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### Financial Globalisation and Child Wellbeing

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*This paper addresses the relationship between financial crises associated with foreign capital flows on the one hand and the wellbeing of children in emerging market countries on the other. The literature on child welfare in crises suggests that the level of employment and labour incomes are the key linkage, because these constitute the major component of the incomes of poor families and affect the division of labour within the household upon which child welfare depends. A simple analytical model of labour markets illustrates the linkage between corporate sector contraction under financial crisis and the incomes of the poor in the urban informal and rural sectors. This insight leads to recommendations for the reconsideration of capital controls and exchange rate management in merging markets as means of employment stabilisation (in the spirit of the original Bretton Woods objectives) and thus child wellbeing.*

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The printing shop closed without warning and her father was thrown out of work, turning Rini's world upside down. With the future so uncertain, Rini's parents worried about not being able to afford to send her to school.

'Indonesia's Despair' *State of the World's Children 2000* p. 21

## 1. Introduction

A central characteristic of the world in the twenty-first century is the increasingly free movement of merchandise and capital across national boundaries, with all countries now bound together by global markets. The rapid growth of private capital flows over the past decade presents an opportunity for poor countries to access a global pool of savings, technology and management skills; but at the same time it presents new policy challenges in terms of securing sustainable development and poverty reduction. The linkages between financial globalisation in general – and financial crises in emerging markets in particular – and the well being of children in developing countries are thus always complex and often ambiguous.

This paper focuses on the analysis of the effect of financial crises on labour markets, the incomes of poor families, and the consequences for child wellbeing. In Section 2, this paper identifies the main issues in financial crisis analysis that are relevant to this discussion. These are the origins of financial integration and instability; the scale of the financial collapses and their wage/employment consequences; and the nature of the recovery process. In Section 3 the literature on the effect on children of financial crises is briefly reviewed, focussing on the consequences of labour market stress on the family itself – as well as the consequent impacts on health and education. A central premise of this argument is that labour incomes are the main determinant of poor families' welfare as these determine not only nutrition and housing status but also in effect access to health and education in countries where public services do not adequately extend to the poor. Section 4 attempts to specify two key transmission mechanisms from financial crises to child wellbeing: the direct effect of capital surges on employment and wages in the 'modern' sector of the economy; and the indirect effect on the urban and rural 'informal' sectors where poor households (and thus vulnerable children) are located. Finally, in Section 5, the implications of these effects on labour markets - and the longer-term consequences of lost growth and fiscal debt on child welfare over a lifetime - for the ongoing debate on the 'international financial architecture' are derived.

## **2. Financial Integration, Stability and Poverty**

The rising supply of private capital from developed countries to developing countries (or more precisely, the rising demand for emerging market assets) is mainly due to the scale and scope of modern production systems that has led to the rise of ‘multinational’ corporations which can locate and articulate their activities on a global basis so as to source local and overseas markets. However, the increasing complexity and competitiveness of financial markets in developed countries themselves have led to a demand for high-yield risky assets combined with a more sophisticated approach to the management of that risk. This has increased the willingness to invest in emerging market assets that are both liquid and possess a low covariance with the rest of the portfolio. This process has generated international bond, equity and credit markets of considerable size; markets which have facilitated by advances in telecommunications and information technology.

The supply of suitable financial assets for foreign investors to acquire has also increased markedly due to the process of market liberalisation in developing countries. The combination of difficulties in long-term international bank borrowing, domestic interest rate liberalisation and strict monetary policies has led to a dramatic expansion of the government bond market. Finally, the opening and expansion of domestic securities markets led by privatisation flotations has encouraged domestic firms to raise funds by issuing shares and bills. The ability to access international capital markets has been enhanced by improved telecommunications technology and changes in these markets themselves. International bond issues by both governments and large firms from developing countries have become routine; while the spread of depository receipts has permitted the quotation of developing country equities on the main global markets.

However, international capital markets suffer from a number of systemic inefficiencies which lead to ‘market failure’ – that is a situation where otherwise profitable investments cannot find finance. In particular, a shift in external market sentiment can cause a sudden (possibly excessive) reversal in the both risk appetite and perception of uncertain future returns, destabilising the economy. The integration of capital markets has also increased the ease by which nationals of developing countries can move their assets abroad. Of course, portfolio diversification can be micro-economically efficient in itself, and indeed many developing country companies have become to emerge as ‘southern multinationals’ in their own right, while intra-regional investment flows are becoming more important. None the less, the scale of ‘capital flight’ from developing countries is legitimate cause

for concern because it implies potential investment foregone – particularly in crisis situations.

With an open capital account, the cycle of foreign capital flows tends to be highly pro-cyclical with countries’ economic conditions, rather than acting to stabilise the economy. This model also encourages pro-cyclical government policy – increased spending in booms and cutbacks during recessionary outflow periods – and hence increased macroeconomic volatility. The management of capital inflows has costs in terms of increased instability of government finances and the macroeconomy more generally, and also unstable real exchange rates if sterilisation is adopted. The result of this overshooting may be the widespread failure of corporate and banking sector institutions: indiscriminate failures which destroy sound as well as unsound banks and corporations may jeopardise the institutional basis of a future economic recovery.

