) and official euroization.⁵¹

Both crises point up the special risks of short-term foreign obligations and the importance of carefully managing the maturity structure of the debt. Turkey's crisis also justifies the priority that has been attached to strengthening banking systems in emerging markets. It clearly indicates that the so-called commercialization of state banks is not enough where there is a history of government pressure for banks to extend subsidized loans. But privatization and the removal of restrictions on foreign entry, while part of the solution in the long run, also heighten immediate risks as private banks come under growing competitive pressure and gamble for redemption. Disorderly exit in a crisis can be a very serious threat to economic stability, which means that there is a necessary role for prudential supervision as well as market discipline in the transition.

On the crisis-resolution front, both experiences highlight the need to develop alternatives to large-scale multilateral finance, which promises to grow ever more expensive with the expansion of financial markets and is a source of moral hazard. They point up the failure of the official community to make adequate progress in addressing this problem to date. Schemes for voluntary debt exchanges and the voluntary provision new money have not been able to surmount free-rider and first-mover problems. Involuntary bail-ins are seen as too disruptive and damaging to the crisis country and the markets. And drastic fiscal measures designed to restore credit worthiness and eliminate the need to resort to any of these solutions have limited prospects of success, given that procyclical fiscal policies threaten to provoke recessions that will

⁵¹See Barbieri and Cevik (2001).

undermine political support for those policies.⁵² Reflecting the infeasibility of these alternatives, there remains almost irresistible pressure for the multilaterals to lend.

Given these dilemmas, there are signs that more ambitious proposals for facilitating orderly workouts of problem debts, previously dismissed as unrealistic, may be back on the table. U.S. Treasury Secretary O’Neill, in mid-September testimony to the U.S. Congress, pointed to the question of whether contractual provisions hindering orderly workouts and exchanges should be modified.⁵³ He alluded to the need to consider an international bankruptcy court that would shelter emerging-market debtors forced to restructure their debts from disruptive legal action.⁵⁴ There may be no consensus in the international community on the precise design of such reforms. But if the Turkish and Argentine crises create a new willingness among policy makers to consider these issues, then all will not have been for naught.

⁵²Unavoidably so in emerging markets with political systems that tend to produce coalition governments whose capacity to stay the course is questionable.

⁵³See J.P. Morgan (2001), p.9. O’Neill’s specific reference was to the negative pledge clauses that hindered the completion of a voluntary debt exchange in Argentina, but the proponents of other contractual changes designed to facilitate orderly restructurings (the addition of collective-action and collective-representation clauses to U.S.-law bonds) would argue that the point is more general.

⁵⁴Fischer (2001b) refers to a “recent agreement between the MD and the Secretary of the United States Treasury to work toward setting up an international bankruptcy court.”

References

- Alesina, Alberto, Roberto Perotti and Jose Tavares (1998), "The Political Economy of Fiscal Adjustments," *Brookings Papers on Economic Activity* 1, pp.197-248.
- Bank of Canada/Bank of England (2001), "Resolution of International Financial Crises," processed (February).
- Barbieri, Riccardo and Serhan Cevik (2001), "Turkey: Still Looking for an Anchor," *Morgan Stanley Global Economic Forum* (29 June), www.morganstanley.com.
- Beattie, Alan (2001), "Turkey Tests Currency Pegs to Destruction," *Financial Times* (22 February), <http://www.ft.com>.
- Boulton, Lila (2001), "Turkey Survey," *Financial Times* (13 July), <http://www.ft.com>.
- Bruno, Michael (1993), *Crisis, Stabilization and Economic Reform: Therapy by Consensus*, Oxford: Clarendon Press.
- Buiter, Willem (1987), "Borrowing to Defend the Exchange Rate and the Timing and Magnitude of Speculative Attacks," *Journal of International Economics* 23, pp.221-240.
- Canero, Gustavo and Maria Segura (2001), "Argentina: Zero Deficit program, International Support, and the Challenge Ahead," *Emerging Markets Weekly*, London: Deutsche Bank (8 August), pp.15-17
- Council on Foreign Relations (1999), *Safeguarding Prosperity in a Global Financial System*, New York: Council on Foreign Relations.
- Eichengreen, Barry (1998), "Comment on 'The Political Economy of Fiscal Adjustments'," *Brookings Papers on Economic Activity* 1, pp.255-260.
- Eichengreen, Barry, Ricardo Hausmann and Jurgen von Hagen (1999), "Reforming Budgetary Institutions in Latin America: The Case for a National Fiscal Council," *Open Economies Review* 10, pp.415-442.
- Eichengreen, Barry and Paul Masson et al. (1998), "Exit Strategies: Policy Options for Countries Seeking Greater Exchange Rate Flexibility," *Occasional Paper no. 168*, Washington, D.C.: IMF (July).
- Ertugrul, Ahmet and Faruk Selcuk (2001), "A Brief Account of the Turkish Economy, 1980-2000," unpublished manuscript, Bilkent University.

