

Working Paper Number 70
Capital Account Liberalisation and Poverty

Alexander Cobham*

While poverty reduction has become the central focus of the multilateral institutions, research into macroeconomic policy has lagged behind and continues to be almost solely growth-focused. This paper aims to contribute to one policy area, that of capital account regulation, and sets out a framework of linkages to poverty. The key conclusion is that while the growth benefits of liberalisation are far from clear for poorer countries, there may be significant costs in poverty terms. While further research is required in a number of areas identified, the main policy implication is that capital controls must be retained as part of the toolbox of pro-poor macroeconomic policymaking.

Keywords: *Capital account, capital controls, macroeconomic policy, growth, poverty.*

April 2001

* Finance and Trade Policy Research Centre
Queen Elizabeth House
University of Oxford, UK
alex.cobham@qeh.ox.ac.uk

* I am grateful to participants at a conference in Helsinki and an expert group meeting in Oxford for helpful comments and discussions. I acknowledge partial funding from Oxfam International and the Bretton Woods Project, and the comments of Jenny Kimmis and Angela Wood.

1. INTRODUCTION

The key question in the current debate on capital account liberalisation (CAL) and international financial integration for developing countries is that of the impact on poverty. The problem for policymakers, both at the national level and internationally for the multilateral institutions, is that the link between CAL and poverty is far from clear. Despite the adoption of poverty reduction as a central objective by the Bretton Woods institutions, analysis of macroeconomic policy in terms of poverty impacts is yet to become a central approach. This paper aims to make a first contribution to assessing the linkages between CAL and poverty, with a view to both indicating some areas in which further research is necessary and outlining some policy implications.

Section 2 assesses the orthodox (growth-focused) view of the costs and benefits of CAL, and briefly surveys the considerable empirical literature. The main finding is that the net growth benefit of CAL – which is the underlying assumption of much of the policy-driven analysis of the multilateral institutions – is far from being established for the poorer countries. Sections 3 and 4 then trace the impact of capital flows on poverty, through government finances and changes in financial markets respectively. A number of serious potential costs of CAL are outlined, and the final section draws some conclusions for policy-makers and researchers on this basis.

2. THE GROWTH-FOCUSED VIEW

The last five years have seen a broad movement in policy attitudes to CAL. The East Asian crisis has been largely responsible for a re-evaluation of evidence on its costs and benefits. The International Monetary Fund (IMF) has backed away from the strong pro-liberalisation statements of the annual Bank-Fund meetings in 1997, and pressure to amend its Articles of Agreement to reflect that position appears to have dissipated. While there remain both strong proponents and fierce critics of CAL, however, those occupying what Eichengreen (2000) calls the “messy middle” now form a majority. This position combines acknowledgement of both potential benefits (in the form of growth) and potential costs (crises). According to which is most emphasised, it can cover a range of views from the scepticism of Stiglitz (2000) to the more orthodox ‘cautious’ liberalisation standpoint urged by Citrin & Fischer (2000).

The arguments for growth benefits are standard. First, it is argued that the access to international capital markets provided by CAL has many advantages. Countries are able to enjoy potentially higher domestic investment. More efficient domestic financial markets may lead to higher quality investment also. The diversification of domestic risks allowed by CAL leads to more efficient and stable allocation of capital, and international trade can be conducted with reduced currency risk. The second key argument is that capital inflows generate a market discipline on governments that can have growth-enhancing effects for inflation, fiscal deficits and other policy variables. The third reason stems from the rather crude ‘inevitability argument’ – that “capital account liberalization, along with deregulation of domestic financial markets, is an inevitable step on the path of development – all the industrialized countries by now have open capital accounts” (Citrin & Fischer, 2000, p.1137). There must therefore be a growth benefit since the countries with stable growth have all liberalised. Finally, the costs of CAL within this growth-focused view occur solely through greater instability, and most strikingly in the form of financial crises.

The policy implications of this approach are well-known, and not surprising. Since there exist growth benefits, countries should liberalise – at least eventually. Since there are costs to instability and crises, and CAL may increase the likelihood of these, a combination of appropriate sequencing and institutional capacity-building are necessary to ensure the benefits accrue. Crises may result from insufficient regulation and prudential supervision of domestic financial systems,

the operation of illiquid financial institutions and the importance of market ‘sentiment’ in driving capital flows. The considerable literature on sequencing, and the Financial Stability Forum’s momentum behind the international codes and standards point the way forward for developing countries to attain the growth benefits of CAL.

Empirical findings on growth and CAL

At this stage we should distinguish more clearly between different types of capital flow: between foreign direct investment (FDI), portfolio investment (FPI – consisting of equity flows and bond flows) and foreign bank lending (FBL). Briefly, FDI is by its nature the least easily reversible, short-term bank lending the most vulnerable to reversal, while FPI (especially equity flows) can also exhibit high volatility. Table 1 illustrates the relative volume of these flows. FDI has tended to concentrate on relatively few regions (China, East Asia and Latin America) - ten countries host three-quarters of the flows to developing countries. However, if we take into account the relative size of the host countries, we find that as a share of gross domestic product or fixed capital formation, the ratios for FDI in Sub-Saharan Africa are similar to those for Latin America and actually higher than the ratios for Asia. FPI and FBL do seem to be biased towards MICs rather than LICs, even when corrected for market size. This reflects in part the under-development of capital markets and bank sectors in poorer countries.

Table 1: Value of capital flows to developing countries, US\$bn

	1991	1992	1993	1994	1995	1996	1997	1998
Net private capital flows	123.8	119.3	181.9	152.6	193.3	212.1	149.1	64.3
Net direct investment	31.3	35.5	56.8	82.7	97.0	115.9	142.7	131.0
Net portfolio investment	36.9	51.1	113.6	105.6	41.2	80.8	66.8	36.7
Net bank lending*	55.6	32.7	11.5	-35.8	55.0	15.4	-69.4	-103.4
Net official flows	36.5	22.3	20.1	1.8	26.1	-0.8	24.4	41.7
Changes in reserves	-61.5	-51.9	-75.9	-66.7	-120.2	-109.1	-61.2	-34.7
Current account balance	-85.1	-75.6	-116.0	-72.0	-91.0	-91.8	-87.1	-59.2

Source: FitzGerald, 1999. * denotes ‘other net investment’ in the original source table (IMF, 1999).

Quinn (1997) presents what he refers to as “the first systematic demonstration of a robust correlation between change in capital account regulation and long-run economic growth” (p.537). Rodrik (1998) found no such correlation. Rossi (1999) uses a different specification and finds that the existence of controls is associated with reduced growth rates. The limitations of econometrics for considering such relationships are clear, however, when so many (especially policy-related) factors would require inclusion to satisfactorily mitigate the risk of omitted variable bias. Prevailing attitudes at the BWIs may also have affected the relationship between capital account policies and multilateral support in certain periods. Moreover, it is not simply a question of regulation; the interesting issue concerns episodes when liberalisation does indeed lead to inflows, rather than having no noticeable effect.¹ For that reason, it may be more useful to consider research which focuses on the particular channels through which CAL may contribute to economic growth.

