CAPITAL FLIGHT: CAUSES AND CONSEQUENCES (A general perspective) By Betty E. S. Machangu Lecturer- IFM

Abstract

Overly expansionary monetary and fiscal policies, an incompatible exchange-rate policy, and a repressive set of financial policies designed to divert resources toward the public sector will clause widespread distortions and imbalances even in the short run. In this respect Capital flights is an important symptom of these policy - induced distortions. Capital flight is generally associated with the short-term outflows resulting from economic or political uncertainties in the home country. It involves 'hot money' that responds to political or financial crises, heavier taxes, a prospective tightening of capital controls or major devaluation of the domestic currency, or actual or excessive inflationary conditions. In other words, it is money that is fleeing from country rather than external investment guided by long term considerations, lacking protection against the possibility of a large loss. Capital flow can typically refer to the short-term speculative capital outflow. While attacking a long-term antidote for destabilizing exchange-rate, fiscal, and financial policies. Without capital controls, the threat of capital flight might impose much needed discipline on policy makers.

INTRODUCTION

Until recently, the issues raised by capital out flows, especially from developing countries to developed countries have been overshadowed by the concerns, over the over the growth of their gross external debt.² Large-scale capital flight is often mentioned as a prime contributing factor to the foreign-debt problems of developing countries. Short term capital flight can be triggered-off not only by shifts in domestic portfolios toward foreign liquid assets but also by changes in trade credit.

In the face of large international interest rate differentials or imminent devaluation for example, domestic firms will slash their traderelated borrowing denominated in foreign currency. They may, at the same time, show increased willingness to engage in trade-related lending denominated in foreign currency. When this mechanism becomes excessive, it seems

reasonable to label it "capital flight". At one extreme, all private capital outflows from developing countries, be they short or long term, port folio or equity investment, could be termed as capital flight. This is because developing countries are poor and should be net borrowers in the developing process, with domestic savings supplemented with external finance. Some authors define capital flight more broadly as the gross value of all capital exports from an economy, regardless of whether they reflect the purchase of foreign financial assets or real assets (such as real estate) or direct foreign investment by domestic residents

Others would even consider the massive emigration of highly trained professionals who fear financial or political collapse at home, to be a form of capital flight, namely, human capital flight. Practically, capital flight can be defined as the difference between total private capital

outflows and the part for which interest income is identified and reported.

2

Other writers define capital flight as capital export by the private non bank sector, although in some cases banks and official entities may engage in it. Capital flight appears also in form of smuggling or under-invoicing of exports and over-invoicing of imports.3 As long as foreign currency receipts from smuggled goods are kept abroad and cannot be observed by the domestic authorities, neither the outflows of the goods nor the corresponding increase in domestic holdings of the assets abroad will be recorded in the balance of payments. This is true also for exports, and imports with "faked invoices". The falsified valuation shows up in the balance of payments - accounts. The difference between the faked amount and the true amount of contract, which represents a capital outflow or inflow is not recorded any-where in the trade accounts nor in financial inflows or in errors and omissions. Other forms of capital flight, are difficult to document. In that case they are recorded as an omissions and agents' fees paid by foreign contractors directly into the banks accounts of residents setting up dummy foreign branches of companies to transfer funds abroad, and keeping part of foreign borrowings abroad. It is not the outflow of private capital only that creates the problem of capital flight, but rather, that part of the outflow that is in some sense lost to the country.

While total wealth (domestic plus foreign) of nationals may be unchanged by capital flight when the government is unaware of the returns from foreign assets accumulated by domestic residents, earnings from these assets, either remain outside the home country through unofficial channel. Such foreign income and wealth of domestic residents can not contribute to the servicing of the country's debt or the financing of its development program. This also could be termed as some form of capital fight.

Estimating Capital flight-Dimensions of the Problem

Regardless of how broadly or narrowly one

defines capital flight, assessing its quantitative importance is difficult⁴. It is ordinately difficult to measure. Its relationship to capital outflows as noted above are highest on motives and perceptions that are both difficulty to measure and subject to abrupt shifts in response to changing circumstances.. This is true, even in countries that impose no restrictions on capital outflows, because financial transactions are often reported imprecisely in countries' balances of payments. The measurements problems become more severe in countries with capital controls, because capital outflows must be concealed, and they must be used to estimate capital flight, which means measuring inflows rather than measuring the gross capital outflows.5

Despite the conceptual and measurement problems encountered by Gulati (1985), some rough estimates of net capital flight are possible' Cuddington (1983) and Guaranty (1986) analysed capital accounts of balance of payments for eight heavily indebted countries namely Argentina, Brazil, Chile, Korea, Mexico, Peru, Uruguay and Venezuela.

