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**Mini-Dissertation in part fulfilment of the
requirements for a Masters Degree.**

**"A survey of the critical factors affecting
CAPITAL ACCOUNT LIBERALISATION."**

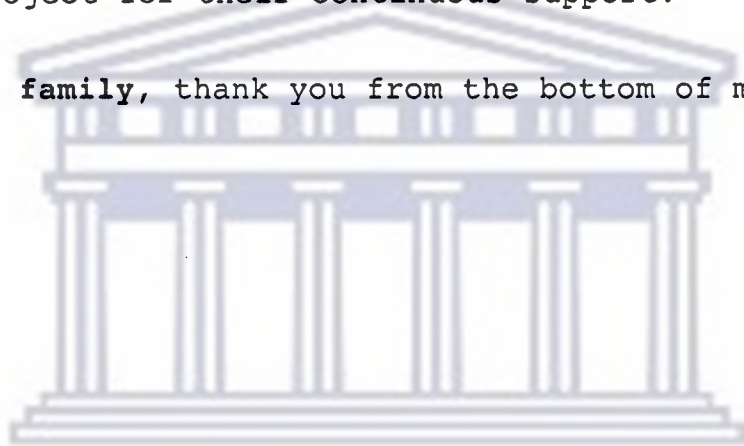
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SECTION 1.

INTRODUCTION

The increase in trade, the increasing internationalisation of production and the improvements in communications, coupled with legalisation of foreign currency instruments have led to a liberalisation of the capital account in a growing number of countries. In line with this trend towards greater reliance on the open market, many governments of developing countries too, have considered the possibility of fully opening their capital accounts. In South Africa the issue was raised again in October 1991 when the financial rand discount dropped to 5.5 percent. This paper will attempt to provide a background to capital account liberalisation in general, and South Africa in particular, by means of a literature survey.

Krueger(1986,p16) defines liberalisation as:

" .. any policy action that reduces the restrictiveness of controls - either their removal, or the replacement of a more restrictive set of controls with a less restrictive one."

More specifically, Hanson(1992,p1) defines a liberalised or open capital account as:

"...one in which individuals and firms can access international financial markets freely, not just one in which the government intermediates international capital flows to balance differences in private savings and investment."

Hanson's definition will be adopted for the purposes of this paper.

During the 1970's attempts were made to liberalise economies of various developing countries, amongst others Argentina, Chile and Uruguay.

The liberalisation policies these countries followed resulted in:

- (1) eliminating or substantially reducing restrictions;

-
- (2) developing domestic capital markets;
 - (3) lifting restrictions on international capital mobility.

History shows that these reform packages have failed and the reform measures were eventually reversed. More recently however, attempts at liberalisation in the countries have been successful.

This paper begins with a brief summary of the economic impacts of capital account liberalisation, paying special attention to the issue of loss of policy effectiveness. It also draws attention, following Hanson(1992), to the new theories of capital flows based on international portfolio diversification of risky assets, which raises the possibility of benefits from capital account liberalisation not linked to higher rates of return on investment. Section Three reviews what is now conventional wisdom on the desirable sequencing of economic liberalisation, so as to provide a background for the programmes needed to liberalise the capital account. Section Four examines the capital controls in South Africa, with specific emphasis on the financial rand and its insulation properties. Finally, section five investigates the implications for South Africa of the liberalisation of the capital controls discussed in section four, with special emphasis on the composition of foreign debt, the fiscal deficit, and interest rates.

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SECTION TWO.

2. THE ECONOMIC IMPACTS OF CAPITAL ACCOUNT LIBERALISATION

2.1) Orthodox Theories

The Traditional Analysis

The traditional analysis as exemplified by Hanson(1992) concerning capital account liberalisation focuses on the positive welfare impacts when allowing foreigners to own domestic capital. This analysis starts with autarky then moves to the welfare implications of free trade. In autarky, it is assumed that the rate of return domestically is higher than the rate achieved internationally. According to the traditional analysis once the capital account is opened the country concerned would experience capital inflows due to the higher interest rates. This influx of capital will increase the domestic capital stock in the home country. As Hanson(1992), notes in the final equilibrium GDP will be higher due to the larger capital stock. The analysis assumes that foreign investors bring in capital goods and utilise the additional production, thereby resolving the transfer problem and leaving domestic labourers better-off because of higher demand for their labour. GNP will increase since domestic labourers gain from both domestic and foreign owners of capital.

The traditional analysis however, seems more appropriate to liberalising the rules governing direct foreign investment than the liberalising of financial flows or the capital account as a whole. According to this analysis financial flows could only be welfare-improving if they create capital stock.

Intertemporal Trade

The dismantling of capital controls is generally presumed to generate positive economic impacts through increased opportunities for intertemporal trade. According to Hanson(1992), the standard Hecksher-Ohlin model ignores differences in demand patterns by rather focusing on the pattern of trade based on the abundance of factors. Intertemporal decisions only enter to the extent that differences in time explains changes in savings and in factor proportions. Deardoriff and Hanson(1978) showed via a two country model the linkage between saving rates, factor proportions and the pattern of trade over time. Within a country forward contracts and storage can to some degree smooth out seasonality, intertemporally. In a two country trading situation (i.e trading in goods and financial claims) where seasonally opposite patterns of production exist, consumption can easily be smoothed out and at a lower cost. This is the foundation of the intertemporal trade theory.

It has been argued that gains from intertemporal trade occur because time and liquidity preferences differ from country to country. According to Fisher and Reisen(1992) an ageing economy would tend to post excess saving and hence a surplus in the current account which they will run down later (when they are old) in the form of net inflows. A country which is forced to endure a bad harvest could gain from intertemporal trade by running a current account deficit so as to smooth consumption over time. In the same vein countries in opposite hemispheres would gain by trading in perishable commodities. Country A, for example in the Northern Hemisphere could supply Country B in the Southern Hemisphere with commodities during its (i.e Country's A) summer and vice vera, when Country B becomes provider during its summer. Instead of paying for import by export proceeds Countries A and B could agree to a situation where Country B's producers could build up their claims on Country A's producers. These claims could be settled later during the harvest time of Country A. Yearly the capital and current accounts each balance, but in each semester the current and capital account will be equal but with opposite

balances.