As Table 1 below indicates, these shocks all led to a considerable decline in average household consumption in leading emerging markets, equivalent to more than 10 percent in a single year in many cases. However, recovery of consumption levels was also relatively rapid in most cases, which has generated some optimism among international financial institutions.

*Table 1 Real Per Capita Household Consumption in Some Crisis Countries*

	1995	1996	1997	1998	1999	2000
Indonesi a	100.0	108.0	114.6	104.4	105.7	107.2
Korea	100.0	106.1	108.8	95.0	104.1	110.7
Malaysia	100.0	104.1	105.7	91.3	91.6	101.2
Thailand	100.0	105.6	103.2	89.2	90.3	92.9
Argentin a	100.0	104.6	111.5	113.5	109.1	109.0
Brazil	100.0	101.7	103.2	101.9	100.2	102.6
Chile	100.0	107.8	114.9	118.0	112.5	118.9
	1992	1993	1994	1995	1996	1997
Mexico	100.0	98.7	102.1	90.8	91.6	94.1

Source: IMF and Consensus Economics

However, these financial shocks also have serious consequences for corporate finance and thus on productive investment and sustainable employment. This problem is exacerbated in many developing countries by the especially weak position of small and medium enterprises (SMEs). Affiliates of foreign multinationals by their very nature are largely exempt from local financing constraints. Large domestic companies or groups generally have preferential access to bank credit, and are thus relatively protected from capital market fluctuations. SMEs are the most vulnerable then to capital outflow-induced shifts in credit availability, and the concomitant impact on the poor can be strongly negative.

Financial crises in a number of leading emerging markets in the latter half of the 1990s and early 2000s caused widespread concern about the premature liberalisation of financial sectors in developing countries, before a solvent fiscal structure, a robust regulatory system and a competitive business sector had been built up. In a number of cases large inflows of short-term funds led to overheating of the domestic economy, excessive credit expansion (and a decline in savings rates), real estate bubbles and overvaluation of the exchange rate. The large outflows of funds once the cycle turned, the collapse of investment and output, the rise of unemployment and the fiscal retrenchment; have had serious consequences for poverty and development and tend to create 'contagion' for neighbouring countries.

In a recent survey Cobham (2000) sets out a basic framework for examining the linkages between capital account liberalisation and poverty. Capital account liberalisation is seen to act at a general level, through the effects on overall growth and on macroeconomic instability; and more specifically, through the effects on poverty of changes in government budgets, access to credit and industrial performance. First, that it remains to be seen whether the overall growth impact of capital account liberalisation is positive, and the case in lower-income countries is particularly weak. There is no evidence of positive growth effects. Second, that the benefits accrue primarily to international financial markets and domestic capital holders, i.e. the relatively wealthy, but eventually to the poorer through improved investment quality (and hence – at least potentially – employment). Third, the impact on investment quantity, however, which may be more significant for employment, is unproven; there appears to be no long-term positive impact, although possibly a one-time, short-term boom in investment may occur. Fourth, there is a danger that the impact of increased macroeconomic instability – which has been shown to have damaging negative effects on both the level and quality of investment – will outweigh these benefits and lead ultimately to reduced employment. Fifth, while the most obvious winners are likely to be located in urban areas, with easy access to financial institutions, any competitive effects which lead to branch closures in already under-

provided rural areas have clear negative consequences for agricultural industry and poverty.

Cobham (2000) reveals that the available literature shows that government revenues are affected by capital account liberalisation through three channels: the imposition of international market discipline, the priorities of the IMF in crisis and post-crisis stabilisation packages, and the changing levels of tax revenue. The first two are negative – at least in the short to medium term – while the third may have differing effects, depending on the extent of possible increases in capital flight and the (output-related) tax base. Government budgets are reduced then, with two effects of particular importance for the poor. Firstly, social spending will suffer in real terms if not relative to the total budget, and the longer-term impact of reduced health and education provision falls particularly on the poorest. Secondly, longer-term spending – i.e. infrastructure investment programs – may be significantly cut, and as well as limiting the country’s development directly the resulting instability will also reduce the extent to which private investment can be crowded in. The possibility of greater government spending on building up reserves and other measures to protect the currency will compound these effects.

As Table 2 indicates, the impact of financial crises on investment has been much more serious than that on household consumption, which implies in turn that the long-term capacity to generate growth and formal sector employment has not recovered.