In each case they included the errors and omissions category in the measure of capital flight because of the widespread belief that errors and omissions largely reflect unrecorded short term capital flows.

They also included sub categories of the line item "other short-term capital, other sector". i.e. excluding the official sector and money banks. A judgment on what to include in capital flight had to be made on a country-by-country basis. The objective was to isolate short term capital movements that might reasonably be considered To get some indication of its capital flight. relative importance, their measure of a capital flight in each year (from 1974 - 1982) was compared to the growth in each country's foreign debt in that year. Their results were noteworthy. First, the importance of capital flight varied tremendously from country to country. Argentina, Mexico, Venezuela showed heavy capital flight over the period, while in Brazil, Chile, Korea and Peru the aggregate amount of capital flight was insignificant. (Table 1) Second, the severity of capital flight varied considerably from year to year. Capital flight can also be measured by one of the broad ways defined as identical acquisitions of external assets except official reserves, plus recorded errors and ommissions in the balance of payment accounts. Errors and omissions are thus implicitly attibuted in their entirely to capital transactions that can be regarded as capital flight.

Although cumulative capital flight from Uruguay was moderately large, it was insignificant for Peru despite the heavy capital flight that occurred in 1974 - 1976.

Even if it has been small relative to the increase in foreign debt, as in the Peruvian case, capital flight may have had a significant effect at times on the authorities ability to carry out micro economic policy. A third feature to note analysed in these countries was capital flight seemed to have become relatively more important in the late 1970's and early 1980's when the developing countries were heavily indebted.

Capital Flight: An attempt to explain the causes

In this section a discussion of the causes of Capital flight is made. The starting point is on discussing questions like, why is it that when an American puts money abroad it is called "Foreign Investment" but when an Argentinian does the same it is called "capital flight"? Other related concerns are why is it that when an American company puts 30% of its equity abroad it is called "strategic diversification" and when a Bolivian businessman puts only 4% abroad it is called "lack of confidence"?

There is no reason why the simultaneous export and import of capital is necessarily undesirable. On the contrary, the simultaneous inflow and outflow of capital may be interpreted as both domestic and foreign residents are pursuing the same conventional objective, which is to diversify portfolios internationally. The fact that gross capital flows, greatly exceed net flows may indicate a high degree of financial

integration with world capital markets and the availability of opportunities for risk sharing. Similarly, long term inflows may be offset by short term capital outflows, when financial intermediaries engage in maturity transformation of the international level

In a number of developing countries, there are extensive controls on interest rates and other aspects of the financial markets. Often, these practices result in nominal interest rates that are below the rates on comparable foreign financial instruments as well as in negative real rates (defined as nominal interest rate adjusted for anticipated inflation).

A rational domestic investor would seek foreign assets that yield high returns. Domestic residents can invest abroad because of paucity opportunities for investing in the domestic securities market and the lack of full or credible insurance on assets held in banking system. These make domestic investments riskier than foreign assets. However foreigners continue to lend funds to such countries

From the above, simultaneous inflows and outflows are not necessarily a "problem" either for developing countries or for financially sophisticated industrial countries. The following discussion focuses on how capital flight could pose as a problem to concerned countries.

A variety, of often related factors lead to capital flight. Some can be attributed to government policies in the countries losing capital, while others are outside official controls.

Consequences of Capital flight

Capital flight Destabilizes Interest Rates and Excapinge Rates and Reduced Monetary Control.

There is a consensus that one of the principal causes of capital flight (that which is caused by speculative capital flows) is the likelihood of a change in the exchange rate and that they are destabilizing. When there is political or financial instability or, when major changes in macro

economic policy are anticipated, mobile capital will move quickly from the risky country to a safe 'heaven'. These movements induce large and rapid adjustments in interest rates and exchange rates, perhaps with considerable exchange-rate "overshooting". If the Central bank intervenes in an attempt to stabilize the exchange rate, foreign-exchange reserves may be exhausted and the domestic money supply may contract sharply. Other things being equal, an expected depreciation of domestic currency, for whatever reason would cause residents to switch from domestic assets to foreign assets.