Theoretically the above example is extremely plausible although, it is of limited empirical applicability. For example, Chile's exports of their temperate zone fruits and vegetables are found in most European markets. The reverse trade, however does not always take place.

The weakness of intertemporal trade theories is that it does not argue for a policy for fully opening the capital account since it simply suggests that through foreign borrowing and lending a country could reduce the costs of intertemporal differences in consumption and production.

2.2) Loss of Macro-Economic Autonomy

Fiscal Policy Impacts: Tax Evasion, Taxation and Risk of Taxation

It is easier to avoid tax when the capital account is opened or fully liberalised, since domestic financial assets can easily be switched for international financial assets. In a closed as well as an open economy, the evasion of tax effectively contributes to the erosion of the domestic tax base and this may generate distortions. For example, a government like South Africa may wish to borrow funds abroad so as to invest in social-infrastructure projects such as highways or a hydroelectric project. These projects are high in social value and cannot typically be financed by direct user charges. The government may decide however, to finance the project through general tax increases. Although all residents in this country will share the benefit of the project, individuals can escape the taxes levied to pay for them by holding much of their increased wealth abroad. Cuddington(1986,p13) in this context notes...

" Because the governments's inability to tax this wealth is limited, it may encounter debt-servicing problems even when it borrows to undertake socially beneficial public-investment projects."

Cuddington's observation is extremely important especially when considering the impact of capital liberalisation on foreign debt. (This issue is discussed in section 2.4 below). It is possible to lower the impact of various taxes within a closed economy, hereby resources can be switched domestically (within the borders of a specific country) to those areas of production and consumption with lower levels of taxation.

Taxation and the risk of taxation could be important when explaining the paradox that capital outflows occur from high return countries as opposed to countries with lower rates of return. Investors realise that high taxes or potential higher taxes could easily off-set gains made from investing in higher return to capital and financial assets in developing countries. Tax concessions on foreign capital are used so as to attract foreign investment, it is also used to ensure that foreign capital finds it more attractive to stay in a particular country. Hanson(1992) notes that tax strategies used to attract foreign investment are not only implemented by developing countries. He noted that developed countries also implemented these tax strategies, for example the United States which since the 1970's has not taxed the interest earned by foreigners when investing in savings accounts.

The risk of potential taxation is also an important contributor to "capital flight". In the minds of potential investors, potential higher taxation means that domestic financial assets should carry a risk premium equivalent to assets held by the rest of the world. As history has shown there is also a risk attached to lending to developing countries with the fear that they could default on their obligations. Hanson(1992) notes that there is no one risk premium but a multitude of risk premia. Risk premia could be associated with differences in forms of taxation, different rates of inflation, the exchange rate, and domestic interest rates. The number and differences in risk premia go a long way in explaining the imperfect substitutability between financial assets amongst countries.

Taxation of financial assets can take many forms such as a simple income tax or an inflationary tax. An inflation tax occurs on certain financial instruments that have zero or fixed interest rates. Banks are usually given a reserve requirement in relation to the amount of deposits that they have in their custody. Reserve requirements that are unremunerated or carry a fixed interest rate have an inflation tax imposed on them. This inflation tax is however implicitly imposed on the depositors or borrowers investing in these banks. Since the depositor or lender may have to endure the effects of this tax an open capital account could result in both capital outflows and capital inflows. With an open capital account, the bank will have to remain competitive by ensuring that domestic deposit rates are equal to international deposit rates. In this case, the impact of higher than international costs of reserve requirements would be solely felt by lending rates since lending rates will increase. Consequently since lending rates have increased, foreign banks would tend to increase their direct lending from home offices, thereby generating a net inflow of capital. Also if firms could borrow internationally they would do so thereby encouraging even more capital inflows.

Chile's tax system entails the residence principle of taxation to domestic residents in that all interest or other income earned from ownership of foreign assets is liable for taxation. Enforcing a tax such as this will always be problematic since no tax information sharing agreements with major industrialised countries exist. In order to limit the erosion of the domestic tax base a country may opt for a policy that restricts all capital outflows. The abolition of capital outflow controls would lead to tax evasion and the raising of the domestic interest rate. The possibility of tax sharing agreements may not be as hopeless as currently seems to be generally assumed. The United States's treasury department has officially entered into such an agreement with Mexico and has stated it is willing to sign similar agreements with other countries. These agreements will be extended soon when the OECD countries sign multi-lateral agreements to the same effect. If these agreements materialise it will largely

dispose of the objection to capital mobility arising from the opportunities it creates for tax evasion¹.

The understanding of capital controls and its impact on tax collection is crucial. If done effectively as well as efficiently a country may derive more benefits by having capital controls than a country with an open capital account. By keeping the capital account closed a country can stop the capital outflow as a result of higher or potentially higher taxes, and if the negative aspects of capital controls on capital inflows can be minimised then indeed the costs of capital controls can be partially off-set. The costs of liberalising the capital account in this situation may indeed be high and may require new taxation policies since the distributional implications of being able to tax capital more heavily should be weighed against the implications of an open capital account.

Impacts on the Effectiveness of Monetary Policies and on Industrial Policies.

Speculative capital outflows are most likely to have destabilising impacts on the interest rates and exchange rates and may reduce monetary control, especially in countries with poor financial infrastructures. When a country experiences large capital outflows these movements cause large and rapid adjustments in interest rates and exchange rates. These large outflows may even cause considerable exchange rate "overshooting". In response to these destabilising effects the governments may have to exhaust their foreign reserves and contract their money supply.