¹ Liberalisation in Bangladesh may be a case in point. However, it is clearly most useful for policy-related work to focus on those cases where inflows *do* occur. The question of countries exhibiting such poor (risk-adjusted) rates of return as not to attract outside capital regardless of regulations is a separate one. Without assuming that inflows always occur, it is these cases we are most concerned with and hence the analysis in the following sections assumes some inflows are observed.

Levine & Zervos (1998) find no evidence of long-run effects of CAL on the growth of the capital stock (which would be expected to yield a higher long-run economic growth path). Klein & Olivei (1999) do find a “statistically significant and economically relevant effect of open capital accounts on financial deepness, and through this channel, on economic growth” (p.1). They make the standard argument that through a more efficient market, which reduces problems of asymmetric information and transaction costs, a greater volume of savings is mobilised to more productive purpose. However, they refuse to draw the simple policy conclusion that this would seem to imply – namely, that CAL in developing countries yields growth benefits.

This is because they do not find “a significant effect of capital account liberalization on financial deepness *among countries which are not members of the OECD*” (p.2, emphasis added). In other words, the finding does not hold for developing countries. Klein & Olivei suggest attributing this to the absence in developing countries of “a constellation of economic, legal and social institutions” (p.2), which is consistent with both the sequencing arguments for ensuring macroeconomic stabilisation and financial liberalisation first, with the findings of King & Levine (e.g. 1993) on financial development and growth, and lends support to the G7’s codes- and standards-based approach to the reform of the global financial architecture.

Kraay (1998) takes the analysis a step further. After first confirming the absence of evidence of growth benefits of CAL, he investigates two common interpretations. First, he considers the view that benefits will only be obtained by countries with sufficiently ‘good’ policies and institutions. This he dismisses on the basis of a number of econometric analyses, from which the only positive finding is that “investment is significantly *more* likely to increase in countries with *bad* policies/institutions than in *good* countries” (p.24). We return to this result in section 3, and offer an explanation for what may seem counter-intuitive initially. Second, he examines the view (of, e.g. Stiglitz, 2000) that the growth benefits of CAL are obscured by the costs of associated volatility. This, too, he dismisses, finding that there is “little evidence that the volatility of capital flows is significantly higher in financially open economies” (p.25). However, these results does not allow for initial levels of financial development. They therefore ignore the relatively greater impact of volatility on countries where the corporate and especially financial sectors are relatively weak or underdeveloped.

Durham (2000a, b, c) has explicitly attempted to assess the difference between MICs and LICs in terms of the impact of CAL. In the first (survey) paper, he notes that an important and obvious but nevertheless largely omitted variable in econometric work has been the initial level of financial development. In particular, he suggests the existence of ‘threshold’ levels of financial development which may have to be reached in order for the gains from liberalisation to be felt. Proceeding on this basis, he draws the following conclusions in the second paper:

- FDI has an ambiguous effect on growth.
- FPI has a generally negative impact on long-run growth. Distinguishing between MICs and LICs on the basis of initial financial development, and between equity flows and bond flows, this is refined to:
 - (i) for higher levels of previous stock market development (i.e. for some MICs but no LICs), volume of equity flows are more likely to be positive for growth;
 - (ii) volatility of equity flows is negatively correlated with growth in all cases;
 - (iii) net bond flows and net equity flows have no impact on domestic savings rates.

These results certainly imply support for the proposition that some countries (i.e. the LICs) do indeed have financial sectors too underdeveloped to liberalise their capital accounts. However, there is also a lack of significant support for liberalisation by MICs either. Durham (2000c) concentrates solely on the effects of stock market development on investment and growth.

Similarly to Klein & Olivei, he finds first that it is higher income countries which drive the overall positive relationship between stock market development and growth.² Initial GDP and country credit ratings are significant, which implies that the gains accrue to already wealthier countries. Moreover, private investment rates respond to stock market valuations in higher income countries only. In other words, the increased investment and growth benefits of equity flow liberalisation are present to an extent in some MICs, but cannot be observed in lower income countries.

It must be concluded on the basis of this literature survey that the (*net*) benefits of CAL for developing countries have not been established. Indeed, since a significant body of work has searched for these, it is more accurate to say that these benefits may not necessarily exist for poorer countries. This is in contrast to the common view that benefits will accrue to those countries who follow the right policies, and who have the right institutional and supervisory standards in place (a view is specifically refuted by the work of Kraay, 1998). The one benefit that seems to withstand scrutiny is through the efficiency of international finance, in the form of a lowered cost of capital (Stulz, 1999).

Of concern is the possibility that liberalisation may not only generate no net growth benefits, but that it may also have significant costs in poverty terms. This paper focuses now on CAL's impact on poverty. In particular we are concerned with the volatility of the domestic economy, for it is here that the costs of CAL are to be seen. The volatility of the domestic macroeconomy, in government finances and private investment in particular, responds not necessarily to the volatility of capital flows but rather to their undeniable *potential* for devastating volatility. The danger of sudden and massive outflows conditions and restricts the behaviour of both government and the private sector. Their behaviour is detailed in sections 3 and 4 respectively.

3. IMPACT ON GOVERNMENT FINANCES AND POLICY

Full CAL for low-income countries involves allowing not only FDI but capital inflows to bond and equity markets and to the banking sector, which can create serious restrictions on governments. As noted earlier, the paper focuses on those episodes where inflows do actually occur; and it is the short-term flows that pose particular difficulties for host countries in terms of policymaking. Two different potential impacts are detailed in this section, reductions in each of the level and the stability of government finances. To this end, it is helpful to consider the general position of developing country government finances before beginning to assess the effects of liberalisation.

Government finances

Reductions in the level of government finances will involve spending cuts that can have significant costs for the poor. Biggs (1998) shows that fiscal cutbacks in developing countries have historically targeted investment most heavily, while providing relative (but far from complete) protection to wages and transfers. Long-term impacts on health and education provision when investment is reduced can be serious. Governments are also faced with the highest levels of poverty and social deprivation, making these social expenditures crucial. Reduced infrastructure investment contributes to poor economic performance, while lack of institutional strength reduces governments' ability to raise taxes effectively.

² Evidence has been found for a temporary increase in investment caused by stock market liberalisation, that is, a one-off boom (Henry, 2000), although problems of causality remain.

Most direct for the poor will be the effect of even the disproportionately small cut in transfers. Despite the relative protection afforded to this category of spending, the impact may be great nonetheless, since transfers to the poorest will form a very great part of their total incomes; and these are incomes they can already ill afford to see cut. Clearly, though, the impact of reduced levels of government finance will hit the poorest groups hardest. It is not only reductions in spending which have costs, however, but also reductions in the stability of government finances.