This is the same rationale as for currency substitution i.e. substitution of foreign currency for domestic currency. While it is difficult to measure exchange rate expectations, precisely it is reasonable to assume that if the current real exchange rate is viewed by potential investors as overvalued then it is likely that the currency would be devalued.

In such circumstances, residents would try to avoid the potential capital loss by converting domestic wealth into foreign claims. This happened in Mexico in late 1975 and early 1976. The growing probability of large currency devaluation undoubtedly contributed to the shift of domestic wealth into foreign assets. 10

Capital flight Reflects Discrepancies between private and social Rates of Return

The social rate of return on capital invested in developing countries is higher than on capital invested in industrialized countries. Capital is scarce in developing countries to an extendd that a flow of capital from developing countries should impair the efficient world wide allocation of resources. Yet the private incentives faced by firms and individuals may not accurately reflect the structure of social returns.

In classical welfare economics, discrepancies between private and social benefits, and costs provide the justification for government intervention as opposed to laisser-faire. Discrepancies between private and social rates

of return can arise for a number of reasons including:

- (a) differences between the returns domestic savers can earn on domestic and foreign assets that cannot be explained by differences in risk.
- (b) differences between private return on savings from holding either domestic or foreign financial assets and the return on real capital investment in the developing country and;
- (c) differences between the private and social returns on foreign borrowing or lending.

Reasons (a) and (b) are common in countries following repressive financial-sector policies. where interest-rate ceilings keep rates on deposits well below their market - clearing levels and the inflation tax is a major source of finance for large fiscal deficits. These policies, coupled with high reserve requirements, drive a large wedge between domestic lending and deposit rates, and this wedge gets larger as the inflation rate rises. Thus, even if banks' lending rates accurately reflect the productivity of their customers' capital investments (which may not be true, particularly when credit is allocated by administrative mechanisms to "priority" sectors), the return that savers receive on time deposits may be far below the social return on domestic investment. When these savers are given the option of holding foreign assets that pay uncontrolled interest rates, "too much" domestic saving will flow abroad. Policy makers may hence feel justified in restricting capital flight, as well as longer-term capital outflows in an attempt to enforce the investment of domestic savings within the company.

The incentives for capital flight created when domestic interest rates are kept below market clearing levels, causing a large interest-rate differential in favour of foreign assets, are accentuated by expectations of major devaluations. These expectations often develop in response to chronic fiscal deficits, the high inflation resulting from monetization of those deficits and timidity in adjusting the nominal exchange rate. If domestic interest rates were

market-determined, growing expectations of devaluation would cause domestic rates to rise. and this equilibrating movement of interest rates would reduce the amount of capital flight. But the requisite movement is prevented by administrative controls on interest rates. As the domestic currency becomes increasingly overvalued, the real exchange rate severely distorts the relative prices of foreign goods and financial assets. In particular the privately perceived prices of imported goods fall below their true social prices. Capital flight is bad in so far as it facilitates the resulting misallocation of resources. In such a situation, the domestic authorities may advocate foreign exchange controls, at least as a short-run crisis management tool. In the longer run however, controls are no substitute for a realignment of the exchange rate.

Capital flight contribute to erosion of the Domestic Tax base

Generally capital flight from major debtor countries is associated with growing fiscal deficits. A widening fiscal deficits financed by printing money creates inflationary pressures which in turn, provides an incentive for residents to reduce their domestic money balances to avoid erosion of the value of these assets by inflation. The purchase of foreign assets is one way of avoiding this inflation tax. Even if fiscal deficits are financed through the sales of, for example, bonds or external borrowing, domestic residents may expect that at some point in the future the government would have either to monetize the debt (by printing more money) or impose additional taxes to pay off. This expectation would also encourage residents to reduce their potential tax liabilities.

Capital flight may greatly reduce the efficacy of the inflation tax on domestic money holdings - a tax on which many developing countries must rely heavily on because they lack well developed financial markets (or no financial markets at all) where, governments securities can be issued to finance fiscal deficits. In addition, governments have difficulty taxing income earned or wealth held abroad, and this may generate distortions.

A government may for example borrow abroad to invest in social-infrastructure, projects such as highways or hydroelectric projects. These projects, which often have a high social value, can not be financed by levying direct user charges. Hence they must be financed by government tax increases. Although the private sector benefits from such projects, individuals may escape the taxes levied to pay for them by holding much of their increased wealth abroad. Since the governments ability to tax this wealth is limited, it may encounter debt-servicing problems even when it borrows to undertake socially beneficial public-invested projects.