Table 2: Gross Fixed Investment in Some Crisis Countries

	1996	1997	1998	1999	2000
Index 1995=100					
Indonesi	100.5	109.1	73.1	58.6	64.4
a					
Korea	107.3	104.9	82.7	86.1	97.1
Malaysia	108.2	118.2	67.3	63.4	75.0
Thailand	107.4	84.1	46.9	44.7	48.0
Argentin	108.9	128.2	136.5	119.0	112.5
a					
Brazil	101.2	110.6	109.8	101.4	107.9
Chile	108.9	121.4	126.4	104.4	108.9
	1993	1994	1995	1996	1997
Mexico	98.8	107.1	76.0	88.5	107.1

Source: IMF and Consensus Economics databases

There is no reliable source of employment data for crisis countries, and the evidence of on modern sector wages (see Table 3 below) is somewhat fragmentary, indicating that wages recover in some cases but remain depressed in others. However, Diven (1999) finds that labour shares of national income fall sharply during financial crises: Perhaps because labour is less mobile than capital, it ends up being forced to bear a large share of these asset losses (in the sense of transferring part of its income to another group). There is strong evidence of this happening. Crises are resolved when workers end up bearing large costs that resemble bailouts of (financial) capital. We estimates that the total losses to labour, from the beginning to the end of the crisis, amount on average to 20 percentage points of GDP”.

Table 3 Real Wage Levels in Some Crisis Countries

	1995	1996	1997	1998	1999	2000
Indonesi						
a						
Korea	100.0	107.3	108.1	96.6	110.1	117.2
Malaysia						
Thailand						
Argentina	100.0	100.4	97.3	96.9	96.2	
a						
Brazil	100.0	102.7	105.5	108.3	92.4	94.4
Chile	100.0	105.2	108.0	111.5	115.4	116.2
	1992	1993	1994	1995	1996	1997
Mexico	100.0	108.9	113.0	86.6	79.9	83.3

Source: IMF and Consensus Economics

Recovery of output from the immediate post-crisis level is almost complete in most countries in crisis during the 1990s; but the longer economic and social consequences may be considerable. This is due to the large and sudden redistribution of assets and liabilities between domestic and foreign agents, between the public and private sectors, and between the rich and poor. This redistribution clearly depends on the form that the rescue package takes; but in most cases this has involved the assumption of large new liabilities

by the public sector in the form of new external borrowing and the taking over of bad loan books of domestic banks long. This in turn implies future fiscal retrenchment with inevitable social consequences.

Much of the problem of addressing this issue arises from the absence of a clear and agreed framework for analysing the effect of macro-financial shocks on poverty, and thus child wellbeing. Bourguignon (1991) is a notable exception: he and his colleagues constructed a generic CGEM framework that includes both financial markets and poverty indicators, comparing fiscal and exchange-rate adjustment to external shocks. This 'maquette' was applied to the cases of Ivory Coast, Morocco, Ecuador, Indonesia and Malaysia. The poverty effects of adjustment programmes are shown to be inevitably negative in the short run, but to be positive in the longer run insofar as private investment accelerates. As we have seen, this latter problem is particularly acute in the case of financial shocks.

The labour market is somewhat crudely modelled in these models, and wage stickiness exacerbates poverty by reducing employment through the price-elasticity of the demand for labour. None the less, these models do show that the poverty effect of external shocks depends to a great extent on the nature of the macroeconomic policy response. In particular, the adjustment can take the form of a relative price shift (ie devaluation) or a demand reduction (eg fiscal contraction) and the poverty effect depends upon the balance of private and public expenditure in the wellbeing of the poor – in other words, on the particular country case. None the less, it is very clear from these models that financial liberalisation exacerbates the effect of adjustment on the poor, because of the shift of private wealth out of domestic investment (which creates employment) into foreign assets – that is, 'capital flight' – reflecting the relative immobility of labour.

Vos and de Yong (2001) is one of the few recent studies to explicitly isolate the through 'microsimulations' the effect of each of the main determinants of poverty and inequality and associate these with the process of financial liberalisation. They model the Ecuadorian financial crisis of the late 1990s in some detail and refer specifically to the labour market effects on income distribution and poverty. The underlying trend under trade and financial liberalisation is one of rising earnings differentials between skilled and unskilled workers - that is, between employment in the modern corporate sector on the one hand and employment (or under-employment) in the urban informal sector and the rural sector on the other. However, "during the crisis periods the pushing of workers into informal self-employed activities was more critical in explaining the rise in inequality". In particular, the changing employment structure mainly explains the shifts in inequality both in boom (positively) and recession (negatively) periods. However, "the



change in the average remuneration explains most of the increase in poverty incidence in the recession and crisis periods, and of its reduction during the liberalisation period.”

In sum, the labour market effects of financial crises are clearly central to understanding the poverty effects of financial crises.

### 3. Child Wellbeing under Financial Instability

The World Bank (2000a) in the *Global Economic Prospects and the Developing Countries* devotes a whole chapter to ‘External Shocks, Financial Crises, and Poverty and Developing Countries’ that concludes somewhat optimistically that recovery has been rapid in cases where countries have pursued ‘sound policies’. Targeted social support in the form of ‘safety nets’ has worked well. In particular, it asserts that health and education have not suffered as a share of government expenditures and have even increased in some cases; though naturally per capita spend has declined with GDP and fiscal retrenchment. A similarly optimistic story emerges from Indonesian village-level data in Cameron (2000), which seems to suggest that sectoral experience may differ, particularly where large real devaluations affect traded good producers positively.

