Financial Crises in Emerging Markets and their Poverty Impact
A Review of the Literature

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Executive Summary

1) This paper reviews the literature on the financial crises of the late 1990s and early this century and their impact on poverty. It focuses on capital account-led crises in middle-income countries. These crises are mainly characterised by sharp domestic currency devaluation, which may, or may not, lead to the collapse of the country's banking system.

2) The paper firstly describes the transmission channels through which a financial crisis may affect a country's poverty profile. Secondly, it summarises the information available on the economic and social impacts of the major financial crises that occurred between the mid-1990s and early this century. To throw light on the role institutions may play in exacerbating or mitigating initial crisis effects, the paper thirdly provides two case studies. The first is on the role the domestic financial system may play in amplifying the initial crisis. The second, on the role of safety nets in mitigating the effects of crises on the poor and the most vulnerable. Finally, the paper offers a set of recommendations for changes in the international financial architecture, to help prevent crises in the first place, and if they still occur, mitigate their short- and long-term effects on the poor.

3) Financial crises caused by sudden reversals of capital flows may affect the poor through a variety of mechanisms. The paper discusses in some detail selected transmission channels between initial macroeconomic events and the country's poverty profile: the exchange rate, interest rates, fiscal tightening, output decline and macroeconomic volatility.

4) The first, immediate effect of the major financial crises of the 1990s and early this century was a sharp devaluation of the exchange rate, with both direct and indirect effects on the poor. Devaluation may affect the poor directly through lowering their purchasing power due to a sharp increase in the prices of imported goods. It can also affect the poor indirectly through reduced public and particularly social expenditure, brought about the government's expenditure adjustment in response to an increase in its dollar-denominated debt. A further possible indirect channel is through higher unemployment brought about by bankruptcies among corporations and, in some cases, a collapse in the banking system. Bankruptcies and banking system collapse, the paper argues, may be caused by large asset-liability mismatches caused by devaluation.

5) To halt the outflow of capital and the fall in the currency, the typical government response comes in the form of a rise in domestic interest rates and fiscal tightening. Higher interest rates may affect the poor through less access to credit and through higher unemployment. The latter happens as a result of output contraction by the corporate sector due to a credit crunch. But the extent of the impact will to an important extent depend on the liability structure of the corporate sector. Fiscal tightening affects the poor through deepening recession and through cuts in social expenditures.

6) Output decline, caused the initial crisis and the adjustments to it, can affect the poor through job loss and lower real earnings. Government revenues fall together, with the poor being further affected through less access to public services, which are downscaled in response to revenue decline.
7) Finally, a crisis affects the poor through exacerbating macroeconomic volatility in key macroeconomic variables: output, consumption, the exchange rate, consumer prices and employment. Volatility in these variables further affects the poor through increasing their sense of vulnerability and insecurity, and in the long term through lowering long-term growth.

8) The paper next summarises the information available on the economic and social effects of the major crises of the late 1990s and early this century. GDP level declined sharply in nearly all crisis-affected countries: 6% in Mexico, nearly 7% in Korea, over 7% and 10% in Malaysia and Thailand, and 13% in Indonesia; 5% in Russia and over 7% in Turkey.

9) In turn, GDP decline led to sharp fall in household income and consumption, which took place through two main channels: a fall in real earnings and increase in unemployment among household members. Reduced government transfers also played a part in overall decline. In Mexico and Russia, household consumption declined by 25% between 1994 and 1996, and 1996 and 1998, respectively.

10) As a result of falling income, the poverty headcount in the crisis-hit countries increased dramatically. It nearly doubled in Indonesia between 1996 and 1999; it increased nearly 50% in Russia; in Argentina, it reached over 50% of the total population. Moreover, in addition to income loss, the poor were affected through reduced access to social services. In Korea and Indonesia, government expenditure on education was reduced from 5.1% of GDP in 1996 to 4.0% in 1998; in Indonesia, from the already extremely low level of 1.4% of GDP in 1996 to 0.7% in 1997 and 1998.

11) The most vulnerable to the crises across different countries were households headed by the younger, the old, the less educated; also, by single-parents, job-seekers and marginal workers, particularly women. As regards the crisis-gender dimension, the paper reports the following patterns are often observed: men replacing women in their work, and women taking precarious jobs in place of stable ones.

12) The paper next discusses the financial sector role in crisis situations, focusing on the cases of Argentina and Brazil. It shows that the banking system in Argentina collapsed following devaluation, due to the fact the economy was highly dollarised and unprepared for devaluation. It then discusses Brazil's case. It shows the crisis in Brazil was much milder and recovery quicker. Two key factors, the paper argues, contributed to this more benign outcome. First, unlike Argentina, Brazil benefited from a large IMF-led rescue package, which contributed to stop deterioration of investors' confidence. Second, and again unlike Argentina, Brazil had the appropriate mechanisms in place, such as hedging practices which, together with a bank deposit system in which only domestic currency denominated bank accounts were permitted, helped the financial system and the economy at large withstand the devaluation shock.

13) The paper then turns to discussing safety nets in Mexico and Russia. It shows in both countries there was a lack of appropriate public safety nets in place that could be activated to protect the poor and the most vulnerable. As a consequence, only traditional government transfers, such as pension transfers, where available for use in Russia; and in Mexico, the government adopted an employment programme. Both these initiatives had limited coverage and therefore were not sufficient to prevent a rise in poverty. Private coping strategies
were adopted in Russia and Mexico. They were to some extent effective but largely insufficient especially among the poorest and most vulnerable.

14) The final section puts forward a number of proposals for adoption both at the national and international levels aimed at preventing crises or at least mitigating their effects, particularly on the poor and the most vulnerable. These include: adoption of counter-cyclical policy; provision of social safety nets that are permanent, flexible and targeted (but not obsessively so); the improvement of domestic financial regulation and supervision so as to take account of the linkages between the macro-economy and the financial sector; provision of international official liquidity through large and timely financial packages, and creation of new financing facilities for that purpose; possible adoption of capital controls to reduce the volume and lengthen the maturity of capital inflows; finally, the encouragement of more stable private capital flows to middle-income countries, through the creation of new public-private mechanisms.
In the late 1980s and early 1990s, developing countries were strongly encouraged to promote capital account liberalisation. The main aim was to enable these countries to attract external capital, and through increased investment, accelerate growth and reduce poverty.

Many middle-income countries across the globe succeeded in attracting international capital flows. However, these flows have proved to be easily reversible, causing deep and costly financial crises in these countries. These crises have resulted in sharp decline in economic growth and large increases in poverty, reversing earlier gains in poverty reduction, and thus putting the affected countries farther away from meeting the Millennium Development Goals.

The aim of this paper is to offer a literature review of the financial crises that have occurred since the mid-1990s and their impact on poverty. The crises the paper will discuss are capital account-led crises. Typically, these crises result in sharp domestic currency devaluation, which may, or may not, lead to the collapse of the country's domestic banking system.

The paper will firstly analyse the transmission channels through which financial crises may affect the poverty profile of the crisis-hit countries. Secondly, it will summarise the information available on the economic and social impacts of financial crises between the mid-1990s and early this century. To throw light on the role institutions and instruments may play in exacerbating or mitigating initial crisis effects, the paper will thirdly provide two case studies, one on the role the domestic financial system may have in amplifying the initial crisis, and the other on the role of safety nets in reducing the negative effects of crises on the poor and the most vulnerable. Finally, the paper will offer a set of recommendations for changes in the international financial architecture, to help prevent crises in the first place, and if they still occur, to mitigate both their short- and long-term effects on the poor.
1. How do Financial Crises Affect the Poor?

Financial crises that start with sudden reversals of capital flows may affect the poor through a variety of mechanisms. Broadly, these crises can be characterised by two sets of macroeconomic events, which may happen sequentially, but which, depending on their intensity and speed, may also be described as a cluster of events.

The first set of events involves sharp variation in key macroeconomic variables: exchange rates, interest rates and consumer prices. These events can affect the poor immediately, through a fall in their earning power, as their consumption basket becomes more expensive, and through a credit crunch.