Since government revenues are volatile, their ability to commit to programs of expenditure is undermined. As well as undermining the stability of those who rely on transfers to attain some minimal standard of living, it also reduces governments' ability to attract complementary private investment, hence reducing their overall potential to assist development. Toye (2000) details the relative instability of various sources of finance. Most unstable is aid, and recent evidence shows that aid flows have been not only volatile but also strongly pro-cyclical.³ The most stable source of government finance has been through debt and money creation. Arguably, given the observed failure of aid to assist in smoothing government expenditures, these are the only stability-enhancing tools available to governments. However, money creation has significant inflationary consequences, and inflation has costs for the poor in particular because of their inability to acquire 'inflation-proof' assets. Moreover, the poor (in the formal sector at least) are subject to the phenomenon of 'fiscal drag' – the impact of inflation in effectively lowering the level of income tax bands – which is extremely regressive in income distribution terms.⁴

This leaves debt as the sole most effective tool for governments to smooth their expenditures and protect the poorest. CAL opens domestic bond markets to international investors, and hence allows greater liquidity for governments and also domestic corporate bond-issuers. The ability of governments to raise additional finance through bond issues, however, is subject, and much more directly, to the market discipline and fiscal policy issues which are discussed below. Notwithstanding the potential benefits here, the effects of financial and especially CAL on the ability of governments to raise finance through debt acquisition may be damaging, however, as the following on market discipline and macroeconomic management will explain.

The remainder of this section concentrates on explaining how both the level and stability of government finances are negatively affected by CAL. It is worth pointing out here that the discussion that follows does not assume that governments, if unrestrained by liberalisation, will necessarily follow efficient pro-poor growth strategies. However, it seems uncontroversial to state that having stronger and more stable finances will allow governments greater freedom to choose such a strategy *if they wish*.

Managing capital inflows

CAL most directly reduces the overall level of government budgets available for fiscal expenditure by diverting expenditures to other avenues; in particular, to managing the associated capital inflows. As Henry (2000) showed, liberalisation is a significant factor in triggering equity flow booms. Liberalisation may also result in increased bond, bank and (possibly) direct investment inflows. These inflows, and most especially the short-term flows which are less stable, put upward pressure on the domestic exchange rate because investors purchase local currency to invest in the stock market. To prevent exchange rate appreciation – which raises the cost of exports and lowers those of imports, and can thus reduce domestic production damagingly – the

³ This problem has been especially marked in African recipient countries, and with regard to the multilateral donors. See Pallage & Robe (2000) for details.

⁴ See Abedian & Biggs (1998).

government must sell domestic currency and buy the incoming foreign exchange, thereby building up their reserves of foreign currency.

This would increase the domestic money supply by the amount in question, however, leading to inflationary pressures and associated problems, so a common next step is to sterilise the inflow. This is achieved by selling the equivalent value of government bonds to return the money supply to its original level and prevent the emergence of inflationary pressure. This counteracts the money supply expansion because selling bonds involves taking domestic currency in exchange, and hence reduces the available money supply – which in turn reduces the impetus for prices to rise.

The government has in effect increased its liabilities – in the form of bonds issued – but also increased its assets by the same amount, in the form of foreign exchange reserves. Assuming these reserves are held as interest-bearing assets, commonly US Treasury bills, the government has not necessarily worsened its position. The effect on government budgets should be negligible then. However, the price to the government of these manoeuvres – omitting transactions costs – will in fact depend on the interest rate differential between the developing country and (in this case) the US rate.

Stiglitz (2000) gives the following example. If a company in the developing country borrows \$100m from a US bank, then since it is perceived as relatively highly risky, it must pay 20% interest. If the government holds foreign exchange reserves (in US T-bills) to offset this borrowing, it receives 5% interest. The annual cost to the poor country of this arrangement is then \$15m. The cost to the government, if it is carrying out full sterilisation, may be different. If the government has sold bonds to the value of \$100m, to maintain a stable money supply, and – being relatively risky, but less than the company in question – pays 15% on this debt, the direct cost to the government is \$10m a year.⁵

While this is the value in foregone fiscal expenditure, the actual cost in foregone investment may be greater given that efficient government investment would have levered in private investment also. The effect of the capital inflows is to seriously reduce the level of government expenditure then. Moreover, since reserve accumulation – and hence the current and future level of government expenditure – must react to volatile short-term flows, there is a further price to pay in terms of increased uncertainty of government finances.

To compound these costs of sterilisation, the widely-held view (with regard to industrialised countries at least) is that it cannot be successfully operated as a long term policy. This is because the inflows are generally the result of an interest rate differential between the domestic and international markets. Sterilisation, involving the issue of more bonds (presumably at the same or a higher interest rate to ensure demand) will not address this problem and may exacerbate it, and therefore cannot be a long-term solution. One other negative impact of sterilisation is that – as has been observed in many, especially African, developing countries – government bond issues

⁵ Note that a similar calculation for sterilising net inflows to all developing countries would imply a cost of \$9.6bn in 1998 (or a staggering \$32bn in 1996). However, the question of how CAL affects interest rates has not been fully answered. Williamson & Mahar (1998) find that *financial* liberalisation was followed by higher real interest rates in Australia, Bangladesh, Chile, Malaysia, New Zealand, Sri Lanka, Taiwan, Thailand, Turkey and the US, but lower rates in a number of others including Israel, Italy and the UK. A corresponding survey for *capital account* liberalisation does not exist (to the author's knowledge). On the whole, however, CAL should provide momentum to a process of equalisation of *risk-adjusted* rates. Since developing country governments' debts are relatively risky, this implies that they are likely to have to pay a higher real (non-risk-adjusted) interest rate on their liabilities (bonds issued) than they receive on their reserve assets (T-bills purchased), although not necessarily by as much as the 15% Stiglitz uses.

dominate the market to the exclusion of other issuers except the largest corporates. In other words, following a policy of sterilisation may exacerbate the problems of domestic industry in raising debt financing for investment.

An alternative to sterilisation is provided by the IMF's 'monetary programming model' (Khan & Huq, 1990). Assume the focus of government policy is to prevent a depreciation of the exchange rate. This desire stems from the associated inflationary pressure: firstly imports become more expensive, and secondly cheaper exports increase the foreign demand for domestic production which in turn drives up domestic prices also. Under this assumption, governments will therefore be holding monetary policy tight (reducing deficits or building up surpluses in the budget) to combat inflationary pressures. Autonomous inflows (of foreign capital) reduce the downward pressure on the exchange rate and allow a relaxation of monetary policy (and hence increased growth), while outflows increase downward pressure and require a monetary contraction.

While this appears to represent a beneficial response to inflows (if the underlying assumption is reasonable), there are obvious costs. Policy will necessarily follow the cycle of foreign capital flows, which have been seen to be highly pro-cyclical with countries' economic conditions, rather than acting to stabilise the economy. In this scenario then, this model encourages pro-cyclical government policy – increased spending in booms, and cutbacks during recessionary outflow periods – and hence increased macroeconomic volatility. The choice between sterilisation and programming then is not an attractive one – the management of capital inflows has costs in terms of increased instability of government finances and the macroeconomy more generally, and also of reduced expenditure under the sterilisation case at least.