This contrasts rather sharply with the more recent World Bank (2000b) view in *WDR 2000/01: Attacking Poverty* that “boom and bust economic cycles prevent countries from consolidating progress in poverty reduction, because it is the poorest who are most vulnerable to these swings”. In the most recent *Global Development Finance* (2001) the Bank takes a more cautious position on capital account liberalisation, hopefully due to the impact on the poor.

Although the literature on child poverty in developing countries is extensive, rigorous studies of the effect of financial crises is scarce. Bell and Reich (1988) collect a number of papers on health, nutrition and economic crises which make the point that as most health and nutrition delivery is by women, the impact of crises on mothers and older sisters will be transmitted to children. In particular, if labour market disruption and low incomes force women to work more away from home, then child care in all its forms will suffer – even though mothers tend to spend a larger proportion of their income (and time) on their children than fathers do.

Moreover, even though the initial impact of financial crises on children may be reversed as the economy recovers relatively quickly, as Myers (1992) points out the failure to invest in early childhood as having a longer-run impact on adult well-being and income earning capacity far beyond the original welfare loss itself. Selowsky and Taylor (1979)

confirm this key point empirically in their study of malnourished children in Chile during the 1970s, which they aptly termed “an example of disinvestment in human capital”. Against this, it should be remembered that as Deaton and Paxson (1997) point out, the conventional method of measuring household poverty is likely to overstate the incidence of poverty among children, and underestimate that on old people.

In one of the few longitudinal studies of health and child nutritional status at a time of economic structural adjustment Bijlmakers, Basset and Sanders (1998) conclude that in Zimbabwe during the mid-90s there was a diversification of income sources and (counter-intuitively) a decline in subsistence production. Safety nets did not reach the poor, and in any case household expenditure on health care, school fees and household durables were all cut. The effect on child welfare in general and stunting in particular was considerable despite the declared intention of both government and aid agencies to protect the poor. However, as Nieuwenhuys (1994) points out, the fact that children are forced onto the labour market in times of financial crises may not be as negative as it might appear. There is not a simple conflict between a child’s paid work and education: because children work anyway, but are usually unpaid, a chance to get monetary income increases their bargaining strength within the family, and their nutritional status is actually protected thereby.

Turning to micro-evidence on the recent financial crises, much has been written on the social impact of the down-swing, particularly on the Indonesian poor, but unfortunately on the experience of recovery in more recent years. It is difficult to determine, therefore, how permanent the effects may be. Watkins (2000: 285-94) in a study for OXFAM addresses the effect of financial crises on education for the poor, which he identifies as the main transmission mechanism – exacerbating the negative impact of structural adjustment programmes in the previous decade. Enrolment rates fell in Indonesia by 3 percent for primary and 11 percent for secondary schools. Rural primary enrolment fell more than urban, but the reverse was true at the secondary level. Real spending on education fell by more than a third in the two years after the crisis. The long-term consequences are serious because education has been the main factor in reducing poverty. Watkins contrasts the case of Thailand, where emergency school scholarships were provided through established channels during and after the crisis, making the impact on education far less than in Indonesia.

Finally, Stalker (2000) argues in a study for UNICEF that the social impact of *Krismon* was particularly great on the health status of poor children because the public health system was based on primary clinics was thinly spread and very fragile. Between early 1996 and early 1999 the proportion of population living below the poverty line rose from 18 to 27 percent. The urban poor were hit more than the rural: the urban formal sector

was hit hardest, and though rural sector suffered less, there were more people competing for same jobs. Official household surveys found that between 1997 and 1998 per capita household expenditure fell nationally by 24 percent: 34 percent in urban areas and 13 percent in rural. Forced sales of assets mean that the real income effect may be even greater. But children were not generally withdrawn from school. However, the proportion of children using government health facilities fell from 26 to 20 percent, due to not having money for fees and the deteriorating service and lack of drugs. Attendance by children under five down from 47 to 28 percent. The key problem appears to be in the community clinics, where local volunteers (mainly women) withdrew in order to earn money elsewhere. Government safety nets worked fairly well in food and education, and though they could have been better targeted on the poor, broad coverage may have defused social tensions. There was much less success in maintaining health programmes or in creating new jobs.

Stalker's conclusion, however, underlines the problem of distinguishing the effects of the financial crisis as such (and by extension, financial globalisation) with the wider problem of under-development.