A change in these key variables in turn sets in motion a second round of events: a fall in domestic demand, investment, output, employment, real wages, tax revenues and public expenditure (FitzGerald, 2001). The poor are affected through job loss, a fall in their real earnings, reduced public transfers, and the quality of, and access to, key public social services (health, education). Other events, such as a change in relative prices and the sectoral redistribution of production that may follow, will also affect the poor, but not uniformly. The sign of the effect on different groups of poor will depend on whether they are urban or rural based and on which type of economic activity they are engaged in.

In what follows we will look in some detail at selected transmission mechanisms between initial macroeconomic events and the country's poverty profile: the exchange rate, interest rates, output decline, fiscal tightening and macroeconomic volatility.

a. The exchange rate

The financial crises of the 1990s and early this century have in most cases been caused by sudden reversals of capital flows. This sudden reversal affected even those countries with sound macroeconomic fundamentals (Gottschalk and Griffith-Jones, 2003).

The first, immediate effect was a sharp devaluation of the exchange rate. Where fixed (or quasi-fixed) exchange rate regimes were the case, the devaluation took place after unsuccessful government attempts to defend their currencies through the selling of international reserves. This was the case in the Mexican, East Asian, Russian, Brazilian and Argentinean crises between late 1994 and early 2002. The nominal devaluation of the exchange rates was as large as 40% in Brazil (1999), 45% in Korea and Malaysia (1997), over 50% in Thailand (1997) and 84% in Indonesia (1998; see Gottschalk and Griffith-Jones, 2003, Table 10.7).

Such dramatic decline in the exchange rate normally have both direct and indirect effects on the poor.

An immediate, direct impact is on the poor's purchasing power, caused by a sharp increase in the prices of imported goods. The effects can be felt immediately by the urban poor, as well as rural poor who are net consumers of imported food. Those rural poor engaged as producers in food production and more generally export-crop activities are expected to benefit from exchange rate devaluation. More generally, as regards the poor's engagement in export and other foreign-exchange generating activities, Lee and Rhee (1999) in their analysis of the Asian crisis observed that...
households who were engaged in export and tourism sectors gained from currency devaluation.

The indirect impacts of sharp exchange devaluation on the poor can happen mainly through two channels: the government channel and the private sector channel.

The government channel

First, devaluation affects the size of the government's external debt and the service of the domestic debt that is dollar-linked. As a result, the government's debt service increases dramatically, especially as a proportion of the country's dollar GDP, as the latter shrinks as a result of devaluation. To meet its increased financial commitments, the government is pressured to reduce public real expenditure, including social expenditure. There is thus a switch in public expenditure from real to financial expenditure.

The poor are affected through a decline (both in absolute and relative terms) in the provision of social services and transfers. The poor may also be affected by cuts in public investment in economic and social infrastructure. These cuts altogether may have not only a transitory but also a permanent effect on them. This may happen through the deterioration not just in their welfare and sense of security, but also in their human capital and therefore their capacity to produce and generate income in the future (Lustig, 1999; Alarcon, 2001; Griffin and Brenner, 2001; McKinley, 2001).

The private sector channel

Second, devaluation may affect the balance sheets of the private sector. In a financially open economy, banks and large companies may borrow abroad and thereby accumulate liabilities denominated in dollars. This being the case, devaluation may cause major currency mismatches. For banks, this may be particularly problematic. Even if their loans to domestic companies are dollar-linked, insolvency levels may rise sharply, as the companies to which banks lend may themselves face an unbearably large mismatch between their debt obligations and the revenues they generate, if the latter are linked to the provision of products and services to the domestic markets and thus denominated in domestic currency. The same applies for large companies that can tap international capital markets directly through issuing corporate bonds. The mismatch will occur if their activities generate revenues in domestic currency. Of course, these effects may be mitigated through hedging operations, available to those companies based in middle-income countries with relatively sophisticated financial markets.

Yet, the possible mismatches just mentioned have the potential to cause bankruptcies among corporations and high insolvency levels, which may cause a collapse in the banking system. Companies may also face pressures to increase the prices of the products and services they offer in order to be able to meet their financial obligations. This may add to the inflationary pressures initially caused by devaluation, even in a context of falling domestic demand.

Fallon and Lucas (2002) concur with this view. They observe that a crisis may have important long-term effects on the poor through bringing about a decline in health and education conditions, which may affect the poor's productivity in the long term. To that they call attention to two additional channels through which the poor may be affected in the long term: first, reemployment during recovery following unemployment during the crisis may not be in the same area and therefore likely to be less well-remunerated; and second, the need to liquidate physical and financial assets during a crisis to smooth consumption may impair the poor's ability to return to its previous livelihood position (p. 42).
The poor are affected through a decline in real earnings, and job losses. These facts are caused by bankruptcies, which may be generalised especially if the banking system collapses, as the latter results in a disruption in productive and commercial activities. To avoid a generalised collapse in the economy, the government may bail out the banking system. However, this implies major fiscal costs. Research conducted by Honohan and Klingebiel (2000) found that of 40 banking crises, nine faced costs of over 15% of GDP; in Indonesia and Thailand, they reached 30%. The ultimate bearers of these costs are tax payers and those affected by cuts in social and other types of expenditures that may take place as a result of government efforts to meet the fiscal demands associated with their major bail outs.

In face of the dramatic effects that devaluation may have throughout the economy, the typical government response, sometimes voluntary, but more often forced upon them by the IMF, comes in the form of a rise in domestic interest rates and fiscal tightening. The rationale is that these two policy tools may help affect international investors’ expectations and attract back capital flows, thereby halting and eventually reversing the exchange rate devaluation. We discuss the first of these policy responses in turn.

b. Interest Rates

To halt the outflow of capital and the fall in the currency, the typical policy response is a sharp increase in interest rates.

The costs for the domestic economy seem clear: the domestic corporate sector and households (including poor ones) suffer a credit crunch at a time capital is most needed (Cobham, 2001). To that, one could add the fiscal costs associated with the increase in the service of the domestic debt held by the public sector, which in many developing countries is mostly short term.

It is thus very likely that an increase in interest rates in a crisis context would deepen the crisis. A credit crunch faced by the corporate sector would deepen output decline and increase unemployment. The crunch happens among other reasons because of information asymmetry problems (see Stiglitz, 2001). That is, banks lose their ability to assess risk when interest rates become too high, due to adverse selection problems, and therefore stop lending even to those companies still willing to borrow.

However, the extent of the impact will to an important extent depend on the liability structure of the corporate sector. If the sector is highly leveraged and its debt is mostly domestic, then it is likely the impact will be big. But if the majority of companies face low levels of indebtedness, and if part of the debt they hold is foreign, then the impact will be smaller.

Brazil's recession during the 1999 currency crisis was mild and did not result in a banking crisis despite sharp interest rate rise because the private sector had a low level of debt (Goldfajn, 2003; Gottschalk, 2000). Among those companies that were indebted, part of their debt was foreign, and they were hedged against a currency fall either naturally for being exporters or through their access to hedging instruments available in the domestic and international markets.

The magnitude of the costs of an increase in interest rates will thus very much depend on how much the private sector is indebted in local currency. But even if the costs of raising interest rates are high, this policy action if pursued for a short period and if effective in terms of halting and even reversing the currency fall, may be
preferable over the costs excessive devaluation can cause, as described in the earlier discussion.

However, the effectiveness of interest rates in bringing benefits through exchange rate revaluation has been contested. The criticism, led by the Nobel Laureate Joseph Stiglitz, is based on the argument that in a context of crisis characterised by deep lack of confidence in the country, portfolio investors will simply take the country off their screen, regardless of the level of interest rates. A related argument is that higher interest rates may increase expectations of defaults and further output declines, and as a result weaken further rather than strengthen the exchange rate (World Bank, 1999; cited by Fallon and Lucas, 2002). In this case, there would be no benefits associated with an increase in interest rates, only costs. This is an empirical question, with evidence suggesting that outcomes vary from country to country. In Brazil, interest rate increases seem to have helped halt excessive devaluation.

c. **Output decline**

When a crisis occurs, output tends to fall, sometimes very sharply. This outcome is the result of various mechanisms that reinforce each other.