¹ see Williamson (1991,p4)

Capital controls can help the monetary authorities target monetary aggregates, and at the same time, the exchange rate more easily. With increasing openness of the capital account, the effectiveness of monetary policy depends critically on the degree to which a flexible exchange rate is maintained. A country with a fully floating exchange rate system can control the nominal money supply at any level desired by the central bank, and the balance of payments adjustment is achieved mainly through exchange rate movements. According to Fisher and Reisen(1992,p8), capital controls are often used to preserve monetary autonomy. If a country however adopts a fixed nominal exchange rate and the capital account is open, their monetary independence is lost. In the classic case of perfect capital mobility and a fixed exchange rate it is well know that monetary authorities lose their ability to influence domestic economic conditions. However capital mobility is never perfect and so monetary policy is not totally lost. As Williamson(1991,p4) notes,

" ...so long as capital mobility is never less than perfect, a restrictive (or expansionary) monetary policy can still be used to control (stimulate) demand, but at a cost that is greater the higher the degree of capital mobility."

The Chilean experience during its restraining demand policy in 1990 serves as a good example of the above statement. Chile's demand restraint policy did in due course work, however at high cost to the central bank. The central bank issued a large volume of long-term, high-interest bonds in exchange for funds on which the central bank could earn a much lower interest rate. Chile's exchange rate is not entirely fixed since it operates within a wide band which gives a certain amount of latitude for the exchange rate to vary in response of monetary policy.

Fischer and Reisen(1992) note that economists in favour of abolishing exchange controls argue that such policy independence is actually undesirable: inflationary policies become untenable with free capital flows because capital flows abroad and official exchange reserves run dry. The result of this situation of overvaluation is that greater discipline is needed in both

monetary and fiscal areas. External imbalances and capital flight can be regarded as economic evidence indicating the need for a policy change. Capital controls can also place pressure on monetary authorities when they are used to preserve an undervalued currency. By preserving an undervalued currency one will expect to find surpluses on the current account and the country concerned will experience growth in their reserves which are likely to cause policy problems. In this case controls would be imposed to prevent excessive inflows.

The opening of the capital account may limit the effectiveness of monetary policy, but it may enhance the effectiveness of certain aspects of fiscal policy. The liberalising of the capital account may ensure that fiscal policy becomes more effective since "crowding out" is reduced. However as noted earlier the effectiveness of fiscal policy may also be reduced through loss of tax revenue. If the latter result is negligible then fiscal policy becomes an alternative to monetary policy when looking at instruments to stem short term fluctuations in aggregate demand. The costs of the loss of monetary policy effectiveness should be weighed against the benefits of the increased fiscal policy effectiveness so as to ensure that the most productive economic policy is chosen.

A close link exist between capital controls and industrial policy in most industrialised countries which is often implemented through government credit allocation. One expects that as these countries develop and adopt more advanced technology the existence of capital controls become less important. In this case Fischer and Reisen(1992,p9) note...

" As countries move up the product cycle towards more complex and sophisticated goods, governments are less likely to pick winners better than the market and more likely to saddle the domestic banking system with non-performing loans."

Hanson(1992) contends that it is difficult to conclude whether the impact of opening the capital account on the effectiveness of policy instruments represents a cost or a benefit towards society. He regards controls as policies that are ineffective and may be another reason for dismantling them. With growing trade integration and the existence of multinationals it has become easier to circumvent existing controls. The existence of capital controls might prove to be ineffective yet if uncertainty exist about the possibility of tighter controls in the future then capital inflows may be stemmed and outflows may increase to an extent not envisaged by authorities.

2.3) Instability

Hanson(1992) suggests that the dismantling of capital controls will indeed create greater instability in essential macroeconomic variables. The consequences of a liberalised capital account could entail the dynamic flows of capital which could not only off-set monetary policy but it could also adversely affect the nominal and real exchange rate, interest rates and output. The experience of the Southern Cone countries showed that the liberalisation of the capital account could result in capital flight, generalised loan defaults, banking crises, falling output and massive unemployment².

The key issue concerning instability is whether the main source of domestic fluctuations in savings and investment is external or internal. If under a fixed exchange rate, domestic fluctuations are caused by variations in savings and investment in the rest of the world or variations in the rest of the world's perception of country risk, then it will be inadvisable to open the capital account. If domestic fluctuations are caused by the instabilities of domestic policies, then international capital flows may reduce the fluctuations.

² see Fischer and Reisen (1992, p9)

The cost of abolishing capital controls lie therefore in the fear that the flow of capital may adjust perversely to the state of the economy and may lead to cyclical instability. Williamson(1991) notes that the Chilean experience provides a clear illustration of this point. In Chile there was a fear that the fall in the copper price would erode confidence and so it prompted a capital outflow that accentuated the recessionary impact of the low price of copper.

2.4) Impacts on Foreign Borrowing and Foreign Debt

Simultaneous Capital Flows

A major problem when opening the capital account, is that, although liberalisation may lead to net inflows, the aggregate flows may hide the changing composition of inflows and outflows, which can at a later stage lead to potential debt problems. The phenomenon of simultaneous borrowing and investing in international capital markets has been analysed, inter alia, by Khan and Ul Haque(1985). One feature of the debt crises in Latin America was the co-existence of two-way capital flows. In particular whilst public sector borrowing was flowing in, private savings was flowing out as residents switched their domestic portfolios for international portfolios. The Latin American countries were therefore simultaneously borrowing and investing in international capital markets. Ize and Ortiz(1987,p311) notes ...

" Since domestic public debt was generally quite substantial, a large proportion of these domestic assets were government obligations. Thus, while domestic creditors were reducing their exposure to public debt, foreign creditors were increasing theirs."