Common sense tells us that [child poverty, homelessness, malnutrition etc] must have been exacerbated by Indonesia's crisis. But it would be wrong to assume that these problems will automatically recede as the monetary situation improves. Macro-economic improvement has not trickled down to restore Indonesians to their pre-crisis standard of living. Even if it had, economic recovery alone would not be enough to tackle the unseen and under-estimated human vulnerability that existed long before the crisis. (*op. cit.* p. vii)

Financial instability in general and financial crises in particular can place an excessive burden on poor and vulnerable members of society in emerging market economies. The poor are not in general the main beneficiaries of the upswing in an asset price boom, as employment and wages tend to rise in the sectors such as banking and construction requiring skills. However, if the subsequent downturn involves a sharp fall in aggregate output and severe fiscal retrenchment, vulnerable groups are likely to experience serious income decline. Sustained poverty reduction requires long-term growth and substantial public investment in social infrastructure, both of which conditions are negatively affected by financial crises.

The consequence of currency collapse for levels of output, and thus employment, can be dramatic. The result of large nominal devaluations, at least in the short term, has been a decline in imports (i.e. reduced absorption) rather than an increase in exports (i.e. resource reallocation); and thus of domestic economic activity. Real wages fall sharply, an effect that is maintained into the medium term if the real exchange rate is to be

depreciated and the traded sector stimulated. The decline of public investment in crisis periods can have long-term employment consequences, while the effect of financial instability and business uncertainty on private investment can be even more serious.

Short-term capital inflows, and the resultant macroeconomic instability, have a number of important consequences for domestic industry. What is particularly significant here is the asymmetric impact of increased levels of macroeconomic uncertainty on firms. In financial crises banks tend to restrict credit to all but preferential borrowers (e.g. large firms). The dominance of small and medium enterprises (SMEs) is greater in developing economies, where larger firms are fewer and SMEs provide much of the employment. Since smaller firms tend to be more labour-intensive and less capital-intensive, their employment contribution is relatively greater and thus their credit starvation in financial crises can have serious social consequences.

#### **4. The Transmission of Financial Shocks to Child Poverty**

Households are affected by real macroeconomic shocks through the level of employment and wages on the one hand, and the availability of government services and bank credit (particularly for residential construction and consumer durables purchases) on the other. To a great extent, therefore, the impact of short-term capital flows on households will reflect the consequence of the response of the fiscal and firms sectors to external shock. First, the negative effect of these flows on public investment stability, and thus on the effective provision of social infrastructure; leading to a reduced supply of and effectiveness in health and education services, public transport systems and urban services. Second, the asymmetric effect of these flows on the volatility of corporate output, and thus on the level of current 'formal sector' employment and, through the level of investment on longer term employment. Third, the negative effect of these flows on capital market and exchange rate volatility, and thus on the level of private investment; with long-term consequences for the level of sustainable employment and thus income distribution.

However, the most significant negative consequence on welfare is probably - as in the case of trade liberalisation - felt through the long term consequences for private investment, because this (rather than low wage rates or even labour skilling) is the main source of sustainable long-term employment (FitzGerald and Perosino, 1999). None the less, the broader effect of capital flows on the real exchange rate is of considerable interest, because this affects the level of aggregate employment in the economy as a

whole (including the small-scale sector) and the level of real wages through relative prices.

The mechanics of this boom often take the form of banks extending consumer credit backed by the short-term capital inflows; rather than extending it to companies as in our earlier model. This boom is not sustainable, however, and to remain consistent with market expectations of solvency the current account should be closed again in the subsequent period and imports should fall sharply again *even if the capital inflow is not reversed*.

In practice, halting an import-and-credit boom generated by short-term capital inflows is very difficult. This is partly for the technical reason that reducing credit levels to consumers implies rapid repayment of debt which cannot be achieved by selling the corresponding household assets (eg houses or consumer durables); and partly for the political reason that the euphoric sense of economic success is difficult to abandon. In consequence, it is not surprising that the authorities seek to sustain the boom in the hope that *further* short term capital inflows can be attracted. However, when foreign investors reach the conclusion that the deficit is unsustainable, the reverse process starts. Capital outflows require that the domestic economy generate a large *surplus* on the current account of the balance of payments. When drastic reductions in domestic demand have caused widespread bankruptcy and household distress, to borrow heavily from international financial institutions in order to - in effect - acquire the domestic assets of non-resident investors.

The aggregate impact of these sudden shifts in corporate sector activity affect both wages and employment directly. This effect is modelled in Appendix A.1. An outflow of capital forces with a sharp decline in GDP as imports fall or a depreciation of the currency, which mitigates the import decline with an export stimulus. Of course, most crises involve both these effects as the capital outflow both reduces liquidity to the domestic market and reduces the price of domestic currency assets. Real wages are also shown to be directly linked to the real exchange rate in Appendix A.1, a nominal devaluation only becoming real if nominal wages do not move up proportionately. There is thus a trade-off between real wages and employment levels in the adjustment process. However this does not arise from the price elasticity of demand from labour, but rather from the impact of the external sector which drives the domestic macroeconomic equilibrium.