Among the factors that may in a first stage affect output negatively, it is worth mentioning: decline in investment (and consumer) demand, due to confidence crisis, negative wealth effects linked to the fall in portfolio equity and property prices, and fall in wage demand caused by consumer-price inflation; and credit tightening as a result of a fall in bank deposits.³

As argued above, output may further decline if interest rates are pushed up in response to the crisis, as credit tightening intensifies and companies reduce output or even go bankrupt, with a resulting increase in unemployment and thus further decline in domestic demand. If the banking system collapses, then the output decline will be even deeper, leading the economy into depression, as the recent Argentinean crisis has shown. Finally, as government revenues fall together with (and proportionately more than) total income⁴, public expenditures decline, reinforcing the initial output decline.

The poor will be directly affected mainly through job loss and lower real earnings, and indirectly through less public services. Those engaged in export and import-competing activities will be less affected. Other mitigating factors can be the activation of safety nets in the form of public works and transfers. However, these tend to be limited by government capacity to spend due to both revenue decline and switch in expenditure-composition towards the financial components of total expenditure. Moreover, as observed earlier, governments tend to adopt a tightening fiscal policy. We discuss this in turn.

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³ FitzGerald (2001) argues that in developing countries credit tightening may affect output more than proportionately. This is because, as firms rely on bank credit to finance working capital, with productive investment being financed through retained profits, when a credit tightening takes place, ongoing investment projects cannot be reversed due to sunk costs and therefore all downward adjustment falls on working capital and, therefore, output.

⁴ Revenue decline tends to be proportionately larger than the fall in GDP, especially in developing countries where the tax system relies more heavily on indirect taxes.
d. Fiscal tightening

As said earlier, the rationale behind fiscal tightening is that, it is believed, it may help restore investors’ confidence more rapidly. However, in a context in which absolute fiscal expenditure is already declining along with total income and tax revenues, and in which the room for tax increase is extremely limited, promoting fiscal tightening will most likely result in a fall in public expenditure proportionately much bigger than income decline.

In such exceptional circumstances, fiscal tightening tends to be achieved through cuts in key social programmes. As reported in Cobham (2001), Brazil reduced spending on priority social expenditure programmes during a crisis as a result of its efforts to reduce its fiscal deficit from 8% to 4.7%; while Indonesia reduced health and education expenditures by 8% and 41% respectively in 1998.

Fiscal tightening thus seems clearly inappropriate at a time public expenditure is needed to protect the poor and the most vulnerable, and more generally to attenuate the fall in domestic demand (thus acting counter-cyclically) and macroeconomic volatility, which financial crises tend to exacerbate.

e. Macroeconomic volatility

A still not mentioned, but very important, way financial crises may affect the poor is through exacerbating a country’s volatility in key macroeconomic variables: output, consumption, the exchange rate, consumer prices and employment. In addition to affecting the poor directly, volatility in these variables may lower the country’s growth and export long-term trends through loss of efficiency it causes, and the uncertainty it creates among investors and exporters. Lower growth slows the speed with which the poor can be lifted out of poverty. Moreover, volatility in these variables may increase poor people’s sense of vulnerability and insecurity, which are important poverty dimensions (World Bank, 2000; Alarcon, 2001). Furthermore, evidence from Latin America shows that macroeconomic volatility slows down long-term trends in improvements of social indicators, such as schooling attainment and health, thus reducing the poor’s ability to overcome poverty (Lustig, 2000).

Furthermore, volatility is problematic for the reason that the growth and poverty effects of it during the downturn phase are larger than the effects observed during the recovery phase. The growth and poverty effects of volatility are therefore asymmetric. Collier and Dehn (2001) found evidence on the former type of asymmetry, while the IMF (2003) reports evidence on the latter.

As discussed above, there are various channels through which financial crises may affect the real economy and the poor. A main channel is reduced growth. Figures 1, 2 and 3 show that the growth effects of the financial crises in the major emerging market economies between 1995 and early this century were quite large.

**Figure 1. GDP Growth Asia-4**

Among the four strongest-hit countries by the East Asian crisis – Thailand, Korea, Malaysia and Indonesia – GDP in 1998 fell by nearly 7% in Korea, over 7% and 10% in Malaysia and Thailand, and 13% in Indonesia (see Figure 1). The sharp GDP decline occurred after years of sustained high growth. Although these countries witnessed a recovery fairly rapidly, only in Korea growth rates returned to pre-crisis level. In 2001, growth slowed down again among all these countries as a reflection of the world recession in that year.
Unlike East Asian countries, the larger Latin American economies were hit by a major crisis at different points in time – December 1994 in Mexico, January 1999 in Brazil and December 2001 in Argentina, although contagion effects were felt as well, with major negative consequences for real economy in these countries.\footnote{Argentina case provides a good example of contagion effects at the regional level. Although it did not suffer a financial crisis in the late 1990s, growth declined by nearly 3% in 1995 as a result of the Mexican crisis of 1994-95, and nearly 4% in 1999 as a result of the Brazilian crisis of early 1999. Contagion was also observed across regions. For example, the Russian crisis of August 1998 was strongly felt in Brazil, which ended up facing a full currency crisis in early 1999 despite the rescue package provided by the IMF in the second semester of 1998.} In Mexico, the Tequila crisis of 1994-1995 brought growth down to -6%, after a moderate growth performance observed in the early 1990s. In Brazil, growth remained slightly positive following the crisis of early 1999. Argentina, in turn, was hit by a massive crisis that engulfed the financial sector at a time it was facing protracted recession. The crisis deepened it by reducing the country’s GDP by more than 10% in the year 2002 alone (see Figure 2).

The Russian crisis of August 1998 brought the country’s GDP growth down to -5% in 1998, against growth of nearly 1% in 1997 for the first time after several years of continued economic decline. Finally, Turkey’s financial crisis of 2001 resulted in a GDP loss of over 7%, which more than offset the growth of 7% observed in the year before (see Figure 3).
Thus, the negative growth effects were quite large in nearly all the major emerging market crises of the 1990s and early this century. Brazil was the only exception, as GDP did not decline (though it did slow down) with recovery following soon after.

Analysts provide a number of reasons for this atypical performance. First, Brazil's Central Bank let the currency float when reserves were still relatively high, thus putting the country in a relatively better financing position to overcome the crisis. Moreover, the crisis had been preceded by a major IMF loan package, which reinforced this position, in addition to contributing to stem deterioration in investors' confidence in the country. Second, the country had strengthened the domestic financial system in the years that followed the Mexican crisis. This enabled the sector to withstand major currency devaluation. Third, unlike in other crisis-hit countries, the non-financial corporate sector was not highly leveraged – in fact their indebtedness level was low – and was hedged against currency risk, facts that helped avoid major bankruptcies, and knock on effects on loan portfolios of banks and on the economy more widely. Fourth, FDI continued to flow to the country at reasonably high levels, partly due to the then still ongoing privatisation process (Gottschalk and Griffith-Jones, 2003; Goldfajn, 2003).