Capital flight Reduces Domestic Investment and makes the Investment Risky

There is a relatively large perceived risk associated with investments in different countries e.g. developing countries whereas most industrial countries have well established political systems with constitutional arrangements that provide for an institutional infrastructure that is conducive to saving and investing. Adequate institutional and legal aspects arrangements for the protection of private property may not exist, periods of of political instability may be relatively more frequent, and there may be dramatic political and economic regimes. Investors in such countries will be faced by many risks such as expropriation and the imposition of exchange controls i.e. the domestic residents face the possibility of losing the value of their assets without compensation, whereas the risks of similar assets held abroad is lower. The domestic investors would thus have a preference for foreign assets.

In countries where domestic interest rates are severely repressed, restrictions on the purchase of 'safe', high-yielding foreign assets may dramatically reduce the domestic saving rate. When a major devaluation of the domestic currency is imminent, there may be a surge in imports of consumer durables and luxury goods financed by a reduction in saving. In short, when

severe economic disequilibrium creates strong incentives for capital flight, capital controls may not succeed in redirecting domestic savings from foreign to domestic investment. Instead, they may depress the incentives to save or divert savings toward inflation hedges such as real estate, thereby reducing the country's growth potential as well as its investment income from abroad. In such a situation capital flight is merely a symptom of inappropriate financial, macro economic, and exchange-rate policies. The symptom may or may not disappear when controls are imposed on short term capital outflows.

Capital flight increases the marginal costs of foreign borrowing.

When the government is unable to tax assets held abroad, capital flight may lead indirectly to larger borrowing abroad by the government or by public enterprises. This is because as was analysed in the preceding section, capital flight erodes the tax base and thus increases the public sector deficit. But as foreign borrowing rises, the marginal cost of borrowing rises (Edwards, 1984).

If a government could tax the foreign assets or incomes of its citizens, international lenders might reasonably be expected to regard those assets as collateral, broadly defined, for their own loans to the government and borrowing costs would depend on a country's net external indebtedness (public and private debt minus official reserves and net private-sector assets abroad). If a government cannot tax foreign assets or incomes, borrowing costs come to depend on the country's gross external indebtedness. Thus capital flight that necessitates an increase in foreign borrowing, raises the national costs of that borrowing.

The interest rates earned on assets held abroad do not increase with the amount invested, but the interest rate paid on foreign borrowing increases with the amount borrowed. Therefore, private investors actions inflict a loss on the country as a whole because they have no reasons to internalize the negative effect of their actions on the government's foreign borrowing costs. Governments optional policy response in this case

is to tax private capital outflows in order to eliminate the discrepancy between private and social costs of acquiring and holding foreign assets. If this is not feasible, capital controls may be an appropriate policy response.

Capital flight erodes the legitimacy of mixed economic systems.

Authors, including Dias-Ale jandro (1984) have analysed the distinction between private assets and public liabilities, emphasizing its broad political consequences. Ale jandro (1984) views capital flight as part of a larger problem.

A country's foreign debts have been assumed by the public sector even if they were contracted initially by the private sector, yet the foreign assets of the private sector remain strictly private. By 1984 for example most of the private external debt had been 'socialized' or its servicing is being subsidized via special exchange rates repayment schedules or tax concessions. The private assets abroad, however, have remained strictly private. "Public" debt is public for being both the responsibility of the state and for being highly publicized". "Private" assets belong mostly to households and are also surrounded by secrecy. This situation reduces the political legitimacy of efforts to service the external debt. indeed, it has generated a legitimacy crises for the role of the private sector in Latin American development.11 Diaz-Adejandro emphasizes that industrial countries have unwillingly encouraged this erosion of legitimacy by maintaining banking - secrecy laws and eliminating withholding taxes on foreigners investment earnings.

These regulations encourage capital flight and tax erosion and they make it more difficult for developing countries governments to tax their nationals wealth in order to service their massive foreign debts.

Capital flight: - The case of Tanzania

Unfortunately the Bank of Tanzania does not have a track record of Capital flown out of the country. (Kimei, -1997). However, the truth remains that since Tanzania has got a back ground of foreign exchange controls especially when the country

was experimenting with socialism ideology and the controls may have led to capital flight. In 1992, the Tanzanian government liberalized its economy, and so the current account trade transactions.