In the case of a capital inflow, an active monetary policy would involve some domestic inflation in order to force up (ie devalue) the real exchange rate and allow output to rise, which may well be politically unattractive. This may be the reason why in Latin America there has been a tendency to allow exchange rates to appreciate during periods of short-

term capital inflow, due to the recent experience of high inflation. In Asia, with less inflationary experience, there is more willingness to allow domestic prices (and thus the real exchange rate) to adjust. On the outflow of short capital, exactly the reverse situation should hold; but as nominal prices are more or less rigid downwards in practice, it is much more difficult devalue the real exchange rate than to revalue it, so that a forced reduction in output is much more likely. In sum, an inflow followed by an equal outflow is likely to have an asymmetric character: the real exchange rate falling (ie appreciating) with the inflow, and output falling on the outflow.

This analysis of the response of the real exchange rate and aggregate demand to short term capital inflows and outflows also reveals asymmetric implications for wages and employment. The real exchange rate rises on the inflow, but does not fall proportionately on an equal outflow; so that aggregate demand falls more on the outflow than it had risen on the inflow. To the extent that real wages will rise with the inflow but employment will remain the same. With the outflow, real wages would not fall but employment would decline. As a key problem of income distribution is the balance between the incomes of the employed and those of the un- (or under-) employed; fluctuations in external capital flows can be expected to have a negative effect on income distribution.

The effect of the collapse of labour incomes in the corporate sector on the rest of the economy is the key to the welfare effect - this effect being transmitted through expenditures on goods and services from the urban informal sector, and from there out to the rural sector. Appendix A.2 shows how the structure of the labour force determines how the financial crisis impact on the corporate sector (with few if any poor households) is transmitted into the urban informal sector and the rural sector (where poor households are located) and thus poverty is worsened. The key insight here is that urban informal sector employment and incomes are determined by the expenditure of corporate sector employees. The effect on the urban poor of a change in the corporate wage rate is thus different from that of a change in corporate employment, even though the expenditure effect is similar, because the latter involves a change in competition in the informal labour market.

Further, migration from rural to urban areas tends to equalise incomes at the margin; so that any shift in urban per capita incomes will affect the migratory process and can even reverse it in a crisis. With sustained expansion of the corporate sector in a boom period, then both urban and rural incomes rise and poverty rises, even though a minority of migrants to urban areas get jobs in the corporate sector. When this mechanism is reversed in a financial crisis, poverty increases in both rural and urban areas.

The model shows that the effect on the rest of the economy of a corporate sector decline depends very much upon whether there is a decline in wages or a decline in employment. The latter is much more disruptive than the former on the rest of the economy, and to the extent that employment loss by the head of household has a more traumatic effect on children than the loss of income, then this finding has significant implications for child well-being.

To get some idea of the relative magnitude of these effects, the model results in Appendix A.3 can be calibrated with some parameter values characteristic of emerging market economies. A representative economy with a typical labour force distribution between the corporate and government sector (20 per cent), the urban informal sector (30 per cent) and the rural sector (50 per cent) is illustrated in Table 4 below. As explained above, an adjustment of 10 per cent in the corporate sector activity level due to a financial shock can be expressed either as a 10 per cent fall in employment or a 10 per cent cut in wage rates. In the first case, the employment decline in the corporate sector (keeping real wages steady) has a violent effect on urban informal employment (down 16 per cent) as incomes fall and the newly unemployed enter the urban labour market driving wages down and forcing migration back to rural areas, where the workforce rises by 6 per cent and wages are also forced down. In the second case, cutting corporate wages by 10 per cent (but maintaining employment) reduces urban informal employment due to the reduction in demand for informal goods and services, but by less because there is no competition in the urban labour market; and less workers are forced back to rural areas so wages there do not fall by so much. In short, the poverty effects in the first case are much greater than in the second case.

Table 4: Poverty Effects of a 10 percent Cut in Corporate Employment or Wages

		Corporate Sector	Urban Informal	Rural Sector
10% Fall in Corporate Employment	Employment	-10%	-16%	+6%
	Wages	-	-6%	-6%
10 % Fall in Corporate Wages	Employment	-	-6%	+4%
	Wages	-10%	-4%	-4%

## **5. Financial Policies for Reducing Child Poverty**

The arguments and evidence set out above imply that employment and investment stability are the key to maintaining and improving child welfare in emerging market economies. This has significant consequences for the management of capital flows, exchange rate doctrine and international financial cooperation.

First, both theory and experience indicate the desirability of scheduling capital account liberalisation after financial liberalisation. Allowing foreign investment in domestic financial markets and foreign borrowing by domestic banks and corporations calls for minimum levels of both market efficiency and institutional and regulatory capacity to safeguard stability. In consequence, many emerging market governments have begun to consider the re-imposition of capital controls as a means of insulating their economies from the potentially destabilising effects of short-term capital movements. These new controls tend to be 'market based' and range from taxes varying with asset maturity to prudential constraints on foreign borrowing by domestic banks and firms. Article VIII of the IMF Articles of Agreement only requires member countries to avoid imposing restrictions on current account transactions, such as those related to trade in goods and services and the remittance of profits and dividends. Indeed, the OECD countries themselves only gradually dismantled controls on capital flows over several post-war decades.