The strong decline in the level of economic activity that followed the crises implied sharp contraction in household income. As a consequence, real household per capita consumption declined very strongly as well. Of course, income and consumption did not decline in the same proportion. In most countries, consumption fell less sharply than income. Thus, consumption smoothing seems to have been a generalised practice during the crises. Russia has been an exception. There, expenditure by the poor fell more than their income. According to Lokshin and Ravallion (2000) this was due, among other factors, to their expectation that the situation would deteriorate even further in the future.
Table 1. Real Household Per Capita Consumption

<table>
<thead>
<tr>
<th>Country</th>
<th>Crisis starting date</th>
<th>% decline (year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>Dec 1994</td>
<td>25.0 between 1994 and 1996(^1)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Sep 1997</td>
<td>12.3 (1998)</td>
</tr>
<tr>
<td>Russia</td>
<td>Aug 1998</td>
<td>25.0 between 1996 and 1998(^2)</td>
</tr>
<tr>
<td>Brazil</td>
<td>Jan 1999</td>
<td>Na</td>
</tr>
<tr>
<td>Turkey</td>
<td>Jun 2001</td>
<td>10.3 (2001)</td>
</tr>
<tr>
<td>Argentina</td>
<td>Dec 2001</td>
<td>23.8 (between Oct 2001 and May 2002)(^3)</td>
</tr>
</tbody>
</table>

Sources: World Development Indicators 2003.  \(^1\) Average household consumption, taken from Baldacci et al. (2002). Corbacho et al. (2003).  \(^2\) Total household expenditure, taken from Lokshin and Ravallion (2000);  \(^3\) Average household income, taken from Corbacho et al. (2003).

Among the East Asian crisis-hit countries, real consumption fell over 7% in the case of Indonesia and over 12% in Thailand and Malaysia.\(^6\) Where recovery was slow to come, accumulated consumption decline over the entire crisis period was probably even larger (Table 1).

In Mexico, household consumption declined by 25% between 1994 and 1996 (Baldacci et al., 2002) and in Russia, by the same amount between 1996 and 1998 (Lokshin and Ravallion, 2000). In Argentina, the decline in household income (a fair proxy for consumption) was equally dramatic but even more rapid. Between October 2001 and May 2002 alone, it fell by nearly 24% (Table 1).\(^7\)

The decline in real household income and consumption took place through two main channels: a fall in real earnings and increase in unemployment among household members. In some cases reduced government transfers also played a part in overall decline.

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\(^6\) The figures refer to the calendar year following the year when the crisis started.

\(^7\) It is important to note that some of these figures are taken from country-studies. They are based on national household surveys and are not perfectly comparable. But they are useful in giving an idea of the order of magnitude of income and consumption falls in the countries under examination.
Table 2. Real Wages and Unemployment

<table>
<thead>
<tr>
<th>Country</th>
<th>Crisis starting date</th>
<th>Decline in real wages (year)</th>
<th>Changes in unemployment levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>Jul 1997</td>
<td>10% (1998)</td>
<td>From 1.5% in 1996 to 5.6% in 1998.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Jul 1997</td>
<td>30%-50% (1998)</td>
<td>From 4.7% in 1997 to 5.5% and 6.4% in 1998 and 1999, respectively.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Sep 1997</td>
<td>Na</td>
<td>From 2.4% in 1997 to 3.0% in 1998.</td>
</tr>
<tr>
<td>Russia</td>
<td>Aug 1998</td>
<td>16.8% (1998)</td>
<td>From 10.8% in 1997 to 11.9% and 13.7% in 1998 and 1999, respectively.</td>
</tr>
<tr>
<td>Brazil</td>
<td>Jan 1999</td>
<td>Na</td>
<td>From 7.8% in 1997 to 9.6% in 1999.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Jun 2001</td>
<td>Na</td>
<td>Na</td>
</tr>
<tr>
<td>Argentina</td>
<td>Dec 2001</td>
<td>Na</td>
<td>21.4% in May 2002</td>
</tr>
</tbody>
</table>

Sources: World Development Report 2000; World Development Indicators 2003; Singh and Zammit (2000); Lee and Rhee (1999); Sussangkarn et al. (1999); Gavrilova et al. (2001); Paitoonpong (2001); Fallon and Lucas (2002); Loksin and Ravaillon (2000); and Perry and Serven (2003); and INDEC.

However, the role each of these main channels had in household income and consumption decline varied across countries. Figures from Table 2 suggest that in Korea and Thailand both real wage decline and rise in unemployment played an important part. In these countries, unemployment, which until the crisis was extremely low, increased strongly due to a combination of factors: bankruptcies induced by credit crunches, austere fiscal and monetary policy which contributed to reinforce rather than attenuate the crisis, and the suspension of legal restrictions on lay-offs (Lee and Rhee, 1999). In Mexico, Indonesia and Russia the increase in unemployment levels was less pronounced (although starting from a higher level), with adjustment taking place mainly through real wages. The adjustment seemed to have been concentrated on real wages rather than unemployment due to larger devaluation faced by these countries (Fallon and Lucas, 2002). Although there are no exact figures for Turkey, it is reported in Cline (2002) and elsewhere that unemployment went up to two digit numbers after the 2001 crisis.

As a result of income decline, the poverty headcount in these countries increased dramatically (see Table 3). In Indonesia it nearly doubled, from 15.7% in 1996 to 27.1% in 1999.
Table 3. Poverty Headcount Ratio for Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Crisis starting date</th>
<th>Year</th>
<th>Headcount ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>Dec 1994</td>
<td>1994</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1996</td>
<td>43%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Jul 1997</td>
<td>1996</td>
<td>15.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1999</td>
<td>27.1%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Sep 1997</td>
<td>1997</td>
<td>6.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1998</td>
<td>7.0%</td>
</tr>
<tr>
<td>Korea</td>
<td>Oct 1997</td>
<td>1996</td>
<td>9.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1998</td>
<td>19.2%</td>
</tr>
<tr>
<td>Russia</td>
<td>Aug 1998</td>
<td>1996</td>
<td>21.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1998</td>
<td>32.7%</td>
</tr>
<tr>
<td>Argentina</td>
<td>Dec 2001</td>
<td>Dec 2001</td>
<td>35.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>May 2002</td>
<td>53%</td>
</tr>
</tbody>
</table>

Sources: World Development Report 2000; World Development Indicators 2003; Singh and Zammit (2000); Lee and Rhee (1999); Sussangkarn et al. (1999); Gavrilova et al. (2001); Paitoonpong (2001); Fallon and Lucas (2002); Loksin and Ravaillon (2000); and Perry and Serven (2003); Griffith-Jones and Kimmis (2003).

Other social indicators

The poor were affected by the crises not only through loss of jobs and decline in earnings, but also through decreased access to social services. In Mexico, government spending on education was reduced by 9.7% in real terms in 1995, a reduction bigger than the fall in real GDP. Similarly, in Korea and Indonesia government expenditure on education was reduced both in absolute terms and in relation to the countries' GDP. In Korea, it was reduced from 5.1% of GDP in 1996 to 4.0% in 1998; in Indonesia, from the already extremely low level of 1.4% of GDP in 1996 to 0.7% in 1997 and 1998. In other countries, expenditure in education was also reduced, at least in absolute terms along with the countries' income decline. Only in a few countries it clearly increased in relative terms. In Thailand, it increased from 3.1% of GDP to 3.4% in 1997. In Malaysia, it increased from 4.0% to 4.7% of GDP between 1996 and 1997 (though it fell back to 4.3% in 1998).

A number of countries faced large school dropouts at primary and secondary levels, and falls in school enrolment rates. In Indonesia, 1.65 million children dropped out from primary school and 1.11 million from secondary school in 1998-1999. At the secondary level, dropout rates in urban areas increased from 11.1% to 17.5% between 1997 and 1998; in rural areas, they increased from 13.5% to 16.8%. Even Thailand faced major dropouts, with 126 thousand students leaving school before finishing it at primary and secondary levels (Sussangkarn et al., 1999; Paitoonpong, 2001).

Health indicators also deteriorated significantly. In Mexico, mortality rate among children aged 1-4 raised from 1.7 to 2.2 per 100 thousand children, while in Thailand the percentage of underweight children increased from 7.6% in 1996 to nearly 12% in 1997 and 1998. In most countries the deterioration in health indicators reflected

8 More broadly, social expenditure in Mexico fell from 9% of GDP in 1994 to 6.8% of GDP in 1995 (Lustig, 2000).
decline in budgetary allocation towards health services and increases in their costs. Moreover, prices of imported drugs also increased dramatically due to devaluation. In Malaysia, prices of imported drugs, which corresponded to 60% of pharmaceutical drugs in the country, increased by 30% (Sussangkarn et al., 1999; Paitoonpong, 2001). In the Russian crisis of 1998, suicidal mortality, associated with violence against other people and women in particular, rose dramatically (Gavrilova et al., 2001).