This actually became possible after the acceptance of Article Eight Status of the International Monetary Fund (IMF) which demanded removal of all restrictions i.e. international merchandise trade. The controls still exist on the capital accounts and people take the advantage of the current account to invest on the items which fall in capital accounts. The controls also forced exporters to under invoice their exports but this did not benefit them much since the exporters were also the importers. As a result there was no much incentive for them to retain the foreign exchange coming from outside, i. e. one sells cotton and buys crude oil.

The controls had conflicting objectives - to make the economy attractive to investors meanwhile curbing the economic inefficiency which causes the capital flight. The controls are still quite tight for the money shops (Bureau De Change) who have now remained money changers. As of 1st July 1996 foreign exchange bureaux not meeting new capital requirements i.e depositing five million Tshs. with the Bank of Tanzania, are restricted to over the counter money changing transactions and, thereby, prohibited from trade financing, and interbank foreign exchange market. Before, that date the bureaux could transact for Imports and Exports, and even open LCs (Letters of Credits for Importers).

Currently, there is no foreign currency sold in black market, since the foreign currency is available in the many bureaux which have emerged in many parts of the country especially in Dar es Salaam and Arusha regions.

Other sources from the BOT commented that capital could have flown out of the country in form of private transfers. For example in 1985 such transfers were US \$ 236,3 million 250.6 millions in 1986, 230 million in 1987, 231-9 million in 1988, 182.4 million in 1989, and 164.5

million in 1990.¹² There are many other countries where capital flight was very severe like Argentina (1976 - 1982).¹³ Since Argentina underwent a number of major political and economic changes during 1970s, there were many causes of Capital flight in those years. For example the military coup of March, 1076, which led in a serious deterioration in fiscal discipline. The public sector deficit rose from 4 3% of GDP in 1972 to 14.4% in 1975 and the inflation rate accelerated to the verge of hyper inflation.

Serious distortions emerged as the government attempted to control price and wage increases. A huge deficit was recorded in the current account and the loss of foreign reserves amounted to \$ 1.1 billion in 1975. Foreign exchange transactions were restricted, and a balance-of-payments crisis occurred in early 1976 when \$ 2 billion in external loans came due.

Other countries like Peru, exercised less severe Capital flight. Over valuation of the currency occurred in Peru between 1973 and 1975, when domestic inflation coupled with a rigid nominal exchange rate pushed the real effective exchange rate well above its equilibrium level.

Furthermore, interest-rate ceilings kept domestic rates from rising to market clearing levels, and domestic financial markets were distorted by high reserve requirements for the commercial banks and by direct credit allocations. These distortions made the Peruvian economy highly vulnerable to capital flight, despite strict capital controls. Estimated Capital flight amounted to \$1.3 billion between 1974 and 1977.

Policy aspects to prevent Capital Flight

Exchange controls may increase the implicit costs of moving funds abroad though such controls may be circumvented. The imposition of controls on the movement of capital to the foreign countries is another policy of counter to capital flight in the long run. A corollary to this view is the position that if funds being held abroad by domestic residents could be induced to return to

the country of origin, or at least their outflow significantly reduced, the heavily indebted countries would be in a better position to adjust to fall in external financing. Providing a stable financial and microeconomics environment would go a long way towards reducing domestic uncertainty and arresting capital flight.

Research shows that capital flight is more rampant in countries with higher and more variable rates of inflation, larger fiscal deficits and generally overvalued currencies, adopting microeconomics policies with the appropriate exchange rates i.e. that are more on line with those available internationally and in line with the expectations of private sector, will reduce the resource transfer abroad. There is need to 'eep fiscal deficits at prudent levels in order to avoid triggering expectations of increased taxation tightened capital controls and accelerated inflation. It might be useful for countries to provide securities that are competitive, and to create a wider menu of domestic financial assets for local investors. Guarantees to investors in the event of a government expropriation or imposition of exchange controls are other possibilities. Government in developing countries could also utilize tax holdings or provide foreign - currency denominated assets to achieve the same objective.

It may be necessary for the recipient countries to alter policies regarding taxes on interest income of non-residents, the provision of deposit insurance on the non-residents deposits, sales of bearer bonds to non-residents and perhaps increase the reporting of the assets held by non-residents to their respective governments. Avoidance of financial repression together with the development of an efficient system of domestic financial intermediation would seem to be especially useful in achieving this objective and reducing countries vulnerability to flight in the future

Capital flight however is not necessarily of capital flight stems rather from an underlying unwillingness of both foreign and at the margin

domestic servers to invest in the economy in question. The adoption of sound policies would certainly contribute to easing the country's difficulties.