The phenomenon of simultaneous foreign borrowing and investing at home and abroad cannot be rationalized within the context of theoretical debt models. Khan and Ul Haque(1985) presented a formal analysis that investigated the concept of simultaneous capital flows by utilising a standard intertemporal optimising model. In the analysis they assumed that government borrowing in

external markets is connected to private sector behaviour since the fiscal imbalances of the government that necessitate foreign financing often reflect the overall imbalances in the economy. This is contrary to the investigation undertaken by Dornbusch(1984), who argued that there are actually two separate agents i.e the government and the private sector engaging in simultaneous foreign borrowing and investing at home and abroad. Khan and Ul Haque also introduced uncertainty into their analysis and assumed that the domestic and external environments are characterized by different sources of uncertainty. In the analysis, risk to domestic investors is loosely associated with the term "expropriation risk" which occurs when the domestic investors face the possibility that their assets may be expropriated by the government, whereas the risk on similar assets abroad is negligible. Khan and Ul Haque(1985,p608) note that ...

" ..,strictly speaking, expropriation risk can be defined as the probability of nationalisation, it is possible to use the term to cover other factors that would tend to reduce potential returns."

Empirical evidence presented by Khan and Ul Haque(1985) shows that the rapid rise in the foreign debt of many developing countries has financed capital flight rather than productive investment. Major debtor countries show a strong tendency to build up foreign debt whilst experiencing massive capital outflows. When foreign perceptions change, then foreign capital flows out and there are no reverse flows, leaving the country with a debt crisis.

Ize and Ortiz(1987,p312) also recognised risk as being a rational way in which to justify the seemingly contradictory capital flows. They argue that the perceived risk in developing countries is higher than in developed countries. Developed countries have the advantages of a stable political climate and established legal and institutional infrastructures. The characteristics of developing countries differ substantially where they are politically unstable and their infrastructures are poorly developed. Residents in developing countries could therefore expect risk-free returns on their investments in developed countries, but they could expect an uncertain return (although higher to compensate for the risk)

if they decide to invest domestically. Given this scenario domestic investors are behaving in a rational manner when opting to invest their domestic savings in international markets.

Marginal Costs of Foreign Borrowing

A negative impact could occur when allowing private investors to borrow overseas, since their actions could drive up the marginal costs of foreign borrowing. When capital flight occurs the disadvantaged government cannot tax the assets held abroad and this may in effect lead to an increase in the fiscal deficit. To accommodate this decrease in government revenue the government concerned may decide to borrow from abroad. This will increase their public debt but more importantly the action of the investors proceeding with capital flight may indirectly lead to higher interest rates on external loans. The reasoning behind this is that the departed capital funds could have been used as collateral. If a government cannot tax the foreign assets or incomes of its citizens, international lenders might reasonably be expected not to regard those assets as collateral, broadly defined, for their own loans to the government, and borrowing costs would depend on a country's gross indebtedness rather than net indebtedness (public and private debt minus official reserves and net private-sector assets abroad). Since the tax base is eroded ensuring reduced collateral the marginal costs of foreign borrowing will increase.

Cuddington(1986,p15) notes ..." The interest earned on assets held abroad does not increase with the amount invested, but the interest rate paid on foreign borrowing increases with the amount borrowed. " Private investors therefore, cannot drive up interest rates in overseas markets by investing further amounts. However, the amount of loans that the government would want to undertake is positively correlated to the interest they would be charged. Private investors could therefore inflict a loss on the country as a whole, because they have no reason to internalise the negative effects of their actions on the government's borrowing costs. A policy option highlighted in this regard by

Cuddington(1986) is to tax capital outflows which would eliminate the discrepancy between social and private rates of return.

2.5) Portfolio Diversification and Risk

The element of risk delinks the welfare implications of an open capital account from its effects on investments hereby allowing one to shift our studies away from the realm of the traditional analysis. Every investor would like to have the ability to diversify his portfolio across borders so as to spread the risk. This diversity in portfolios of assets and liabilities allows domestic borrowers to seek lower funding costs and it enables domestic savers to find the better prospects for higher yields. The benefits of competition may indeed overshadow the static gains from financial integration. Additional competition may lead to the breaking-up of oligopolistic market structures which will further intensify competition amongst financial intermediaries. The result of this competition will squeeze intermediation margins which in turn will enable borrowers to find lower funding costs and it will enable lenders to seek the best possible returns.

Further advantages include the lowering of transaction costs due to the importation of more advanced technology from the more developed countries. Due to greater liquidity one might also observe that the quality of financial assets will improve. "Homogenous pricing as well as better tailoring in terms of liquidity and special purpose instruments takes place through separation, hedging and risk spreading."Fisher and Reisen(1992,p8).

The theory of portfolio diversification and risk contradicts the traditional analysis which assumes that developing countries experience these capital outflows because their returns on capital are lower than their international competitors. However, as noted by Hanson(1992) the rate of return is not always the reason for capital outflows since developing countries are generally thought to have lower levels of capital per worker which implies should

imply higher rates of return in developing countries in the absence of capital movements. Investors face an additional country risk when investing in developing countries, and it goes without saying that the more diverse the investor's portfolio the more protected his overall investments become.

A liberalised capital account would therefore generate benefits for residents who are now permitted to gain from portfolio diversification. As Williamson(1992) notes, despite the diversification of the Chilean economy over the last decade, a Chilean investor whose portfolio is confined to Chilean assets runs substantially more risk than one who can invest in an international portfolio. This source of gain is of utmost importance to institutions such as pension funds. In contrast, foreign investors ought to be willing to invest a small part of their portfolio in Chilean assets if offered at a modest premium on their expected rate of return, provided at least that the only risks they face are economic risks inherent in Chilean investments. Hence, potential exists for mutual gain through two-way investment in that both parties have diversified portfolios, with the Chileans able to gain greater security for a modest cost in lower expected returns, and foreign investors gaining a greater expected yield for a modest cost in terms of less security.

2.6) Savings Availability, Irreversible Capital Flows and Administrative Economies.