Inequality and the most vulnerable

Whilst the effects of the crises were clearly very large on the poor, the effects on inequality were rather mixed. In most countries inequality increased, and quite substantially in the period after the crisis, but in some countries it seems to have decreased. Table 4 summarises the changes in the GINI coefficients observed in selected crisis countries.

### Table 4. Gini Coefficient

<table>
<thead>
<tr>
<th>Country</th>
<th>Crisis starting date</th>
<th>Year</th>
<th>Gini index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>Dec 1994</td>
<td>1994</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1996</td>
<td>0.46</td>
</tr>
<tr>
<td>Thailand</td>
<td>Jul 1997</td>
<td>1996</td>
<td>0.477</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1998</td>
<td>0.481</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Jul 1997</td>
<td>1996</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1998</td>
<td>0.37</td>
</tr>
<tr>
<td>Korea</td>
<td>Oct 1997</td>
<td>1997</td>
<td>0.290</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1998</td>
<td>0.294</td>
</tr>
<tr>
<td>Argentina</td>
<td>Dec 2001</td>
<td>May 1999</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td></td>
<td>May 2002</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Sources: World Development Report 2000; World Development Indicators 2003; Singh and Zammit (2000); Lee and Rhee (1999); Sussangkarn et al. (1999); Gavrilova et al. (2001); Paitoonpong (2001); Fallon and Lucas (2002); Loksin and Ravaillon (2000); and Perry and Serven (2003).

The indeterminate outcome of inequality in a context of sharply increased poverty reflects the fact that a financial crisis affects all income groups but in particular the wealthier groups. This is because they are the biggest holders of physical and financial assets, whose prices tend to collapse, and with them the income they derive from these assets. Urban employees in the formal sector who are not among the poorest are strongly affected as well. Fallon and Lucas (2002) argue that inequality tends to increase in urbanised, middle-income countries, and decrease in countries with significant share of rural workers in total working population. That helps explain why Mexico and Indonesia, where the rural sector and the share of rural workers in total labour force are significant, witnessed a fall in inequality.

Turning to the effects of crises on the lower-income groups, various studies report who among the poor is the most vulnerable. In Argentina, those households headed by male, less educated and employed in construction were the most vulnerable to the crisis (Corbacho et al., 2003). In Russia, the most vulnerable were households with higher proportions of pensioners and children (Gerri and Li, 2002). In Mexico, the households most vulnerable were those headed by farmers, self-employed, old and less educated; also, single-parent and single-person households were strongly affected. In Asia, the most vulnerable included the young and less educated, first time job-seekers, and marginal workers, particularly women (Kim, 1998).
As regards the gender effects of crises, it is worth noting that, according to Singt and Zammit (2000), economic depressions and cyclical volatility affect women more strongly than men. Indeed, the authors report that a number of gender-related types of substitution were observed during the Asian crisis. These included men replacing women in their jobs, and women in precarious jobs replacing those in stable ones. Fallon and Lucas (2002)\textsuperscript{9} report that in Thailand's rural sector, an increase in men's employment was offset by a fall in women's employment.

Finally, as suggested earlier the poor are also affected differently according to whether they are urban or rural based. Unlike natural shocks such as a severe drought, financial crises tend to affect more strongly the urban poor. This was the case in Asia, especially in Indonesia where urban and rural households adopted different coping strategies (Frankenberg et al., 2002), in Mexico (Baldacci et al., 2002) and in Russia, where expenditure among the urban poor fell by 27% whereas that of the rural poor by 21% (Gerry and Li, 2002).

\textsuperscript{9} Based on Siamwalla (1998).
3. The Role of Institutions

As we have seen earlier, financial crises may affect the poor through a number of channels. We have also seen that certain institutions and instruments may amplify, or mitigate, the initial poverty effects. In what follows we will discuss two specific institutions and tools.

First, the paper will discuss the role the domestic financial sectors in Argentina and Brazil played in these countries' crises. The purpose is to show that the financial sector may exacerbate a crisis, as happened in Argentina, or, as the Brazilian experience demonstrates, that this does not necessarily need to be so. A financial system can withstand a currency crisis and support the recovery process, if sufficiently strong and appropriately regulated.

Second, the paper will look in more detail at the role different coping mechanisms, including private ones, in alleviating the poverty effects of crisis, in two countries: Mexico and Russia.

3.1 The Financial Sector Role in Crisis Situations

The economic and social consequences of the Argentinean financial crisis that started in December 2001 were extremely negative: GDP fell by more than 10% in 2002, unemployment levels shot up to about 22% and real wages witnessed steep decline. In just few months after the crisis erupted, poverty increased to over half the country's total population (Griffith-Jones and Kimmis, 2003, based on CEPR, 2002 and INDEC, 2002).

This outcome was largely a result of the currency and banking crises in early 2002. Following the draw down of the country's foreign reserves and collapse of the currency, the country's domestic banking system, and the economy at large, were unprepared to cope with major changes in the values of their dollar-denominated liabilities brought about by devaluation. This, together with public's run on bank deposits due to the lack of confidence in the banking system, led to its collapse, which in turn caused a steep fall in domestic demand and acute shortage of working capital to the productive sector (Gottschalk, 2003).

The lack of preparedness by the financial and other sectors of Argentine's economy to cope with devaluation, had to do with the government's firm commitment to the currency board regime. To maintain coherence with this commitment and thus avoid undermining the credibility of the regime, the government did not encourage, or provided the instruments for, the undertaking of hedging against currency risk. What happened instead was that the currency board, together with the services and logistical support provided by the financial system, encouraged economic agents to become indebted in dollars. At the time the crisis broke out, the economy was heavily dollarised and un-hedged. Dollar bank deposits were permitted, and debt contracts at all levels including household mortgages were dollar-linked.

An additional and very important factor that explains why the crisis in Argentina was so deep is the fact that the country did not benefit from an IMF-led rescue package (Griffith-Jones and Kimmis, 2003). This if provided at the time, could have helped attenuate the fall in the domestic currency and thus reduced the major asset-liability imbalances that contributed to the collapse of the domestic economy.
In contrast to the Argentinean experience, Brazil's currency crisis of early 1999, and later the sharp devaluation occurred in 2002, were less costly in terms of forgone output. Moreover, both episodes were followed by quicker recovery. This more benign outcome was partly explained by macroeconomic and especially microeconomic features specific to Brazil. In the context of this discussion we highlight two key factors: the facts that the private sector had low levels of indebtedness and that it was hedged against exchange rate risk.

These facts - low levels of indebtedness and currency risk hedging - reduced significantly the degree of currency mismatches between assets and liabilities held by the private sector. Moreover, dollar-denominated bank accounts are not permitted in Brazil, which further contributed to the smaller currency mismatches held by the banking system. These facts were key in helping Brazil's financial system withstand currency devaluation both in 1999 and 2002. An additional factor that explains why the banking system withstood sharp devaluation is that, unlike in Argentina, the government did not default on its public domestic debt. Doing so would have had a major impact on the system, as the domestic financial system is the main creditor of Brazil's government.

Brazil's government could avoid default on its public debt because, unlike Argentina, it benefited from large IMF-led loan packages, one of about US$ 40 billion in the second half of 1998 and the other of US$ 30 billion in mid-2002. Although the first package was not sufficient to avoid the currency crisis of early 1999, it certainly helped the country overcome it quite rapidly. The second package, of mid-2002, helped stop the crisis confidence in the country associated with the presidential elections of October 2002, and to make the elected president commit to prudent macroeconomic policies, which in turn helped gradually rebuild market's confidence.