The intractability of the debt problem and the evident unwillingness of private foreign creditors to lend a range of developing countries suggest that the belated adoption of sound national policies may not in itself always be sufficient to eliminate real capital flight. Existing levels of indebtedness may be such as to continue to discourage investors, be they domestic or foreign and thereby sap the potential for credit worthiness through higher growth. As such, capital flight is a part of the much wider set of issues associated with the debt situation and the need to restore growth in the developing world.

The phenomenon of capital flight and the inability to remove the outflow may also become a factor in the provision of new lending to countries that need external finance to support their adjustment efforts. Foreign bankers, for example, may be unwilling to make loans that would merely finance future capital flight. Future lending to developing countries will therefore hinge responses to the problem of capital flight by both borrowers and lenders. It is highly unlikely that a government will be able to prevent all private capital outflows even in the best of circumstances since many of the causes are beyond control. What authorities can do is to try and change existing incentives in the economy to minimize the amount of capital flight as well as to attract capital from abroad, and thus direct more resources, both domestic and foreign, forward expanding the productive base of the economy. Capital flight can however, be returned for the private investor but may have significant costs for the country as a whole i.e. private marginal benefits are outweighed by social marginal benefits Cuddington argued that offering debt equity swaps provides an approach to encourage the return of Capital.15

Cocluding Remarks

In making a case that capital flight is bad and should therefore be controlled by "appropriate"

policy action, interventionists presume that these consequences of capital flight inflict welfare losses on the economy as a whole. Not only will capital flight exacerbate existing economic distortions in the short run, but it may also have adverse implications in the long run. It should be emphasized that the implicit premise underlying assessments of this sort is that capital flight is caused by factors beyond the policy makers control. In many cases, however, capital flight is a direct private-sector response to illconceived or poorly executed domestic policies. In such circumstances, it would be more appropriate to condemn the controversial policies than the capital flight. Inflationary macroeconomics policies, political instability, or a lack of confidence in the economy.

Were it not for the threat of capital flight, governments might be tempted to adopt even worse monetary and fiscal policies. The loss in welfare from these imprudent policies might be even greater than the loss attributed to capital flight. The ability of private capital to "vote with its feet" may prevent politicians from eroding national wealth by adopting policies favouring special - interest groups at the expense of the country as a whole.

This is not to say, of course, that restricting speculative capital outflows is the optimal or even the second best policy response. Measures to counter capital flight are likely to interfere with longer term capital movement by impeding debt service and profit remittances. It would be preferable to attack the underlying causes of Capital flight, namely severe financial-market distortions, than merely to treat the symptom, capital flight by imposing capital controls.

NOTES

- See Alijandro (1984) dooley et al (1986), Donnbush (1985) and Harbinger (1985) among others
- See J. Cuddington (1994)P
 Bhagwati, Kruege, and Willulswasdi
 (1974)

- Cite any other literature on the difficult of measuring capital flight
- Morgan Quaranty (1986). Estimated Capital flight for eighteen developing countries (Argebtina, Venezuela, Mexico, Peru etc.).
- World Bank Report (1984).
 - Stephen Charles Kanitz (1984) Sao Paulo Economists).
- Khan and Ul Hague
- See, among other, Friedman's (1953)
- Lewis (1976)

12

14

15

- Political legitimacy is eroded because the general public becomes increasingly unwilling to bear an onerous debt budget as it realizes that the growth of public sector debt has facilitated the amassing of foreign assets by the privileged of society. International Financial Services Jan 1993
- Studies in International Finance Dec. 1986.
 - Most countries report balance-of-payment information to the international monetary. Fund in units of domestic currency. The fund converts the figures to SDRs when compling the Balance of payments year book using the period average exchange rate of country's currency against the SDR. All U.S dollar figures in this study calculated by multiplying the SDR figures in the year book by the period-average U.S dollar SDR exchange rate.
 - Cuddington (1986) p.