Second, the exchange rate affects both the level of domestic activity (and thus the employment level) and the real wage, and is thus a key determinant of the welfare of poor households and their children. A full float clearly leads to employment and wage instability when the economy experiences exogenous shocks; while hard pegs tend to lead to overvaluation and destabilising speculative attacks. Some form of exchange rate management is unavoidable for small open economies with high trade coefficients and shallow domestic capital markets. Although it is clearly desirable to achieve both real wage and employment stability, the analysis in this paper indicates that both cannot be attained simultaneously so that if child welfare is the criterion, employment stability (and thus real exchange rate variability) may be preferable to real wage stability.

Third, the international financial community must recognise the systemic problems faced by countries whose financial markets are still at an intermediate stage of development. Their financial systems require some protection from external shocks that might otherwise lead to excessive fluctuations in liquidity. As they are not sufficiently integrated to global markets to rely on permanent access to private financing, they must have flexible access to official financing for counter-cyclical borrowing in order to sustain employment levels through the cycle. Thus emerging market economies should be



free to choose the exchange rate regime that they judge best for their circumstances, and international support should not be made conditional on the adoption of a particular regime. Further, for any exchange rate regime to be sustainable for these economies with diversified trading and investment patterns, it is essential that G3 exchange rates (i.e. between the dollar, euro and yen) should not be too unstable.

Fourth, emergency financial ‘rescue packages’ clearly need to be underpinned by strong social policies: providing safety nets without excessive fiscal strain and actions to make sure that the needs of the poor are given proper consideration. As the longer-term development of children can be harmed by household unemployment and loss of health and education access, even if only for a few years. Increased social and economic stability will not only help households cope with shocks and build the political consensus in support of government policy that prevents social conflict from worsening, and thus help restore private sector confidence more quickly.

Fifth, creditors should thus accept greater public intervention in the economy for social protection during a financial crisis, so long as it is consistent with fiscal stability over the cycle as a whole, so as to maintain domestic investment and employment levels. These mechanisms may include public works schemes to create employment, maintenance of bank credit to small firms and the ‘ring fencing’ of fiscal expenditure on primary education and basic health systems. More long-term funding should also be made available from multilateral development banks to strengthen social infrastructure provision.

Sixth, the international community must thus recognise that for the new International Financial Architecture to be viable, it must be underpinned by sound social protection systems in order to both protect vulnerable groups – above all children - in emerging market countries and maintain political consensus on sound economic policy. This, after all, was the underlying aim of the Bretton Woods agreements.

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## Appendix

### A Model of Sectoral Employment and Wage Response to Exogenous Shocks

#### A.1 Adjustment to External Financial Shock

Suppose a simple aggregate model of the dependent open economy along the lines of the World Bank RMSM model (see Agenor and Montiel, 1995). The real exchange rate ( $e$ ) is defined in terms of the relationship between trade and non-traded prices ( $P_t, P_{nt}$ ) in the usual way, where traded prices are the product of the nominal exchange rate ( $E$ ) and world prices ( $p$ )

$$e = \frac{P_t}{P_{nt}} = \frac{E \cdot p}{P_{nt}} \quad \text{Eqn 1}$$

Exports ( $X$ ) in real (eg ‘dollar’) terms depend on the real exchange rate

$$X = x_0 + x_1 \cdot e \quad \text{Eqn 2}$$

Imports depend on the real exchange rate and the level of domestic activity ( $Y$ )

$$M = m_0 + m_1 \cdot e + m_2 Y \quad \text{Eqn 3}$$

The authorities’ task is to ensure that the trade balance (ie  $X - M$ ) is kept in line with net capital inflows ( $F$ ), themselves composed of official and private net flows plus changes in reserves

$$X - M = F \quad \text{Eqn 4}$$

Substitution of [2] and [3] into [4] allows us to express the level of activity ( $Y$ ) in terms of the real exchange rate ( $e$ ) and the level of capital flows ( $F$ ).

$$Y = \frac{1}{m_2} [F + e(x_1 - m_1) + x_0 - m_0] \quad \text{Eqn 5}$$

Obviously, if there is a capital outflow associated with a financial crisis (ie  $F$  falls) then either  $Y$  must decline too in order to restore equilibrium (eg through a large cut in domestic credit and/or government expenditure) or the real exchange rate must be adjusted upwards – that is depreciated in the sense that non-traded prices must decline relative to traded prices.