Market discipline

The second key channel through which CAL affects the level and stability of government finances is the mechanism of market discipline. The concept of market discipline reflects the sensitivity of investors to certain government policy variables. In theory, governments "are 'forced' to have good economic policies, lest capital flow out of the country" (Stiglitz, 2000, p.1080). Although Stiglitz does not make the distinction, 'good' policies are those which investors perceive as consistent with strong investment returns. In practice, since investors base their decisions on only a very narrow range of information, changes in the level of governments' deficits, inflation (or expected inflation) and short-term indebtedness ratios in particular, can lead to very rapid adjustments of investors' portfolios. This apparent myopia is in part determined by the evaluation methods of the influential international credit ratings agencies.⁶

For a developing country with a liberalised capital account, the resultant changes can involve inflows or more particularly outflows of great magnitude relative to the total size of the economy. The importance of avoiding such recession-inducing flows therefore ties government hands in important areas of macroeconomic policy: market discipline acts as a deterrent against allowing high levels of inflation or running fiscal deficits. Countries which maintain significant controls on short-term flows, by contrast, can use countercyclical macroeconomic policy to smooth recessions and reduce macroeconomic volatility; China is just one example. CAL therefore constrains the possible level of governments' fiscal expenditures.

⁶ Collier & Gunning (1999) refer to two particular pieces of work reflecting the underlying flaws: "...Haque et al. (1998) show that while the three major investor risk ratings are largely explicable in terms of policy fundamentals, they have a high degree of persistence and the dummy for Africa is large and significant. Hence, newly reformed countries in Africa find that their ratings are slow to change, and that they are contaminated by a 'bad neighbourhood' effect. Jaspersen et al. (1998) show that the risk ratings are significant in regressions of private investment" (pp.11-12).

It is interesting to draw out two implications of the above discussion. Firstly, if fiscal deficits are used by (some) developing countries to efficiently promote investment and protect the poor, the market discipline of CAL will reduce the ability of these governments both to crowd in private investment and to target the poorest of their citizens through a social safety net. In other words, CAL will have negative poverty effects directly (through government expenditures) and indirectly, through reduced investment and growth.

Secondly though, where governments are using fiscal deficits *inefficiently*, the market discipline effect of liberalisation will be to curtail the wasteful use of limited resources. While there may be no direct poverty effects of this, crowding out of private investment by inefficient government expenditure may cease, with concomitant positive effects for investment (quality at least) and hence growth. This explains a preliminary result found by Kraay (1998) which goes against the received wisdom: that “investment is significantly *more* likely to increase in countries with *bad* policies/institutions than in *good* countries” (p.24). While Kraay suggests that this may stem from the superior ability of ‘good’ countries to prevent irrational post-liberalisation booms, the market discipline explanation given here seems a more likely explanation. Since market discipline restricts good policy-making, CAL has the highest costs for relatively *well*-governed economies.

Taxation and capital mobility

Two further avenues through which CAL can affect government finances and poverty are the linked issues of capital mobility and taxation. Most obviously, the associated macroeconomic volatility may make tax revenues increasingly variable because of the instability of the underlying output, employment and investment. Also of concern are the potential for capital flight after the removal of controls, the impact of increased capital mobility on the incidence of taxation and the effects of tax competition between countries. These are treated in turn.

Capital flight may be defined as the transfer of funds out of countries motivated by domestic economic and political uncertainty (Schineller, 1997), but is often used to refer to all flows from capital-scarce to capital-abundant economies. Strictly defined, flight ought to involve illegal and undeclared capital movements, and there is an extensive literature detailing attempts to measure these flows.⁷ Our concern here is with the effect of removing controls.

However, as FitzGerald & Cobham (2000b) detail, the extent of illegal capital flight from developing countries is already large, and the findings of Doolley & Kletzer (1994) imply that CAL in fact may tend to act in reverse. That is, when domestic financial markets are liberalised and it is known that outward flows will not be unduly restricted, domestic flight capital tends to reassert a ‘home bias’ and return to the market in significant quantities. The actual effect of liberalisation on flight may be generally positive then in increasing domestic investment by domestic capital-holders. However, even in the case of Uganda – whose 1997 liberalisation has been seen as beneficial thus far, and largely through the return of flight capital – it is clear that the improvement of conditions for investors was the driving factor.

The more particular danger concerning the potential for large-scale ‘flight’ is that it will lead to the tax burden falling more heavily on the less mobile factor – labour. To encourage inflows and avoid inducing capital outflows, governments have an incentive to tax capital less. Since workers are relatively immobile, and tax revenues must be maintained if government expenditure is not to suffer, the tax burden will fall more heavily on labour. This has regrettable distributive implications. The (relative) reduction of taxes on capital is in effect a reduction of taxes on those with greater wealth. Moreover, taxing labour more instead affects the poorest most heavily – their

⁷ See FitzGerald & Cobham (2000b) for a comprehensive survey.

income from work forms a proportionately larger part of their total income than that of capital owners. The very poorest may be protected to the extent that they are not in fact part of the formal economy, and hence unaffected by changes to the taxation system. However, changes which increase the burden of taxation on labour will inevitably increase the disincentive for the poor to move into the formal sector.⁸

Finally in this section, we turn to tax competition between developing countries for capital flows, and in particular for FDI. Many developing countries – particularly the smaller ones – attempt to attract foreign investment through tax incentive policies in an attempt to compensate for local distortions and inefficiencies, or to simply prevent foreign investment from going to neighbouring or similar countries. However, such incentives play a limited role as determinants of foreign investment, and even where successful – e.g. in some export promotion zones - involve significant fiscal costs.⁹

Tax competition affects the poorest countries most, and disproportionately so. Haufler & Wooton (1999) show how tax competition between *industrialised* countries for foreign direct investment can lead to all of the benefits of investment being obtained by the multinationals. This justifies the OECD and EU measures taken to prevent such harmful competition between their respective members.¹⁰ The problem is more acute for poorer countries, however, since individually they face even higher tax elasticity of investment. That is, the level of direct investment will be more sensitive to the tax rate in a small developing country than in a large bloc of industrialised countries like the EU.

This effect occurs because the cost of ignoring one small developing country is also small for the multinational. Region-wide agreements such as the EU's make the economic importance of the players more significant, and hence reduce the tax elasticity of investment. While this may provide some respite, however, ultimately the only solution is a universal one which involves both developing and industrialised countries together. The effects of one developing country acting unilaterally to stop tax competition for FDI would simply be to eliminate a large part of that country's FDI flow. Only by working together can governments prevent the benefits being competed away to the multinationals.

While foreign direct investment is acknowledged then as the most positive form of capital flow to liberalise, agreement on tax and subsidy competition is necessary to ensure some of the benefits accrue to the host countries and that tax revenues are not unduly undermined. Finally, it should be noted that tax competition for portfolio investment does not occur in the same way. While long-term investments can be attracted by one-time payments or subsidies, portfolio investment is instantly reversible, so ongoing payments (or perhaps subsidies on introduced capital controls) would be required.

⁸ Note that this effect of *potential* capital flight is compounded by a different effect of *actual* outflows. Outflows will erode the tax base (by reducing the total stock of capital and labour in the economy). Even if the tax structure is unchanged by capital flight, proportionally more tax will fall on the remaining capital and labour. Since the percentage of transferable (capital) assets of a person will generally be lower, the poorer he or she is, the poor are least able to avail themselves of the potential for capital flight and suffer most from the changed balance of taxation.