Thus, two key factors help explain why Brazil has suffered economically and socially much less than Argentina from devaluation episodes in the recent past. First, at the crucial time when markets were betting against Brazil, the country's authorities reached agreement with the IMF over massive loan packages, which helped stop the situation deteriorating further. This in particular helped the government avoid default on its public debt, thereby maintaining the country's banking system intact. Second, Brazil had the appropriate mechanisms in place, such as hedging practices which, together with a deposit system in which only domestic currency denominated bank accounts were permitted, helped the financial system and the economy at large withstand the devaluation shock.

Argentina's financial system was judged by financial experts as very strong, and as having the best regulatory system in place in Latin America. According to Stallings and Studart (2003), the system ranked very high on a variety of financial indicators, both regarding bank regulation and supervision by the year 2000. It had the highest actual risk-adjusted capital ratio, overall capital stringency and capital regulation index among a group of Latin American countries (plus the US). Moreover, the banking system had the highest level of foreign bank ownership in Latin America - at 49% in 2000, which was seen as an additional indicator of solidity. In the authors' view, this assessment was confirmed by the fact that the system had withstood the effects of the Tequila crisis.

\footnote{The analysis that follows is based on Gottschalk (2003).}
\footnote{The authors take the indicators from Barth et al. (2001).}
In our view, the financial system had indeed been tested during the Tequila crisis, as it suffered major macro volatility - in interest rates and output - and therefore had shown to be in good shape. In this sense, the system was stronger than in Turkey, another emerging market country that suffered a major banking crisis. There, the currency crisis of 2001 was rooted in a fragile domestic banking system, which did not withstand the interest rate shock the economy suffered in November 2000 (Ozatay and Sak, 2002). However, in Argentina the financial system had not been tested against an event that is key in the current context of financially open economies and volatile international capital flows: sharp variations in the exchange rate.

The lessons we can therefore draw from the Argentinean and Brazilian experiences are that, for the purpose of ensuring financial solidity, the country's macro-economy and how it interacts with the financial system, have to be fully taken into account. A particular aspect to look at refers to the potential effects of exchange rate volatility on banks' balance sheets and those of their customers. More broadly, looking at how the macro and financial dimensions interact with one another, rather than focusing on the financial system in isolation, is particularly important in the case of developing countries, given the intensity of macro shocks they are subject to from time to time.

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12 Turkey's crisis thus constitutes an interesting contrasting case to Argentina's: its crisis was domestically driven and took place at a time it was under an IMF-supported programme (Ozatay and Sak, 2002).
3.2. The Role of Coping Mechanisms

This section examines in some detail the coping mechanisms, both public and private, that were used during the Mexican and Russian crises. To place the discussion into context, it starts with the socio-economic effects of the crises and changes in poverty profile.

As seen earlier, the Mexican peso crisis of 1994-1995 and the Russian crisis of 1998 had major economic and social effects. In Mexico, GDP fell over 6% in 1995, with household consumption declining by 25% between 1994 and 1996. Both poverty incidence and the poverty gap increased, and more strongly so in urban areas. These outcomes resulted both from the already poor becoming poorer and from those nearly the poverty line falling into poverty, due to lack of safety nets to protect them (Baldacci et al., 2002). In Russia, GDP declined 5% in 1998, and average household expenditure fell nearly 25% in the same year against the level observed in 1996. Expenditure among urban households fell even more, by 27%, against a fall of 21% among rural households. The incidence of poverty increased by nearly 50% (from 22% to nearly 33% - see Table 3), as 20% of the total population fell under the poverty line (Lokshin and Ravallion, 2000). In both countries, the poor were affected by the crisis through similar set of channels: decline in economic activities, higher unemployment, lower real wages, and steep fall in government expenditure.

Who were the poorest and what income groups were the most affected by the crisis?

In Mexico, the poor households were the ones headed by farmers, the less educated or self-employed, and those located in the Yucatan peninsula. The latter shows that in Mexico poverty has a clear geographical dimension. And the hardest-hit by the crisis were single-parent households, and households headed by pensioners, self-employed or employees. Empirical evidence points to an improved income distribution between 1994 and 1996, both in rural and urban areas, as a reflection of steep fall in income among the wealthiest, not an improvement in the conditions of the poorest. The poorest 10% witnessed a fall in expenditure of 12% against an average fall among the poor of 1.6% between 1994 and 1996 (Baldacci et al., 2002, p. 24).

In Russia, the crisis impact was also different across income brackets. The extreme poor faced a smaller reduction in expenditure as compared to other population groups. 42% of the poor in 1996 even managed to escape from poverty in 1998. At the same time, many among the non-poor became poor as a result of the crisis. Those who were poor in 1996 and remained poor in 1998 were mainly living in the larger households, with more children, headed by the younger and less educated. In the same way, those households that fell into poverty between 1996 and 1998 shared similar characteristics - were headed by the younger and less educated. In both cases, they were less likely to be pensioners. These findings are partially confirmed by a later study carried out by Gerry and Li (2002), to whom the most vulnerable were the less educated and living in larger households. They also found a concomitant improvement in pensioners' expenditure position as pension transfers increased during the crisis.

What role did public safety nets play in protecting the poor during the crisis? And what informal coping mechanisms were used to endure the bad times?

In Mexico, social expenditure fell by 12% and 15% in 1995 and 1996, respectively (Fallon and Lucas, 2002, based on Lustig, 1998). Transfers to the poorest decile fell
by 13%. Although this fall was less than that for the richest decile, of 37%, better targeting did not help the poor significantly, nor did it prevent many from falling into poverty. The poor, especially pensioners together with single parents and the less educated, became poorer (Baldacci et al., 2002).

On the positive side, the government allocated resources to a short-term employment programme, which reportedly generated five hundred thousand jobs. Among the private protection mechanisms, a main coping strategy among the poor seem to have been their engagement in informal-sector activities, with labour transition from protected to unprotected jobs, and from unprotected to self-employed jobs taking place during the crisis (Fallon and Lucas, 2002).

In Russia, both formal and informal coping mechanisms seem to have played a bigger role in protecting the poor. There, public transfers played a positive role despite the fact they fell by 18% between 1996 and 1998 (Lokshin and Ravallion, 2000, p. 14). This is because targeting improved with an increase in transfers of almost 100% to the extremely poor (i.e. those households with expenditures below half the poverty line). At the same time, transfers to the remaining poor also grew, while transfers to the better off were drastically reduced. An increase in pensions was the main channel through which transfers reached the poor. The increase was big enough to offset a fall in family allowances and social aid to the poor that took place at the same time (Lokshin and Ravallion, 2000).

Crisis coping strategies among Russia's households, in turn, comprised a number of mechanisms during the 1998 crisis. These included relying on private assets to smooth consumption, looking for new or secondary jobs, and producing on their own land plot. Also, households relied on informal social and family networks, or even migrated to places where there were more job opportunities (Lokshin and Yemtsov, 2004).

Lokshin and Yemtsov (2004) report the results of the Russian Longitudinal Monitoring Survey (RLMS), a national household survey undertaken in November 1998, thus a few months after the crisis broke out. The survey shows that producing more on their own land plot, and asking relatives for help, figured among the most effective coping strategies adopted by Russian households. The first was a strategy adopted by 19% of total respondents, and the second, by 21%. Although the large majority also adopted expenditure cuts, respondents did not consider it very effective for dealing with the crisis.

Lokshin and Yemtsov identified three main groups of households as regards how they used these different strategies: a pro-active group, a social network group and a passive group. The first group relied mainly on home production, and/or alternatively looked for supplementary jobs. The second group relied mainly on their networks of family or friends, moved to live with relatives or asked for government help. The third group basically cut expenditures. Through econometric tests and simulations, they associate the first group with higher income households and holders of higher levels of human capital. Poorer households, especially living in urban areas, were likely to fall under the second group. Pensioners, smaller households and those living in areas of high unemployment levels seemed more likely to adopt the passive strategy. The authors see the third group as those increasingly marginalised by years of economic decline and progressive deterioration of Russia’s formal and informal social institutions.