The absence of capital controls creates the fear that domestic investment will decline as domestic savings are placed abroad instead of invested domestically, and in consequence growth will decline. In particular, there exists a fear that long-term investments such as pension funds will be placed abroad. According to Williamson(1992), experience with capital flight has indicated that this cost should be taken seriously.

The traditional analysis assumes that foreign capital will flow into a country that liberalises its capital account due to

interest rate differentials. Developing countries have however argued that they have closed capital accounts so that they can ensure that domestic savings remain in their respective countries. Williamson(1991,p3) notes..."Domestic savings will be placed abroad instead of invested at home, and in consequence growth will be lower." There is a reluctance to risk losing the limited stock of domestic long-term funds such as pension funds available for long-term investment. Cuddington(1980) argues that this situation should be taken seriously especially in the light of irreversible capital outflows. When portfolio holders flee with their funds abroad it is difficult for the government concerned to rebuild a reputation for monetary, financial and political stability so as to attract these funds back to its origin. Empirical evidence suggests that reversals of capital can occur as in the case of Mexico and more recently Argentina. Mexico experienced periods of reversals suggesting that certain incentives can reduce or reverse capital flight to a certain extent.

While it is often argued that capital controls are so porous that their removal will do very little to increase the export of capital, Williamson notes that the mere fact that it is always possible for wealth owners to place their funds abroad retail, at a premium, through the parallel market does not imply that controls that prevent institutions exporting capital wholesale, at the official rate, are ineffective in limiting the export of capital. It is certainly true as in the case of South Africa that capital controls can prevent the placement abroad of long-term institutional savings managed by the pension funds. Capital controls may also slow the process of capital flight giving the authorities time to re-act.

A benefit, although very small, is the savings in public expenditure that accrues when dismantling capital controls. Administrative costs are lower when capital controls are abolished. In Britain the abolition of capital controls lead to the release of about one quarter of the staff of the Bank of England, plus those who formally had to negotiate with them in the private sector.

SECTION 3.

3. THE ORDER OF LIBERALISATION

3.1) Introduction

The previous section focused on some of the effects of capital account liberalisation. This section addresses the question of how a programme of liberalisation should proceed.

An extensive body of literature focuses on the question of the order of liberalisation. The order of liberalisation deals with the question of which market (i.e current or capital account) should be liberalised first. Interest in this question was particularly aroused by the different paths of liberalisation followed by Chile, Argentina and Uruguay during the latter half of the 1970s. Chile as noted by Edwards(1987) was characterised as having opened the current account first whilst Argentina and Uruguay liberalised their capital account first. The main objective of these liberalisation attempts were to transform countries into open export-oriented economies.

A decade after these liberalisation strategies were implemented, evidence indicates that they were to a large extent failures. In all three countries tariffs were raised and capital controls re-imposed. Severe financial crises resulted in the collapse of and virtual nationalisation of the banking sector. There is no clear agreement on the main causes of the failure of these reform strategies. A particularly serious problem was the timing of the reforms, in that, they were being implemented at the same time as major stabilisation programs aimed at combatting inflation up to 600 percent. According to Edwards(1984), one can generally assume that the failure of these reforms had more to do with the macro-economic policies that were being adopted alongside them than the type of liberalisation itself.

Edwards(1984) maintains that a number of issues related to the dynamics of liberalisation are not clearly understood. The most important of these issues relate to the sequencing and speed of economic liberalisation. In a utopian world without externalities and distortions the problems of sequencing and speed will not exist, and therefore, authorities would not hesitate to simultaneously liberalise both current and capital account. In the real world, however these problems are more complex. With respect to speed Leamer(1980) argues that the following should be taken into account: efficiency gains, income distribution, and the credibility and feasibility of the reforms. The question of sequencing has both micro-economic and macro-economic implications. On the macro-economic side different liberalisation sequences will have different implications on the paths of various critical variables, including the real exchange rate, aggregate output and unemployment.

It has generally been recognised that opening the economy to the rest of the world is an integral part of any economic reform. However, determining the appropriate order of liberalisation is not easy since there exist no theorems or recipes. This section therefore investigates the preconditions for any liberalisation attempt. This section attempts to address the following questions ;

1. Should domestic interest rates be raised before, after, or at the same time capital controls are lifted ?
2. Should the trade account be opened up before the capital account ?

3.2) The Order of Liberalisation: Domestic Interest Rates and the Real Exchange Rate

Major liberalisation attempts such as those in the Southern Cone have been implemented in very unstable macro-economic environments which as Edwards(1984) suggests have led to the failure of reform packages. There is also a growing belief that the effect of opening the capital account on the real exchange rate also contributed to the failure of the liberalisation attempts. According to Edwards(1987), one of the few aspects of reform sequencing that is well established and almost universally accepted, pertains to the liberalisation of the domestic capital market and the capital account of the balance of payments. In this respect it becomes clear that impediments to capital movements should not be relaxed until the domestic financial sector is fully liberalised. If the capital account is liberalised when interest rates are fixed at arbitrarily low or negative levels, one would naturally expect massive capital outflows. If the domestic interest rate is below the world interest rate (appropriately corrected by expected devaluation), financial capital will tend to leave the country. Capital flight has indeed resulted from significant differences between the world and domestic interest rates. In Argentina, for example, in the 1980's capital flight occurred due to high expectations of a real depreciation. Thus, the real interest rate was perceived to be well below the world's interest rate.

Countries with high inflation and high fiscal deficits cannot undertake to liberalise the domestic interest rate until the fiscal deficit has been addressed. If a large fiscal deficit is being financed through an inflation tax it necessitates that foreign reserve requirements on banks be kept high and interest on deposits be kept low. This strategy is essential so as to ensure that the base on which the inflation tax is collected (i.e the stock of base money) is not eroded. If the fiscal deficit is not controlled before domestic interest rates are liberalised then

the base of the inflation tax is reduced. This would mean that the rate of the inflation tax will be increased so that the government could collect the same amount of resources. The implication of such a policy would be severe increases in inflation which could become difficult to control without a major monetary reform policy.