⁹ See, e.g., UNCTAD, 1999: "There was consensus [among the experts assembled by UNCTAD] that while [tax] incentives have their pros and cons, their role essentially remains subsidiary. More fundamental factors are political and economic stability, project feasibility, market considerations, investment climate and infrastructure" (p.9).

¹⁰ Both the OECD and the EU have recently adopted non-binding instruments for dealing with potentially harmful preferential tax regimes – in recognition of the dangers for industrialised countries of such competition. FitzGerald & Cobham (2000a) emphasise the importance of the association of non-OECD countries with these.

However, competition for portfolio investment does appear in different forms. This involves deliberate government measures to facilitate the use of tax havens or loopholes. For example, the BIBF in Thailand has been used to funnel low-tax capital into the country, and in particular was heavily used in the post-crisis ‘fire-sale’ of domestic assets to international investors. India’s recent attempt to prevent the use of Mauritius as a tax-avoiding point of entry to the country’s capital markets was quietly abandoned for fear of chasing away investment. The phenomenon extends beyond developing countries too; for example, the deliberate US loophole which results in the British Virgin Islands being technically responsible for almost as large a share of US banks’ liabilities as the UK itself.¹¹

Arguably, this may be *more* damaging than FDI competition, since it does not even allow governments any opportunity to be selective – whereas in the latter, subsidies can be directed to the chosen industrial sector or regional location. However, there is as yet no serious body of research on competition in the use of tax havens and other avoidance measures, and their developmental implications.

Some conclusions for government finance and the poor

Capital inflows (especially short-term) lead to particular problems for government finance. Through the management of capital inflows, through the associated market discipline, and through changes in governments’ tax-raising ability, both the level and stability of government finances are undermined, and macroeconomic stability is also threatened. The implications for the poor are disturbing. Historically, the burden of reducing fiscal budgets has fallen most heavily on infrastructure investments, which is arguably the most important area for investment if developing countries are ever going to approach their industrialised counterparts in economic terms. The reductions in social spending (although generally proportionally smaller) also have very damaging consequences for the poor. In particular, reductions in health and education budgets have extensive long-term impacts for the poorest most of all.

The increased instability of government finances significantly reduces their ability to crowd in private investment, as does macroeconomic instability. The impact of opening domestic bond markets, although positive in increasing liquidity, contributes strongly to the reduction of monetary policy efficacy through the vehicle of market discipline. The high and dangerous volatility of private capital flows is exacerbated by official flows also. Since they exhibit both volatility and pro-cyclicality, they are currently contributing to, rather than minimising, precisely the instability which CAL incurs.

As well as these costs to the poor through the channel of government finances, perhaps the key danger of CAL is that of macroeconomic instability. In particular, the associated costs are of potentially reduced investment, employment and growth. The effects on poverty through access to credit, industrial investment and performance, are investigated in the following section.

4. LIBERALISATION AND INDUSTRY

To examine the impact of CAL on poverty through structural and performance changes in industry, it is necessary to treat separately the different maturities of capital flow. Foreign direct investment, as a longer-term flow, is not associated with instability in the same way as short-term bank lending and equity flows. Its impact for poverty is not clear, however. On the one hand, the potential positive impact of FDI in terms of both real investment, export levels, technological capability-building and human capital accumulation can be significant.

¹¹ US Dept of Commerce data – see FitzGerald & Cobham, 2000a.

On the other hand, however, a number of caveats about the positive impacts should be highlighted. The competitive effects on a market of entry by a well-backed multinational company can be destructive; if domestic firms are unable to compete, the ultimate market size may shrink, reducing employment. Furthermore, multinationals are more likely to source their inputs from abroad, which both reduces the level of domestic employment generated and weakens the recipient country's trade balance. Finally, affiliates of multinationals tend to be less labour-intensive than domestic firms (especially SMEs) and the employment (and household income) effects must be borne in mind. Durham's finding (2000c) of an ambiguous effect on growth is compounded by country-specific work – e.g. Sharma (2000) finds that the well-known and substantial FDI inflows to India have had no statistically significant effect on exports.

In this section we therefore focus on two more directly poverty-related channels. First, the differential impact of short-term capital flows' instability on different sizes of firm, and what this means for employment, is considered. We then turn to the differential impact of changes in credit allocation and the availability of financial services more generally for the poor.

Liberalisation, macroeconomic uncertainty and financing firms' investment

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.¹² That is, smaller firms are disproportionately badly affected by the *potential* for volatility which CAL incurs in developing countries. As was seen in section II, the channel of credit from to and from the domestic financial sector can very quickly dry up, and this danger is especially strong for smaller firms. The potential impacts are detailed below, but first it is useful to list some stylised facts about smaller firms.

The importance of smaller firms in terms of employment provision and stability are well-documented for industrialised economies (Cobham, 1999). In particular, smaller enterprises account for the bulk of employment in many economies, and especially those of poorer countries. The European Observatory for SMEs (small and medium-sized firms) provides data on the relative dominance of employment by different sized-firms in the Europe-19.¹³ While large firms (employing more than 250 employees) dominate in the richer economies (e.g. Germany, France, the Netherlands, the UK), poorer economies are dominated by SMEs (10-250 employees, e.g. Portugal, Ireland) or even VSEs (up to 10 employees, e.g. Spain, Italy and Greece).

If anything, the dominance of VSEs and SMEs is greater in developing economies, where larger firms are fewer and microenterprises provide much of the employment. Since smaller firms tend to more labour-intensive and less capital-intensive, their employment contribution is relatively greater. In poorer countries, where capital is relatively scarce, this effect is exaggerated. Mead & Leidholm (1998) survey the available data and show that the share of microenterprises or VSEs in employment (of those aged 15-64) runs from 17% to 27%: Botswana 17%, Kenya 18%, Lesotho 17%, Malawi 23%, Swaziland 26%, Zimbabwe 27% and the Dominican Republic 19%. With the exception of the latter, the employment in question is predominantly in rural, non-town areas, and in commerce rather than manufacturing. The majority of VSEs are owned by females and employ

¹² UNCTAD's Trade & Development Report (1996) shows that even advanced countries have seen basic macroeconomic variables – i.e. consumption, investment, trade – become more volatile since financial liberalisation. CAL provokes a parallel but potentially more extreme reaction.

¹³ A country is said to be dominated by very small enterprises (VSEs), SMEs or large-sized enterprises (LSEs), according to which class is responsible for the largest share of total employment.

a majority of female workers. Overall then, the poverty implications of changes in the small firm sector are significant.

One other notable feature of the sector is its high death rates: typically 50% after 5 years, even in industrialised countries (Cobham, 1999). This section therefore focuses on the implications for the sector's ability to provide employment (generally among the poorest groups) of liberalisation. The channel through which this is achieved is that of the macroeconomic instability generated.