References:

- Bhagwati Jagdish N;, Anne O. Krueger and C. Wobulswasdi, (1974) "Capital flight, from LDCs: A statistical Analysis" (1974).
- Cline, William r., "Venezuela's External Debt,"

 Washington, Institute for International

 Economics, 1983, unpublished
 manuscript.
- Carbo, Vittorio, "Feforms and Macroeconomic Adjustments in Chile during 1974- 82," World Development, 13 (August 1985), pp. 893-916.
- Carbo, Vittorio, Jaime de Melo, and Jam s Tybout, "What Went Wrong with the Recent Reforms in the Southern Cone?" Economic Development and Cultural Change, 34(April 1986), pp. 607-640.
- Diaz-Alejandro, Carlos F; Latin American Debt: I don't think we are in Kansas Anymore, Washington Bookings Papers on Economic Activity No. 2, 1984
- Dooley, Michael, "Country-Specific Risk Premiums, Capital Flight, and Net Investment Income Payments in Selected Development Countries," Washington, International Monetary Fund, Departmental Memorandum DM/ 86/17, Mar. 11, 1986.
- Dooley, Michael, W. Helkie R. Tryon and J. Underwood "An Analysis of External Debt Positions of Eight Developing Countries through 1990. Journal of Development Economics 21 (May 1986), pp. 283-318.
- Dornbusch, Rudiger: External Debt Budget
 Deficits and Disequilibrium Exchange
 Rates in G.W. Smith and J. T.
 Cudldington eds. International Debt and
 they Developing countries, *The World Bank* (1985).

- Driskkill, Robert, and Stephen McCafferty, "Speculation, Rational Expectations, and Stability of the Foreign Exchange Market," Journal of International Economics, 10 (February 1980), pp. 91-102.
- The Economist, "Latin American: The Other Side of Debt" (June 23, 1984).
- Edwards, Sebastian, "LDC Foreign Borrowing and Default Risk: An Empirical Investigation, 1975-80," American Economic Review, 74 (September 1984), pp. 726-734.
- Friedman. Milton, "The Case for Flexible Exchange Rates (Essays in Positive Economics (University of Chicago Press 1953).
- Gulati, Sunil K., "Capital Flight through FakedTrade Invoices: 1977-83, "New York, Columbia University, May 11, 1985, unpublished manuscript
- Hanson, James, and Jaime de Melo, "External Shocks, Financial Reforms and Stabilization Attempts in Uruguay: 1974-1983, "World Development, 13 (August 1985), pp. 917-939.
- Harberger, Arnold C: International Dent and the Developing Countries. *The World Bank* (1985).
- John T. Cuddington (Nov.) 1984. Extension of "Capital" flight and the Growth in External Debt with Yoon Je Cho, and Monrad Ezzine.
- Johnson Lewis, "Inflationary Expectations and Monetary Equilibrium (American Economic Review (1976).
- Kanitz, Stephen Charles, "Renegotiating the Brazilian Debt," Wall Street Journal (Sept. 21, 1984), p. 45.
- Kennedy, Peter, A Guide to Econometrics,

- Cambridge, Mass., MIT Press, 1979.
- Khan, Mohsin S., and Nadeem Ul Haque, "Foreign Borrowing and Capital Flight: A Formal Analysis, "IMF Staff Papers, 32 (December 1985), pp. 606-628.
- Kohlhagen, Steven W., "The Identification of Destabilizing Foreign Exchange Speculation," Journal of International Economics, 9 (August 1979), pp. 321-340.
- Krugman, Paul, "A Model of Balance of Payments Crises," Journal of Money, Credit, and Banking, 11 (August 1979), pp. 311-325.
- Morgan Guaranty Trust Co; "Capital flight" World Financial Markets (March 1986).
- Nogues, Julio, "The Nature of Argentina's Economic Policy Reform during 1976-81," The World Bank, 1984, processed.
- Purvis, Douglas D., "Dynamic Models of Portfolio Behaviour: More on Pitfalls in Financial Model Building," American Economic Review, 68 (June 1978), pp. 403-409.
- Stephen Charles Kanitz; "Renegotiating the Brazilian Debt, Wall Street Journal (Sept. 21, 1984).