The following patterns can thus be identified in Russia concerning coping strategies. The government reduced rather than increased total public transfers during the crisis.
But it redirected the resources available to the extremely poor, thereby protecting them from the crisis and even helping over 40% of the poor in 1996 to escape poverty during the 1998 crisis. The downside was that just one main transfer mechanism was used - pension transfers - therefore mostly benefiting one, even if very large, type of poor. Many Russians who were above the poverty line were left unprotected and therefore became poor during the crisis. Among the private coping mechanisms, Gerry and Li (2002) among others point out that increased home production, which is a practice rooted in Russian history, has played a major role in protecting Russians. Use of social safety nets was an additional important coping mechanism adopted during the crisis. Finally, individuals that were better-off and embedded with higher levels of human capital were more likely to adopt more effective coping strategies, whereas the most vulnerable tended to adopt defensive strategies that were largely ineffective to protect them from the crisis.

Mexico and Russia during the crises seemed to share the following characteristics. First, steep decline in government expenditure (proportionately bigger than GDP decline) at a time it was most needed as a counter-cyclical tool and to protect the poor and most vulnerable. As a result, poverty increased and clearly in Mexico’s case the poor became poorer. Second, a lack of appropriate safety nets in place that could be activated when a crisis occurred. Third, reliance on private coping strategies in the absence of adequate government support. These, which were better documented, and therefore more extensively reported for the Russian case, show that they played an important role in protecting the poor and most vulnerable. However, they were far from sufficient to contain increased poverty.

Overall, the main conclusions are that, first, although in both countries private coping strategies were adopted by the population as a means of alleviating the crises’ impact on their well being, these even if to some extent effective were largely insufficient. The Russian experience also shows that the degree of effectiveness varied according to the strategies available and that the most vulnerable were the least likely to adopt effective coping strategies. This clearly indicates the need for targeting the most vulnerable through public safety nets.

Second, as regards public social safety nets, few tools were available at the time of the crises. The extremely poor in Russia were better protected than in Mexico due not to a well-devised, planned government strategy, but because it used a traditional transfer mechanism - pension transfers - to protect pensioners, who in Russia are quite numerous and poor. Of course, this at least shows that having already in place mechanisms to be activated during a crisis can help a great deal to protect the poor.

Finally, from the above it is possible to affirm that the high increase in poverty incidence both in Mexico and Russia could have been much less pronounced had these countries had in place counter-cyclical fiscal policy and adequate safety nets to protect the poor.

The paper has clearly shown that the economic and social effects of crises can be enormous. Between 1995 and early this century, crisis-affected countries experienced steep GDP decline accompanied with a sharp increase in poverty. This just confirms Lustig's view that economic crises are among 'the most important cause(s) of large increases in income (or consumption) poverty' (Lustig, 2000, p. 3). More worryingly, the paper shows that there is broad consensus that the effects on the poor are asymmetric and to the extent they affect their ability to grow out of poverty, irreversible as well.

The paper also shows that the countries that suffered financial crises were not adequately equipped to mitigate their economic effects or to protect the poor. Their macroeconomic frameworks lacked the instruments that could give them room for counter-cyclical fiscal policy, or at least expand social expenditure. As a consequence, what happened was a disproportionate fall in public expenditure, particularly on social sectors. Moreover, they had few social safety net tools at disposal that could be activated to protect the poor and the most vulnerable.

There is therefore a clear need for actions to be undertaken both at national and international levels to equip countries to deal with crises when they occur. Equally important, actions are needed not just to improve countries' capacity to deal with crises, but to prevent them in the first place. In what follows the paper will discuss a number of proposals for adoption by developing countries and the international financial organisations to help prevent crises or at least mitigate their effects, particularly on the poor and the most vulnerable.\(^\text{13}\)

\section*{a. Counter-cyclical fiscal policy}

First, it is important international financial institutions such as the IMF and the World Bank support national governments in designing macroeconomic policy frameworks that are sufficiently flexible to respond to emergency situations, such as financial crises. These frameworks should have embedded mechanisms that permit fiscal policy to operate counter-cyclically in times of crises. Some middle-income countries are already adopting more flexible fiscal frameworks to better deal with volatility associated with business cycles and shocks. Chile, for example, has adopted a counter-cyclical element in its fiscal framework.\(^\text{14}\)

Other middle-income countries should follow Chile’s example, and the international organisations should support this initiative, so that they have the flexibility to combat recessions and the effects of financial crises (Gottschalk, 2004a). A more flexible fiscal framework would permit governments to reduce social expenditure in difficult times proportionately less than GDP decline, not more as was the observed practice in the recent financial crises. This would give room for maintaining or activating safety nets targeted to the poor.

\(^{13}\) For an excellent analysis of the role of the international financial architecture in crisis prevention and management, see Griffith-Jones and Ocampo (2003); for a discussion in the Latin American context, see Griffith-Jones and Kimmis (2003).

\(^{14}\) In this framework, a structural fiscal surplus of 1\% should be met. The structural fiscal balance is the difference between the actual fiscal balance and the cyclical component of the balance. Having a structural fiscal target rather than actual target implies that the government will be able to increase public expenditure during the downswing phase of the business cycle, and decrease it during the upswing phase (Fiess, 2002).
b. Social safety nets

The provision of social safety nets should be a crucial component of governments’ actions to protect the poor during crises. There is a consensus in the literature that safety nets should be permanent institutions, so that they are in place when a crisis breaks out and therefore can be quickly activated (APEC, 2001; Baldacci et al., 2002). Previous crises have shown that setting up safety nets takes time, and it may even be the case that they will be fully operating only when the country is already on a recovery path.

Other characteristics safety nets should have include flexibility, so that they can be easily adapted to target the most affected by the financial crisis; they should also be flexible in terms of instruments available, to ensure the chosen instrument is the most appropriate to protect the poor. For example, if the poor are mainly affected through a fall in real earnings, cash transfers should be used; but if the channel through which the poor are affected is unemployment, then public works should be a more appropriate instrument.

At the same time, safety nets should not be obsessively focused on the poorest, so that they do not miss those near the poverty line who may fall into poverty if left unprotected, as the Mexican and Russian crises have shown. Also, in some countries like Mexico poverty has clear geographical dimensions. Geographical targeting therefore should be considered as well.

Finally, safety nets if permanent could have a budget that operates counter-cyclically, in the same way as suggested for public expenditure more broadly. It could operate during normal times with a smaller budget to protect the chronic poor, and have a bigger budget during crisis times to prevent many from falling into poverty and the poor from becoming poorer.

The Mexican and Russian crises have shown that it is important that there is a range of instruments at disposal, rather than just traditional ones such as pension transfers. These may include cash transfers, public work programmes, microfinance and nutritional programmes, in addition to traditional social insurance (i.e. pensions and income support; APEC, 2001).

MDBs should support countries in the design and implementation of social safety networks through providing technical and financial assistance. The regional development banks (e.g. IADB) could play an important role, given their specific regional knowledge, particularly of the factors that cause poverty and of the mechanisms that in some cases make it so entrenched.

Moreover, new financing facilities could be created to specifically fund the expansion of safety nets when a crisis occurs. The latter is particularly necessary in view of sharp fall in government revenues in times of crises, when demands for social protection increases are at their highest. More broadly, the MDBs could create new counter-cyclical financing facilities, to support countries' public expenditure during crisis time.
c. Banking regulation and supervision

Counter-cyclical fiscal policy and the provision of safety nets are important elements for reducing the negative effects of financial crises on the poor. It is equally important that action be undertaken to contain the effects of crises in the first place. Ensuring there is in place a strong regulatory and supervisory framework for the financial system is crucial in this regard, as Brazil’s and Argentina’s experiences demonstrate.

A large number of developing countries have considerably improved regulation and supervision of their financial systems. But there is still room for improvement. In this regard, First Initiative is a highly welcome multi-donor programme of technical assistance to the financial sector of developing countries, which should receive continued support. However, it is important that the technical assistance it provides is not narrowly focused on the financial system, but instead take into account the inter-linkages between a country’s macro-economy and its financial sector. The above analysis of Brazil and Argentina shows that indicators for financial system solidity can change very rapidly with sudden changes in the macroeconomic environment, which is a key characteristic of developing countries, given their vulnerability to various types of external shocks.