The general effects of uncertainty about macroeconomic and market-specific prospects on investment have been analysed extensively through the literature on the 'real options' approach (see Dixit & Pindyck, 1994). Essentially, the models show how investment can be either increased or reduced by the level of uncertainty faced by firms in a market. While this effect may act in either direction, Cobham (2000) shows how uncertainty impacts most strongly on the investments of smaller firms, and leads to their observed high death rates and lower growth rates. This occurs because smaller firms are financially constrained, and the macroeconomic volatility associated with CAL exacerbates this phenomenon.

The classic Stiglitz & Weiss (1981) model of credit rationing shows how banks will refuse credit to firms or for projects which are viable, essentially on the basis that obtaining the necessary information on the firms and their investment projects would be too expensive. Combining this with the theory of investment under uncertainty shows how smaller firms are constrained to make relatively bad decisions – decisions which are more time-constrained, and inevitably result in more volatile outcomes. This causes in particular the high death rates of SMEs which are observed in both developed and developing countries. Moreover, SMEs' expectation of their ability to access funds will be a crucial determinant of both their investment decisions and performance, and hence of their employment capacity; and since CAL increases firms' uncertainty about their financing, the ultimate effect may be to increase poverty.

This problem is exacerbated in many developing countries by the especially weak position of 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 (see FitzGerald, 1995). 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. Further research is clearly needed on the workings of this channel in developing countries, and indeed the structure of industry more generally to ascertain the extent to which industrialised country results are paralleled.

The alternative source of financing is through equity. There is a considerable literature on possible connections between stock market development – and in particular CAL in this area – and investment and growth of developing countries (see Durham, 2000a). However, the only strong finding of a benefit is of a one-off increase in investment (Henry, 2000), but no long-run increase in the capital stock (Levine & Zervos, 1998). In any case the benefits of equity markets will not be directly felt by smaller firms and so the employment impacts will be less. Equity markets are of course dominated by large firms and privatised state firms. Only in the largest developing countries such as China have secondary boards – stock markets aimed at allowing smaller firms to raise funds for investment – been at all successful.

Small firms struggle to attract finance through the market because of their informational opacity, so the effort put into the development of such stock markets may not be worthwhile for at least smaller lower-income countries where they cannot be fully supported. A further argument against

focusing efforts too directly on stock market as opposed to other financial development is an incentive may be generated for disintermediation, the trend for banks to devote greater proportions of their resources to capital market investment rather than business lending, where the latter would be more directly productive in terms of employment benefits. While some studies have implied a correlation between stock market development and overall ease of financing, as Demirguc-Kunt & Maksimovic (1999) report, they find no correlation between stock market activity and smaller firms' ability to access debt.

China provides an interesting case for consideration, as her slow but steady progress towards financial and at least partial CAL has been characterised by a problem particular to transition economies. On the one hand, the large state-owned enterprises (SOEs) are being privatised, and are rationalising vast swathes of their workforces. China (despite some ideological misgivings) is therefore desperate to encourage small, private enterprises as the only alternative source of employment (and indeed growth). The flows of funds for investment to this particular sector is crucial then, and hence the interest in secondary board markets. However, the financial liberalisation which is continuing apace is having rather contrary consequences.

Part of the WTO agreement in place requires that foreign banks' access to domestic markets be greatly increased within a fairly short timeframe. Domestic banks are therefore being hurriedly prepared for the harshest market conditions they have ever faced. At the same time as seeking the necessary profitability (and clearing their books of bad loans), they are trying to deal with the need to find profitable lending opportunities without incurring the same bad loan problems again. Moreover, they are being urged to make funds available to the newly approved private enterprises – who by definition have little in the way of credit histories or track records of business success by which to signal their creditworthiness.

The result of these competing pressures is that banks are building up large quantities of unlent deposits, since the privatised SOEs are no longer demanding loans in the same quantities, and are not policy-designated lending targets, while the banks are attempting to introduce market-based risk assessment techniques to prevent bad lending, and hence SMEs are being very strictly rationed. The effects of the ongoing financial and CAL then are being seen as a squeeze on lending to already underfunded SMEs, with the inevitable knock-on impacts of reduced investment, growth and employment.

While their banks may not have bad loans to the same extent, it can be surmised that smaller developing countries may feel the same effects in terms of greater rationing. Policymakers then are faced with the quandary of liberalising their financial markets and abdicating influence on the targeting of funds, while at the same time seeing the main employment providers of their economies suffering a credit withdrawal. The resultant poverty impacts then may be large, even if the ultimate growth effects (of eventually more efficient financial markets) are beneficial.

Overall, it appears that the increased macroeconomic instability associated with liberalisation of short-term flows will mitigate against smaller firms' investment – or at least that those investments will be more volatile through the impact of greater uncertainty, and hence less likely to be successful. The high death rates noted above may be exaggerated further. This would reduce the employment capacity of the economy, with resultant negative impacts on poverty. This is a key hypothesis which requires empirical investigation (although quality of data on firms' investments is problematic in developed countries, and – as Cook & Nixon (2000) discuss – rather more so in developing countries). To investigate further the impact of CAL on industry, it is useful to consider the differential impact in allocation of credit.

Liberalisation and credit availability

Financial sector deregulation – including CAL changes in the freedom both of domestic banks to undertake international transactions, and of foreign banks to enter the domestic market – has important ramifications for the availability and allocation of credit. As is evident from the above discussion on SME investment, this can in turn have significant effects on both investment and growth, and employment and poverty. Granting domestic banks the freedom to allocate credit on a pure profit basis can have a number of effects. That predicted by theory is the most positive: simply that banks now compete freely, and hence become more efficient in their credit allocation, make fewer bad loans, support more profitable projects, generate more profits to reallocate and thus facilitate both more and better investments.

Gregorio & Guidotti (1992) find for a set of 98 developed and developing countries that about three-quarters of the positive effects of financial sector development result from this type of effect and hence superior quality of investments, and only the remaining quarter from greater quantity of investment. Even then, Brownbridge & Gayi (1999) survey the changes resulting from financial reforms in eight LDCs – Bangladesh, Laos, Nepal, Madagascar, Malawi, Tanzania, Uganda and Zambia – and find that only Nepal showed a significant rise in private sector bank borrowing. In other words, the observed increase in financial activity may only relate to government operations, and not involve any greater (employment-enhancing) investment by firms.

A further concern stems from the informal sector nature of much developing country SME operations. It is possible – as Taylor (1988) argues – that the effect of liberalisation is simply to shift the origin of SME financing from the informal to the formal sector, and hence there will be no net benefit in terms of investment volume. Kariuki (1995) confirms this for Kenya's financial liberalisation, showing that the average volume of credit among a sample of firms actually fell in every year from 1985 to 1990, except for a 1.5% rise in 1986.

The allocative effects in terms of sector and firm size are also unclear. Jaramillo et al. (1992) conclude that, in the case of Ecuador, financial liberalisation led to more technologically efficient firms receiving a greater share of credit. However, these happen to have been also the largest firms, and it was the previously subsidised smaller firms which suffered a credit withdrawal. As with China today, the impact of liberalisation was to increase credit-rationing among SMEs. If this effect can be predicted then, the question for a government considering liberalisation is whether the positive growth effects of greater credit allocation to more efficient larger firms outweighs any employment costs of reduced credit to SMEs.