TABLE 1 ESTIMATES OF CAPITAL FLIGHT

(in millions of C 5 dollars:										
	1971	1975	1976	1977	1975	1979	1950	1951	1952	Total
Argentina										
Capital Hight	36	- 163	266	-615	1,497	- 1.693	2,301	5,650	4,975	15.255
Change in foreign debt	1.1(4)	400	(A)	1,500	3,100	6.7(+)	9,000	5,400	1,000	32.6(A)
Capital fheld Change in debt (%)	3	- 41	66	- 41	45	- 25	26	92	435	47
Brazil										
Capital flight	6-1	427	- 496	618	- 299	-1.227	351 ·	390	379	206
Change in foreign debt	6,900	6,G(X)	7.500	5.200	16,500	\$ 600	11,200	12,900	12,560	93,500
Capital thight change in debt (%	1	5	-6	8	- 2	- 14	3	3	3	D
Chile										
Capital flight	47	- 25	- 252	- 503	- 250	- 416	- 452	- 899	792	- 1.955
Change in fareign debt	4(4)	1,500	- 200	0	1.700	2,100	3,2(*)	4,700	2,000	15,400
Capital flight change in debt (%)	32	- 2	126		- 15	- 20	- 15	- 19	40	- 13
Korea										
Capital flight	 69	- 453	-112	12	1,524	- 516	-1,607	494	1,255	558
Change in foreign debt	1,700	2,700	2,000	2,400	4,300	5,300	5,500	3,900	3,500	33,600
Capital flight/change in debt (%)	- 1	- 17	- 6	0	35	- 10	- 29	5	34	2
Mexico.										
Capital flight	1.272	1,285	3,331	917	517	1,447	4,826	11,510	7,555	32,662
Change in foreign debt	4,500	5,600	6,600	6,600	4,300	5.500	16,400	22,700	7,100	52,600
Capital flight/change in debt (%)	25	23	54)	14	12	16	29	51	106	-10

Pero Capital inght Change in foreign debt Capital fiight/change in debt [8]	72 1,100 7	526 2,400 34	329 1,300 25	112 1.000 11	- 31 800 - 6	13 60 2	157 600 31	-465 900 -52	1 iS 2 000 7	1,167 10,700 11
Uroguay Capital fiight Change in foreign debt Capital flight/change in debt (%)	82 30 274	38 122 31	13 50 26	-42 114 -37	- 159 - 17 (932)	5 268 2	- 90 422 - 21	184 357 48	1.161 805 141	1, 193 2, 181 55
Venezuela Capital dight Change in foreign debi Capital flight/change in debit (%)	522 - 1 (4x) - 27	135 600 26	- 401 - 1,2(4) - 33	1.736 6.409 27	= 943 5 540 = 17	-2 351 5 500 -28	3,366 3,200 105	5,013 2,500 179	7,464 3,160 211	10,776 27,600 40

NOTE 1 "Change in foreign debt" figures are from Douley et al. (1956) except in the case of Uruguay, where figures are obtained by cumulating relevant capital inflows using Balance of Payments Yearhook.

NOTE 2: As described in text, capital-flight estimates are calculated in slightly different ways across countries, depending on the information contained in the descriptive factorists in Balance of Payments Yearhook. The precise definitions are as follows

Argentina Net errors and omissions plus "short term, other sectors."

Brazil: Net errors and omissions.

mazii: Net errors and omissions plus "short term, other sectors."
Korea. Net errors and omissions plus "short term, other sectors."
Mexico. Net errors and omissions plus "short term, other sectors, other assets."
Pern Net errors and omissions plus "short term, other sectors, other assets."

Uruguay Net errors and omissions.

Venezuela Net errors and omissions plus "short term, other sectors" plus "other bonds assets "

APPENDIX

CAPITAL FLIGHT EXECUTED BY UNDERINVOICING EXPORTS

Underinvoicing exports is an important mechanism for evading capital controls in many developing countries. Gulati (1985) has recently compared the exports reported by individual developing countries with imports from each country reported by its industrial-country trading partners. Gulati's paper presents the average extent of underinvoicing for the 1977-83 period, but he has kindly provided these year-by-year percentages of reported exports for

_	1977	1978	1979	1000				
Argentina	20.6			1980	1931	1952	1983	Average
Brazi]	11.2	24.2 9.0	18.9	17.4	19.2	21.0	19.5	19.6
Chile	14.0	23.5	17.1 14.8	14.5	11.4	15.9	9.8	19.6
Korea Mexico	2.0	-0.9	-0.7	13.8 0.5	9.6	12.0	6.5	12.5
Peru	77.9	26.3	42.4	27.6	-3.5 26.9	-6.1	- 5.1	-2.5
Uruguay	20.8 15.0	13.6	8.9	14.4	18.1	26.5 10.0	33.8	33 6
Venezuela	7.6	13.5 6.1	13.7	14.3	19.5	64.1	9.6 52.6	12.9
No.			0.7	4.2	9.5	8.9	9.4	27.5 6.4

NOTE: Because exports are recorded f.o.b. and imports CIF, a difference of approximately 10 Percent is to be expected. Thus, only magnitudes above 10 percent should be regarded as capital

SOURCE: Gulati (1985 and private correspondence).