Argentina in the late 1970's and early 1980's liberalised its capital account without undertaking a policy to reduce the fiscal deficit. The result of this decision was devastating for Argentina's economy. Argentina's attempt to control the inflation rate failed miserably. The reduction in the tax base resulted in a higher inflation rates so as to finance the deficit. Moreover, during this period Argentina had to resort to foreign borrowing to finance its budget deficit. Argentina's inability to control its fiscal deficit led to the collapse of its liberalisation and stabilisation attempts.

Different sequencing of liberalisation will have different effects on various macro-economic variables including the real exchange rate. As mentioned a number of countries have followed different liberalisation sequences, Argentina and Uruguay in the 1970's opened their current account first whilst countries such as Chile and the Republic of Korea reduced barriers to international trade before lifting restrictions on the capital account.

Opening of the capital account will generate important financial flows. In theory when a country has controlled its fiscal deficit and liberalised its domestic capital market that country is likely to experience some capital inflows which result from the perceived differentials between the domestic and foreign returns to capital. These inflows could have adverse effects on the economy if inappropriate policies are followed. For example, under a system of fixed exchange rates these inflows may be monetised which will result in inflation and a real appreciation of the exchange rate.

If a country has a flexible market related system of exchange rates these inflows of foreign funds will result in the appreciation of the nominal and real exchange rate. The opening of the capital account, in this case, will generate a real appreciation of the domestic currency and, since financial markets adjust faster than that of the goods market resulting in an abrupt real appreciation. It is essential to note that whilst opening of the capital account may generate a real appreciation, for a successful trade liberalisation a real devaluation of the domestic currency is required. Hanson(1992,p23) notes in this regard...

" Current account liberalisation typically requires a real depreciation of the exchange rate, to offset the negative effect on the balance of payments of cuts in the average level of protection. In contrast, capital account liberalisation tends to produce a real appreciation of the exchange rate."

The depreciation required for the current account liberalisation and the appreciation caused by opening the capital account therefore represent conflicting pressures on the real exchange rate which could prove costly during any liberalisation process. A real devaluation of the exchange rate will expand the exportables sector when the old protective relative price structure is replaced by the new. If a country decides to preclude the devaluation it runs the risk of not having a smooth transition into world markets. The real appreciation generated by the opening of the capital account will pressurize domestic profitability in the tradeable goods sector at the time when it is undergoing costly adjustments. Consequently, as Edwards(1987) suggests, the capital and current account should not be opened simultaneously. Moreover he suggests that in the transition period after the trade account has been liberalised, capital flows should be strictly controlled. Edwards's policy proposal is reinforced by the fact that, in general, the opening of the capital account may stimulate an overshooting of an inflow of capital which will result in a real appreciation in the short-term. The overshooting of the inflow of capital will only be temporary since as time progresses capital inflows will decline to new long-run

equilibrium levels. The adverse effects of large capital inflows were noted as early as 1973 by McKinnon(p160) who argued that ...

"...unusually large inflows of foreign capital...inhibit the exchange rate to depreciate sufficiently...Previously protected competing industries, which face a significant adjustment problem, could have their difficulties magnified...Hence the capital inflow could trigger a decline in overall domestic output..."

McKinnon went further to suggest that abnormal inflows or injections of capital should be deliberately avoided so as to avoid the negative consequences of opening the trade account. However, the analysis highlighted by McKinnon did not look at whether these large capital inflows could be sustained in the long-run. The resulting equilibrium should be seen as a long-term phenomenon and in this case it is not clear that the capital account liberalisation should be delayed for the fear of its effects on the real exchange rate.

Empirical evidence, suggest that a number of countries experienced large capital inflows and a significant appreciation of the real exchange rate with the opening of the capital account³. Korea in the mid 1960's experienced a large inflow of short-term capital. The result of this inflow was inflation and a substantial real appreciation which amounted to 20 percent between 1965 and 1969. Chile experienced the similar problems at the opening of their capital account. Chile's capital inflows amounted to \$500 million during 1970 as opposed to \$3.2 billion during 1980. During 1981 capital inflows increased further to a total of almost \$4.8 billion. This increase in the level of capital inflows lead to a number of consequences. Firstly, Chile had to finance a major increase in expenditure on both tradables and non-tradables. Secondly, the level of foreign debt increased significantly, exceeding 50 percent of GDP in the late 1981. Thirdly, as a result of the increase in expenditure on non-tradables, the real exchange rate appreciated significantly. This real appreciation amounted to 27 percent between the third quarter of 1979 and the first

³ see Edwards S.(1986,p265) and Edwards S.(1987,p28)

quarter of 1982. Thus, partly through the opening of the capital account and the manipulation of other economic variables Chile encountered a real appreciation of 30 percent during 1978 and 1981. Both Chile and Korea followed different strategies when they experienced large capital inflows. Whereas Korea adjusted its nominal exchange rate periodically, Chile had a fixed nominal exchange rate during most of the period. Although both countries decided on alternative liberalisation strategies both had to endure a real appreciation which worked against the exporters of these countries.

As highlighted before there exist conflicting pressures (i.e. real exchange appreciation and a depreciation respectively) on the real exchange rate as result of opening the capital account. These conflicting pressures result in resources moving in opposite directions. When resources are moving in opposite directions there is usually a social and economic cost attached to this movement. It is for this reason that it is advisable for countries to implement policies so as to avoid unnecessary resource switches. These resource switches entail the reversal of movements of resources after a short period. It is in this instance that Chile serves as a clear example. During 1976 exporters in Chile embarked on an ambitious project to increase their export capacity. However, during the period of 1979-81 Chile experienced a major real appreciation. This meant that these exporters now had to move their resources into sectors responsible for the production of non-tradables especially the construction sector.