The granting of domestic entry to foreign banks and financial institutions would be expected to have similar effects in terms of increased competition and efficiency. Foreign entrants will bring new technologies, new techniques and expertise in risk assessment, which will (at least eventually) filter through to domestic rivals. This should then improve the quality of loans made, and reduce the extent of credit rationing since banks will be better able to assess their limited information on firms. A number of dangers are also present however.

The danger of precipitating crisis is compounded by the possibility of increased competition initiating a number of negative impulses in the sector. Reducing the costs of a branch network may have negative consequences for rural dwellers especially. Since rural branches serve a less densely populated area, they may be the obvious choices for closure. Since rural areas are already relatively underbanked (in terms of geographic concentration, though not necessarily by population), this will further limit the access of a significant section of the population to financial

services. This has potential costs through reduced saving and investment in rural communities, and hence of reduced output and employment (or subsistence) levels.

Matin, Hulme & Rutherford (1999) point out the success of the Bank Rakyat Indonesia in setting up sub-branch units to reach a mass rural clientele and hence broadening significantly the provision of financial services to the poorest, but this is not a common phenomenon in the wake of financial deregulation. Brownbridge & Gayi (1999) found that entrance into the banking sectors of their eight countries did tend to lead to investment, to longer opening hours, the opening of ATMs, use of debit and credit cards – in other words, increased access to financial services – but only in urban areas. Only the purchase of a rival's rural branch network by Finance Bank (Zambia) went against this trend.

Reducing the costs of non-performing loans and risk assessment are potentially contradictory aims. If banks choose to target the extent of their poor quality loans, this will involve taking greater care with future lending decisions. Investing in improved risk assessment methods and information about potential borrowers should reduce rationing and improve the access to credit of sound businesses (especially the disproportionately rationed SMEs). The easier option however may be to introduce *more* rationing for smaller firms, and focusing on less informationally opaque larger firms – as seen in China and probably Kariuki's (1995) Kenyan firms.

Reducing the costs of risk assessment can also involve disintermediation – transferring deposits to (possibly international) capital markets where information is readily available and risks fairly clearly seen, rather than lending them out to businesses. This has obvious negative effects for the quality of industry investment and resulting employment and poverty levels, although the risk of financial crisis may be lessened.

The alternative response to increased competition involves increasing revenues. This will essentially take the form of raising interest rates on lending, but this may be through redirecting lending to higher risk groups or alternatively to (possibly international) capital markets where returns may be higher. The first of these will have the obvious dangers of raising the risk in the bank's portfolio, and without proper supervision can precipitate crisis. The second will reduce the volume of lending available directly to businesses, and hence increase the extent of rationing for smaller firms which cannot access capital markets themselves.

The case of liberalisation giving freedom to domestic banks to transact internationally has been touched on already. The potential for domestic savings to be channelled abroad to international capital markets will lower the availability of credit to domestic firms, although the entrance of foreign banks may compensate for this. The crisis-inducing possibility is the danger of domestic financial institutions without sufficient expertise or supervision seeking funds from foreign financiers without taking into account the exchange risk or the possibility of short-term loans *not* being rolled over, as in the East Asian crisis.

Finally, we need to consider in more detail the effects of liberalisation and increased competition on rural access to credit. A key feature of especially African developing countries has been the overwhelming absence of deposit-taking institutions willing to handle small sums operating in rural areas. Mosley (2000) notes that this continued unabated after a series of financial liberalisation reforms in Kenya (1982-4), Malawi (1985-7 ad 1994-6), Uganda (1992-4) and Lesotho (1994-6). Mosley's findings for the impact of liberalisation on access to credit make unsurprising reading: namely, that liberalisation brought few direct benefits, but the innovation of (especially NGO) credit institutions increased access (to *some* financial services at least) dramatically in both Kenya and Uganda where the NGOs were most active. More worryingly,

even in these cases, the access of the very poorest groups did not significantly increase despite the improvement for more marginal individuals below but closer to the poverty line.

Increased competition has *not* had any noticeable impact on the microfinance institutions. That is, despite the success of, for example, the PCEA Chogoria in Kenya and the CCEI/Gatsby Trust scheme in Cameroon, private sector competitors have not moved in. Furthermore, liberalisation specifically of the microfinance sector has had serious negative effects: in Malawi, the privatisation of the (failing) SACA and Malawi Mudzi Fund led the new company to seek collateral for its credit provision, and hence de facto disqualify a large sector of the poor from access. Mosley makes the more general points that while this type of liberalisation may have bad effects for poverty, both conventional liberalisation of the interest rate (allowing lending at an interest rate of around 40%, as is common among the microfinance institutions to cover the high costs of networks in rural areas) and policies to promote institutional development can have very promising effects.

Matin et al. (1999) survey financial services provision for the poorest in low-income countries and find two trends in particular. One is a general trend towards more low-level, informal financial intermediation (e.g. the return of deposit collectors in Nigeria after a fall in confidence in the banking system); and the other, more situation-specific responses from formal institutions (e.g. the doorstep financial services offered in Dhaka slums by SafeSave). Matin et al.'s paper is subtitled 'Deepening Understanding to Improve Provision,' and our understanding of the overall effects of CAL on domestic industry and credit access are far from clear. The apparent absence of research on the preconditions for CAL to improve (or at least leave unchanged) the access of domestic firms to credit is indeed paralleled by the absence of research to indicate the preconditions for CAL to be at least poverty-neutral. A deeper understanding of the channels involved is required then, even for purely domestic financial liberalisation.

It is clear then that the macroeconomic instability associated with CAL affects domestic firms' investments negatively, and especially SMEs, so one effect of liberalising short-term flows may in many cases be to reduce the growth of the economy's major employment-providing sector. The opening of the domestic financial sector raises a great number of questions about where increased competition will lead under different initial conditions, but these questions remain unanswered for lack of research. Research is also required to fully understand the structure of industry in developing countries and its response to changing financial conditions, and also the development of provision of financial services to the poorest.

5. CONCLUSIONS

This paper has set out a framework for further analysis of the linkages between CAL and poverty. While theory implies there will be efficiency benefits for international finance, the existence of growth benefits for developing countries – of both short term flows and FDI – has simply not been established. Moreover, a variety of costs for liberalising countries, and a number of further potential dangers, have been identified. The key conclusion for policy-makers is that retention of the *option* to make use of capital controls within an appropriate macroeconomic policy structure is essential. The underlying assumption that liberalisation has definite benefits is neither a useful nor a justifiable starting place from which to begin policy analysis.