The role of the wage level in this adjustment process can easily be seen using the approach to the modelling of the real exchange rate set out in Dornbusch (1980). World prices are of course exogenous, but domestic non-traded prices are formed by a markup ( $r$ ) on costs composed of labour inputs ( $u$ ) at the nominal wage rate ( $W$ ) on the one hand, and imported inputs ( $m$ ) at the traded price level on the other.

$$P_{nt} = (1 + r)[u.W + m.P_t] \quad \text{Eqn 6}$$

Rearranging equations 16 and 17 yields a clear relationship between the real wage and the real exchange rate. The higher (ie more depreciated) the real exchange rate, the lower will be the real wage.

$$w = \frac{1}{u} \left[ \frac{1}{1+r} - m.e \right] \quad \text{Eqn 7}$$

In consequence, there is a clear trade-off between the level of wages and the level of activity in the adjustment mechanism. To adjust to a given external financial shock (ie change in  $F$ ) one or the other must be shifted. If for simplicity (but see below) we take total employment ( $L$ ) to be proportional to the activity level ( $Y$ ) so that

$$L = I.Y(e) \quad \text{Eqn 8}$$

Then the same is obviously true of the trade off between the level of wages and the level of employment. If employment is to be stabilised, then the real exchange rate (and thus the real wage rate) must be used as a policy instrument.

However, this assumes a single wage rate and an unsegmented labour market. In reality there are a number of employment sectors and although the impact of financial crisis is initially felt in the ‘modern’ corporate sector of banks and companies, the rest of the economy soon feels the consequences. To these labour market impacts we now turn.

## A.2 Equilibrium in the Segmented Labour Market

Consider an economy with a labour force ( $L$ ) allocated between three sectors – the Corporate and Government Sector (1), the Urban Informal Sector (2), and the Rural Peasant Sector(3). As there is no unemployment insurance, there is no open unemployment either.

$$L = L_1 + L_2 + L_3 \quad \text{Eqn 9}$$

Employment and wages ( $L_i, w_i$ ) in the CGS are set exogenously, and will of course respond to the financial shock under consideration. Expenditure ( $B$ ) on the goods and services supplied by

the UIS is determined by the shares ( $\hat{a}$ ,  $\hat{a}$ ) of the wagebill and profits in the CGS) respectively; these profits are determined by a markup,  $r$ , on the wagebill.

$$B = \mathbf{a}L_1w_1 + \mathbf{b}(1+r)L_1w_1 = [\mathbf{a} + \mathbf{b}r]L_1w_1 \quad \text{Eqn 10}$$

And this expenditure determines total income (wages times employment) in the UIS sector.

$$w_2L_2 = B \quad \text{Eqn 11}$$

At equilibrium, the wage (or income) levels in the UIS and RPS are equalised by migration. Workers migrate into the cities to provide UIS goods and services, increasing the labour force ( $L_2$ ) and, for the given expenditure ( $B$ ), driving down average incomes ( $w_2$ ). A frictional ‘wedge’ between the two wage levels could be introduced, but would not affect the results.

$$w_2 = w_3 \quad \text{Eqn 12}$$

Finally, RPS incomes are determined by the amount of labour in the sector, because total output ( $A$ ) is given independently of the labour force, along familiar ‘Lewis’ lines.

$$w_3 = \frac{A}{L_3} \quad \text{Eqn 13}$$

Substituting as appropriate in order to eliminate  $B$  yields solutions for the levels of employment and wages in the UIS and RPS in terms of wages and employment in the CGS sector:

$$L_2 = \frac{L - L_1}{1 + A/w_1L_1} \quad \text{Eqn 14}$$

$$w_2 = \frac{A + w_1L_1}{L - L_1} \quad \text{Eqn 15}$$

$$L_3 = \frac{L - L_1}{1 + w_1L_1/A} \quad \text{Eqn 16}$$

$$w_3 = \frac{A + w_1L_1}{L - L_1} \quad \text{Eqn 17}$$

### A.3 The Impact of Exogenous Shocks to Corporate Sector Labour on the Rest of the Labour Market

We can now derive the respective response elasticities ( $R$ ) with respect to the (exogenous) changes in  $L_i$  and  $w_i$ . As we shall see, the effects of wage and employment changes in the corporate sector are different. To the extent that, as is argued in the text, the welfare effects on children of household unemployment are different to, and probably worse than, changes in household wage income, it is important to separate the two effects.

$$E(L_2, w_1) = 1 - \frac{L_2}{L - L_1} > 0 \quad \text{Eqn 18}$$

$$E(L_2, L_1) = 1 + \frac{L_1 + L_2}{L - L_1} > 1 \quad \text{Eqn 19}$$

$$E(w_2, w_1) = \frac{L_2}{L - L_1} = E(w_3, w_1) > 0 \quad \text{Eqn 20}$$

$$E(w_2, L_1) = \frac{L_1 + L_2}{L - L_1} = E(w_3, L_1) > 0 \quad \text{Eqn 21}$$

$$E(L_3, w_1) = -\frac{L_2}{L - L_1} < 0 \quad \text{Eqn 22}$$

$$E(L_3, L_1) = -\frac{L_1}{L_3} - \frac{L_2}{L_3} \left\{ \frac{L_3 - L_1}{L - L_1} \right\} < 0 \quad \text{Eqn 23}$$