Fischer, Stanley (2001a), "Exchange Rate Regimes: Is the Bipolar View Correct?" *Finance and Development* (June).

Fischer, Stanley (2001b), "Farewell to the Staff," www.imf.org (1 October).

Giavazzi, Francesco and Marco Pagano (1990), "Can Severe Fiscal Adjustment Be Expansionary? Tales of Two Small European Countries," *NBER Macroeconomics Annual 1990*, Cambridge, Mass.: MIT Press.

Goldstein, Morris (2001), "No More for Argentina," *Financial Times* (17 August), <http://www.ft.com>.

International Financial Institution Advisory Commission (2000), *Report*, Washington, D.C.: U.S. GPO.

International Monetary Fund (2001a), "Transcript of a Conference Call with Journalists," 13 July, <http://www.imf.org>.

International Monetary Fund (2001b), "Resolving and Preventing Financial Crises: The Role of the Private Sector," *IMF Issue Brief* (March).

J.P. Morgan (2001), *Emerging Markets Today*, New York: J.P. Morgan (21 September).

Kahn, Joseph (2001), "From No Aid to a Bailout for Argentina," *New York Times* (23 August), <http://www.nytimes.com>.

Kenen, Peter B. (2001), *The International Financial Architecture: What's New? What's Missing?* Washington, D.C.: Institute for International Economics (forthcoming).

Kiguel, Miguel A. (2001), "Structural Reforms in Argentina: Success or Failure?" paper prepared for the Croatian National Bank Conference on Current Issues in Emerging Market Economies, Dubrovnik (28-30 June).

OECD (2001a), *Economic Survey of Turkey*, Paris: OECD (January).

OECD (2001b), *Policy Reassessment in Light of the End-2000 Financial Crisis*, Paris: OECD (January).

Poterba, James and Juergen von Hagen, eds (1999), *Fiscal Institutions and Fiscal Performance*, Chicago: University of Chicago Press.

Rodrik, Dani (2000), "Turkey Deserves its \$10 billion," *Financial Times* (6 December), www.ft.com.

Rodrik, Dani and Andres Velasco (1999), "Short Term Capital Flows," NBER Working Paper no. 7364 (September).

Roubini, Nouriel (2000), "Bail-In, Burden-Sharing, Private Sector Investment (PSI) in Crisis Resolution and Constructive Engagement of the Private Sector," unpublished manuscript, New York University.

Roubini, Nouriel (2001), "Bail-Ins, Bailouts, Burden Sharing and Private Sector Involvement in Crisis Resolution: The G-7 Framework and Some Suggestions on the Open Unresolved Issues," unpublished manuscript, New York University.

Tutar, Ibrahim and Aysit Tansel (2001), "Political Business Cycles, Institutional Structure, and Budget Deficits in Turkey," unpublished manuscript, PrinceswaterhouseCoopers and Middle East Technical University.

Vogel, Thomas T., Jr. (2001), "Unwinding the Moral Hazard in Argentina," Bloomberg Financial Services, <http://www.bloomberg.com>..

Werling, Vladimir (2001), "Argentine Confidence Crisis: Facing a Policy Dilemma," *Economic Research*, Morgan Guaranty Trust Company (10 August).

World Bank (2000), *Global Development Finance 2000*, Washington, D.C.: World Bank.