References

- Abedian, I. & M. Biggs, 'Inflation and Government Revenues,' in I. Abedian & M. Biggs (eds.), *Economic Globalization and Fiscal Policy*, Oxford: Oxford University Press, 1998.
- Biggs, M., 'Deficits and Economic Growth: Lessons from Developing Countries,' in I. Abedian & M. Biggs (eds.), *Economic Globalization and Fiscal Policy*, Oxford: Oxford University Press, 1998.
- Brownbridge, M. & S. Gayi, 'Progress, Constraints and Limitations of Financial Sector Reforms in the Least Developed Countries,' *IDPM Finance and Development Research Programme Working Paper Series 7*, 1999.
- Cobham, A., 'The financing and technology decisions of SMEs (I and II),' *Queen Elizabeth House Working Paper Series 24 and 25*, 1999.
- Cobham, A., 'Making Bad Decisions: Firm Size and Investment under Uncertainty,' *Queen Elizabeth House Working Paper Series 39*, 2000.
- Collier, P. & J. Gunning, 'The IMF's role in structural adjustment,' *Centre for the Study of African Economies Working Paper WPS/99-18*, 1999.
- Cook, P. & F. Nixon, 'Finance and Small and Medium-Sized Enterprise Development,' *IDPM Finance and Development Research Programme Working Paper Series 14*, 2000.
- Demirguc-Kunt, A. & V. Maksimovic, 'Institutions, Financial Markets and Firm Debt Maturity,' *Journal of Financial Economics 54*, 295-336, 1999.
- Dooley, M. & K. Kletzer, 'Capital Flight, External Debt and Domestic Policies,' *NBER Working Paper Series 4793*, 1994.
- Durham, B., 'A Survey of the Econometric Literature on the Real Effects of International Capital Flows in Lower Income Countries,' *Queen Elizabeth House Working Paper Series 50*, 2000a.
- Durham, B. 2000b, 'Econometric of the Real Effects of Cross-Border Capital Flows in Emerging Markets,' *Queen Elizabeth House Working Paper Series 52*, 2000b.
- Durham, B., 'Econometrics of the Effects of Stock Market Development on Growth and Private Investment in Lower Income Countries,' *Queen Elizabeth House Working Paper Series 53*, 2000c.
- Eichengreen, B., 'Taming Capital Flows,' *World Development 28:6*, 1105-16, 2000.
- FitzGerald, V., 'Hamlet Without the Prince: Structural Adjustment, Firm Behaviour and Private Investment in Semi-Industrialized Countries,' in P. Arestis & V. Chick (eds.), *Finance, Development and Structural Change*, Aldershot: Edward Elgar, 1995.
- FitzGerald, V., 'Policy Issues in Market Based and Non Market Based Measures to Control the Volatility of Portfolio Investment,' *Queen Elizabeth House Working Paper Series 26*, 1999.
- FitzGerald, V. & A. Cobham, 'The Development Dimension of International Taxation,' *Background Paper for Department for International Development (UK)'s White Paper on Globalisation*, 2000a.
- FitzGerald, V. & A. Cobham, 'Capital Flight: Causes, Effects, Magnitude And Implications For Development,' *Background Paper for Department for International Development (UK)'s White Paper on Globalisation*, 2000b.
- Gregorio, J. & P. Guidotti, 'Financial Development and Economic Growth,' *IMF Working Paper Series 92/101*, 1992.
- Haufler, A. & I. Wooton, 'Country size and tax competition for foreign direct investment,' *Journal of Public Economics 71*, 121-139, 1999.
- Henry, P., 'Do Stock Market Liberalizations cause Investment Booms?,' *Journal of Financial Economics 58*, 301-34, 2000.
- IMF, *World Economic Outlook (May)*, Washington DC: International Monetary Fund, 1999.

- Jaramillo, F., F. Schiantarelli & A. Weiss, 'The Effect of Financial Liberalization on the Allocation of Credit: Evidence from a Panel of Ecuadorian Firms,' *World Bank Working Paper* 1092, 1992.
- Kariuki, N., 'The Effects of Liberalisation on Access to Bank Credit in Kenya,' *Small Enterprise Development* 6, 15-23, 1995.
- Khan, M. & N. Huq, 'Adjustment with Growth: Relating the Analytical Approaches of the IMF and World Bank,' *Journal of Development Economics* 32, 155-79, 1990.
- King, R. & R. Levine, 'Finance and Growth: Schumpeter Might be Right,' *Quarterly Journal of Economics* 108:3, 1993.
- Klein, M. & G. Olivei, 'Capital account liberalization, financial depth and economic growth,' *NBER Working Paper* 7384, 1999.
- Kraay, A., 'In Search of the Macroeconomic Benefits of Capital Account Liberalization,' *mimeo.*, Washington: World Bank, 1998.
- Levine, R. & S. Zervos, 'Stock Markets, Banks and Economic Growth,' *American Economic Review* 88, 537-58, 1998.
- Matin, I., D. Hulme & S. Rutherford, 'Financial services for the poor and poorest: deepening understanding to improve provision,' *IDPM Finance And Development Research Programme Working Paper Series*, 1999.
- Mead_D. & C. Liedholm, 'The dynamics of micro and small enterprises in developing countries,' *World Development* 26, 61-74, 1998.
- Mosley, P. (1999), 'Micro-Macro Linkages in Financial Markets: The Impact of Financial Liberalisation on Access to Rural Credit in Four African Countries,' *Journal of International Development* 11, 367-84.
- Pallage, S. & K. Robe (2000), paper presented at *Computing in Economics and Finance 2000* conference, UPF-Barcelona, 8th July 2000.
- Quinn, D. (1997), 'The correlates of change in international financial regulation,' *American Political Science Review* 91, 531-552.
- Rodrik, D., 'Who needs capital account convertibility?,' *Essays in International Finance* 207, 1998.
- Rossi, M., 'Financial fragility and economic performance in developing countries: do capital controls, prudential regulation and supervision matter?,' *IMF Working Paper Series* 99/66, 1999.
- Schineller, L., 'An Econometric Model of Capital Flight from Developing Countries,' *International Finance Discussion Paper* 579 (Washington, D.C.: Board of Governors of the Federal Reserve System), 1997.
- Sharma, K., 'Export Growth in India: Has FDI Played a Role,' *Yale University, Economic Growth Center Discussion Paper Series*, 2000.
- Stiglitz, J., 'Capital market liberalization, economic growth, and instability,' *World Development* 28, 1075-1086, 2000.
- Stiglitz, J. & Weiss, A., 'Credit rationing in markets with imperfect information,' *American Economic Review* 71, 393-410, 1981.
- Stulz, R., 'Globalization of Equity Markets and the Cost of Capital,' *NYSE Working Paper Series* 99-02, 1999.
- Taylor, L., *Varieties of Stabilisation Experience: Towards a Sensible Macroeconomics in the Third World*, Clarendon Press: Oxford, 1988.
- Toye, J., 'Fiscal crisis and fiscal reform in developing countries,' *Cambridge Journal of Economics* 24, 21-44, 2000.
- UNCTAD, *Trade and Development Report 1996*, Geneva: United Nations Conference on Trade and Development, 1996.

UNCTAD, *Report Of The Ad Hoc Expert Group Meeting On Efficiency And Cost Benefit Assessment Of Host Country Tax Incentives And Technical Assistance Needs*, Geneva: United Nations Conference on Trade and Development, 1999.

Williamson, J. & M. Mahar (1998), 'A Survey of Financial Liberalization,' *Essays in International Finance* 211.