Theoretically the policy Chile had to adopt to avoid unnecessary resource switching would entail firstly opening its current account and then after the new production structure is established, slowly open its capital account. Although Chile did follow this program its reforms were still a failure and its experience renders a few important lessons. First being that after a country has liberalised its current account it should ensure that sufficient time has elapsed before it considers opening its capital account. Of course it is quite impossible to define exactly what " sufficient time " entails. However, it is certain that sufficient time would include a period of observing the real exchange rate and the external sector behaviour. A second lesson highlighted by the Chilean experience is that the destabilising effects of massive capital movements are often underestimated. The Chilean case clearly, as Edwards(1987) notes, shows that destabilising effects of massive capital movements are greatly magnified by the presence of other distortions, such as legally imposed wage rigidity.

Concluding Remarks

Generally, it is assumed that the simultaneous liberalisation of both the capital account and the capital account is beneficial, however this strategy or sequence is not always feasible or desirable. It is in this situation that sequencing becomes important. This study concludes, that in these cases, the fiscal deficit has to be controlled and tariff reforms undertaken, before the capital account is liberalised. If the domestic capital market is not reformed, the country concerned could experience huge capital flight resulting in a depreciation of the real exchange rate.

This study also suggests that a more prudent sequencing strategy would be based on liberalising the current account first. The strongest case made for this ordering is that destabilising effects on the real exchange rate could be avoided. The experience with destabilising capital flows immediately after opening the capital account has generally been negative and has jeopardised other aspects of the reform package. This study also supports

Edwards's(1987) view that the capital account should be opened slowly so that the possible increase in the stock of foreign debt that could follow liberalisation will be spread through time, reducing the degree of real appreciation and negative protection provided by the exchange rate.

SECTION 4

4. SOUTH AFRICA IN CONTEXT.

4.1) Capital Controls in South Africa

A Brief History of Exchange controls in South Africa.

In South Africa, foreign exchange controls were intensified in 1961 following the Sharpeville shootings which resulted in large capital outflows. Controls were imposed on both residents and non-residents, the latter had to use the blocked rand mechanism to repatriate their capital. Essentially, this meant that the capital account of the balance of payments was insulated against volatile flights of equity capital since blocked rands could only be sold to non-residents. One could therefore say that there was a pool of investment currency, the price being determined by foreigners demand and supply of South African equities. If foreigners were pessimistic about their investment in South Africa, the price of the blocked rand would decrease creating a larger discount against the commercial rand rate. The larger discount would further increase the return on South African securities as shares could now be bought at a discount, but dividends could be repatriated at the commercial rand rate. South Africans, under exchange control law are prohibited to purchase foreign assets. South Africa's case is informative since it highlights the sensitivity of capital flows to political risk and unrest.

By February 1976 the scope of the blocked rand system was broadened to allow non-residents to transfer blocked balances directly between one another. A market for these blocked rands developed, and by 1979 these balances could also be used to purchase shares, certain government securities and semi-gilts through the renamed financial rand market. An important feature of the financial rand was that foreign direct investment could now take place through the financial rand mechanism, thereby giving the foreign direct investor more rand for every dollar.

Liberalisation trends in the financial and foreign exchange markets during the late 1970's and early 1980's also had an impact on exchange control policy. The Franzsen Commission in the early 1970's argued in favour of maintaining exchange controls since it felt that political factors could lead to capital flight and thereby put a strain on the level of foreign exchange reserves. However, by 1978 with the changing attitude towards the market mechanism and the increasing influence of Dr Gerhard De Kock of the Reserve Bank, South Africa's approach to exchange control had changed. The De Kock Commission placed its faith in the market mechanism to halt capital flight through depreciation of the commercial rand, which would decrease the foreign currency value of the repatriated capital and therefore inhibit it. The De Kock Commission stressed the inefficiencies and ineffectiveness of exchange controls and argued for the complete elimination of these exchange controls on non-residents and only a limited controls on residents.

The De Kock Commission with regards to residents, argued that controls were to be gradually lifted, since a sudden lifting of these controls might have had a large impact on real estate and stock market prices and interest rates. Exchange controls on non-residents in line with the De Kock Commission were lifted in 1983 however, speculation against the rand, which intensified in the aftermath of the foreign debt crisis necessitated, in tandem with a partial moratorium on foreign debt repayment, the reinstatement of the financial rand on 2 September 1985.

Controls on Residents

Residents are restricted by exchange rate controls in that they are not allowed to own financial rands nor are they allowed to make investments in foreign markets. Certain exemptions can be made by the Reserve Bank and normally these transactions are made through the financial rand medium, however the investor would be compelled to employ commercial rands for non-capital expenditures.

The Financial Rand Discount.

The following identity is used to calculate the financial rand discount:

$$\text{FinRand Discount}^4 = \frac{\text{Commercial Rand US \$} - \text{Financial Rand US \$}}{\text{Commercial Rand US \$}}$$

Since the introduction of the financial rand, the financial rand discount has varied considerably. In August 1986 when the commercial rand was US \$0.38, the financial rand price was trading at a low of US \$0.18. In October 1991 the discount dropped as low as 5.5 percent, which raised speculative that it was time to scrap the financial rand. The financial rand discount can be seen as a barometer of foreign investor confidence in South Africa. See GRAPH ON PAGE 29 for a detailed analysis of events affecting the financial rand discount.