C. International Official Liquidity

The provision of large and timely financial packages to help countries deal with financial crises is crucial. Moreover, existing facilities such as the IMF Supplemental Reserve Facility (SRF) should be enhanced to support crisis-hit countries to meet their external obligations. Brazil’s experience shows that such support can make crisis adjustment far less costly, in terms of forgone output, and recovery speedier. Indeed, the provision of official liquidity through special facilities and concerted packages is crucial to reduce the costs of crises.

Moreover, in view of the elimination of the CCL, it is important to ensure that in practice the SRF is provided not only for crisis management but also for crisis prevention, as in fact has been the case in the past.

Of course, the provision of official liquidity does not preclude the need for both formal and informal institutional arrangements for supporting debt restructuring. The inclusion of Collective Action Clauses in bond contracts by key emerging market countries such as Mexico, Brazil and South Africa is very welcome, as this may facilitate negotiations between governments and their creditors on debt restructuring. It is unfortunate, however, that the proposed Sovereign Debt Restructuring Mechanism (SDRM) has been rejected by the IMF Board. As Griffith-Jones and Ocampo (2004) note, the restructuring of the Argentinean debt may prove intractable, in which case having in place a more orderly approach to debt restructuring will inevitably be made necessary.

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15 CCL stands for Contigent Credit Line. It was a financing facility to protect countries from crisis contagion effects. It was eliminated in November 2003 due to lack of use. That is, since its creation in 1999 until it 2003, when it was eliminated, no country had applied for it.
Regional Arrangements for the provision of financial assistance

Financial assistance could be provided through regional arrangements as well. These arrangements could, for instance, take the form of regional funds. They could provide financial assistance to countries facing a financial crisis. They could be used to help a country avoid a crisis or, if it does occur, contain it (Agosin, 2000; for a detailed analysis, see Griffith-Jones, Gottschalk and Granville, 2001).

A regional fund would not be a substitute to the IMF, whose role in mobilising resources would remain crucial. It would have a complementary role, in providing additional resources. These would enable countries to respond more effectively and rapidly to a crisis situation, as funds would be more easily accessible and attached to less conditionality. It would in particular benefit the smaller countries, as access by them to IMF resources seem more difficult than by systematically important countries. An additional advantage would be that this fund would leverage resources to individual countries, thus taking the pressure off the countries to accumulate excessively high and costly international reserves as a crisis defence mechanism. The resources could come from the international reserves of the region’s countries – for example it could be a percentage of each country’s reserves, of 10% or 15%.

This type of proposal was first put forward by Agosin (2000) for Latin American countries. It is in certain respects similar to the Asian Monetary Fund, initially proposed by Japan in the wake of the Asian crisis. Of course, a fund for Latin America would be much more limited, in terms of financial resources available, than an Asian fund, but still could prove effective in serving as a first line of defence against crises.

d. Capital Account Liberalisation

The financial crises of the late 1990s and early this century have in most cases been caused by sudden reversals of capital flows. Although crucial, the provision of official liquidity however large is likely to fall short of the financing needs of developing countries facing the sudden reversal of external private capital. It is therefore important that the international financial community and the IFIs in particular, encourage countries to pursue a cautious approach towards capital account liberalisation, so that they become less vulnerable to short-term, volatile capital flows. A cautious approach may be pursued by liberalising first long-term flows and maintaining restrictions on short-term flows. Countries that have fully liberalised their capital account could consider adopting capital control mechanisms for preventive purposes, such as Chile’s unremunerated reserve requirements (URR). The URR is a capital control instrument aimed at restricting the volume of capital inflows, and lengthening their maturity. To the extent these aims are achieved, these controls reduce the booming effects that would take place if flows were excessive, as well as the deep downturns or even the likelihood of crises associated with their sudden reversals. It therefore has a clear preventive purpose, which should be preferable over controls for crisis management purposes, although the latter should be an option to be considered as well.\(^\text{16}\)

\(^{16}\) See Williamson, Griffith-Jones and Gottschalk (2003) for an analysis of the developing country experiences with capital account liberalisation in the 1990s.
e. Encouraging more stable (or long-term) capital flows to developing countries

After the East Asian crisis and especially the Russian crisis capital flows declined strongly, turning even negative in the first two years of this new century. But they are recovering now. There is a broad consensus they are coming back in a fashion similar to that observed in the 1990s. They are flowing in increasingly large amounts, especially to Latin America, and can be reversed very quickly, at any change in the international macroeconomic environment. There is therefore the need for encouraging more stable private capital flows to developing countries, so that they have more predictable sources of external finance and for supporting long-term growth, while becoming less subject to the booms followed by crises associated with short-term, volatile flows.

To encourage more stable private capital flows, new public-private mechanisms could be created. In what follows we will make brief reference to the creation of new types of public guarantees that could be provided by the IFIs, and put forward a proposal for public incentives for encouraging socially responsible investment (SRI) in developing countries.

Griffith-Jones and Fuzzo de Lima (2004) proposes the creation of new types of guarantees, including partial counter-cyclical guarantees, to mitigate risks of long-term investment and loans to support long-term investment, particularly in infrastructure projects. As Griffith-Jones and Fuzzo de Lima observe, guarantees have played in the past a very important role in helping catalyse private flows and extend the maturity of loans to developing countries. Drawing on data from the World Bank, the authors report that the loan maturity for infrastructure projects in developing countries with guarantees is 12 times bigger than loan maturity without guarantees.

The case for encouraging SRI investment in developing countries, in turn, rests on fact that SRI can be a major source of long-term flows to these countries, due to its liability structure, which is mostly long term. SRI assets have grown dramatically in recent years, reaching US$ 2.7 trillion in 2001. In the US, they grew from just US$ 1.0 trillion to over US$ 2.0 trillion between 1997 and 2001. In the UK SRI growth has been even more dramatic – with asset values quadrupling from just £50 billion in 1999 to over £200 billion in 2001 (Russel Sparkes, 2002).

Changes in the UK legislation on pension funds have been pointed out as a key factor behind this increase. In 2000 the UK government modified the 1995 Pensions Act to require that pension funds report to what extent their investment decisions take into consideration social and environmental issues (Coles and Green, 2002). This seems to have propelled UK institutional investors to increase significantly their SRI investments. As a consequence, today over 80% of total UK SRI assets are held by institutional investors.

However, the strong growth SRI has exhibited in the recent past has been a phenomenon limited mainly to the acquisition of developed country assets. Of the US$ 2.7 trillion of total SRI assets in 2001, only 0.1% was emerging market assets (IFC, 2003). This is much lower than the share of emerging market assets held by mainstream investors, of around 2-3%. There is therefore an enormous potential for SRI growth in emerging markets.

17 See, for example, Plender (2004).
The official sector in industrialised countries could provide incentives to encourage SRI investor community based in their countries to invest in EM assets. For example, they could follow the UK example by modifying pension funds’ legislation to include a requirement on institutional investors to report on a regular basis their policies towards investing in EM. Indeed, UK legislation could be modified to specifically highlight developmental concerns in the required reporting by pension funds. They could even set a minimum developing country EM asset holding target to be reached over a certain time-frame. Moreover, they could facilitate the establishment by the SRI industry of a set of principles to guide their investment decisions towards EM, in the same way the IFC has done with major internationally active banks, in establishing the Equator Principles on social and environmental issues. Of course, it would be important that these principles are broad to include development elements. The Millennium Development Goals could serve as a basis for the establishment of these principles (Gottschalk, 2004b).

To summarise, encouraging more stable capital flows to developing countries would be an effective way to reduce the boom-bust cycles of volatile flows. It would avoid costly financial crises while supporting growth and sustainable development. This initiative would be consistent with the Monterrey agenda and would therefore contribute to take it forward, by helping provide development finance to developing countries.
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