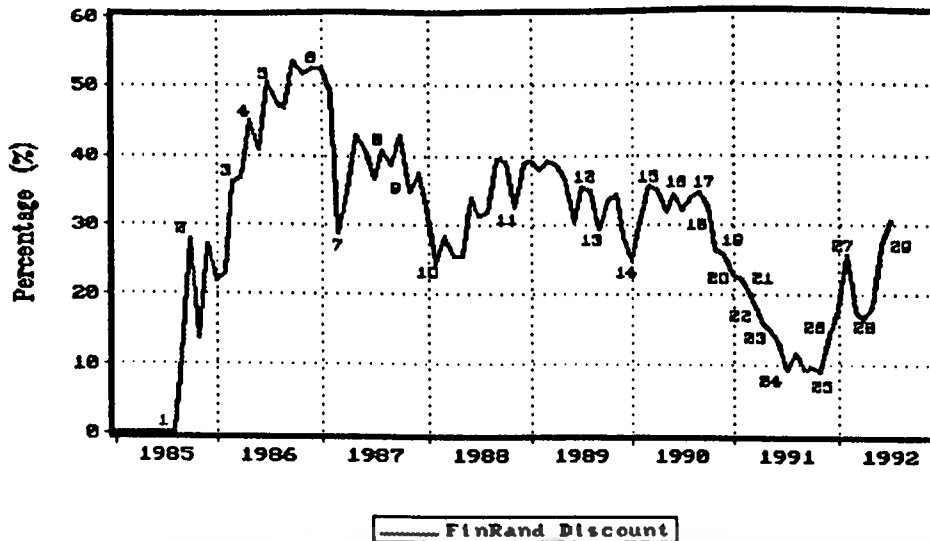
⁴Note if the financial rand discount is calculated using the identity above, then only the dollar price of a rand can be used since the commercial rand rate quoted in dollars will always be greater than the financial rand value quoted the same way, thus yielding a positive numerator. The denominator is the commercial rand quoted in US dollars. If, however, the rand price of dollars is used, the identity above will have to be manipulated in order to arrive at the same discount for any given currency.



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Financial Rand Discount

A Barometer of Foreign Investor Confidence in S.A.



EVENTS THAT HAVE AFFECTED THE FINANCIAL RAND DISCOUNT SINCE 1985

1. Reintroduction of Finrand in the wake of debt crisis.
2. US Sanctions Package
3. New State of Emergency Declared
4. Unrest continues in Vaal Triangle Townships
5. 10th Anniversary of Soweto riots
6. Bomb-blasts rock major cities; Widespread Disinvestment
7. Attractive SA gilt yields cause finrand to rise strongly
8. More US firms disinvest
9. World Stock Markets (Oct'87) crash hardy affects discount
10. SA announces that funds in standstill net can be used to buy quoted SA stocks
11. Sharpeville Six reprieved
12. Rumours that SA is to stop foreign purchase of gilts through finrand sends discount up
13. SA withdraws ability to use finrands to buy residential property; foreign confidence in SA investments rises
14. FW's "New SA" parliament speech; unbanning of ANC; finrand very volatile as SA's future uncertain
15. Mandela announces that future government plans to nationalise - discount soars to 35%
16. More disinvestment including pull-out of Mobil.
17. August 1990 - Major Revision of Finrand Regulations
18. Heavy buying of SA gilts by German and Swiss investors
19. Stals announces that SA records a net capital inflow in Quarter 3 of 1990 - first since 1987
20. FW's opening of parliament speech - phasing out of finrand considered.
21. Discount falls as overseas buyers purchase SA goods during Gulf War
22. First head-to-head meeting between Inkatha and ANC - outlook promising
23. FW's European Tour - foreigners respond
24. Discount falls as low as 6%; Reserve Bank still say timing is not right to scrap finrand
25. US Sanctions lifted
26. New spate of Disinvestments
27. Threat of revision to finrand tax rules; Right-wing Threat
28. Strong confidence again as Referendum results in overwhelming "YES" majority
29. Negotiations break down; Boipatong tragedy; Mass Action Campaigns - Discount returns to 30%.

Source: Bottega, R (1992,p21).

The Mechanics of the Financial Rand.

A large proportion of the turnover in the financial rand market occurs due to arbitrage and position taking. However before discussing arbitrage and position taking, this study will focus on the activities underlining the supply and demand for financial rands. These activities include the sale of quoted shares and securities, or the sale of non-quoted shares, plant and equipment. By virtue of the Exchange Control regulation the proceeds from these sales are deposited in accounts as " financial rand accounts ". These financial rands can only be utilised for a limited range of purposes by non-residents. For example, these rands cannot be used to purchase foreign currency at the commercial rate.

Non-residents buy financial rands:

- 1) in order to purchase rands to pay for shares, gilts or semi-gilts brought from residents in South Africa, or,
- 2) in order to purchase fixed assets or property in South Africa (subject to Exchange Control approval).

The process of non-residents buying from residents actually destroys the financial rands since the resident can only own "ordinary rands". This destroying of financial rands happens in both the share and property market. When the non-resident buys shares from a resident the former receives share certificates marked non-residents whilst the residents receives ordinary rands. When a non-resident is cleared to purchase property through the financial market, he purchases the financial rands which will becomes ordinary rands when in the hands of the resident. Of course such a transaction will only be passed when the non-resident acknowledges that the property concerned will be registered in his name at the time of sale.

Events in the financial rand market cannot directly affect the commercial currency exchange rate, and vice versa. Any shock resulting in capital outflows would occur through the financial

rand market, the effect of which is to depreciate the financial exchange rate. There would, however be no effect on the official reserves and, hence the exchange rate. It is in this way that the current account is protected by large capital outflows. However, the rate of return on financial currency investments will indirectly be affected by the commercial rand rate since dividends and interest earnings are repatriated at the latter rate. An expected depreciation of the commercial rand rate, under ceteris paribus conditions, will reduce anticipated returns on such investments, whilst an expected appreciation would increase them and the financial rand will adjust accordingly. The interdependence is captured in the equation below:

$$r^* = r(Ce(1-T)/F) + (Fe-F)/F \quad (1)$$

where:

r^* - expected rate of return for non- residents for holding domestic assets over a given time

r - domestic rate of interest at a given time

Ce - (mean) expected spot exchange value for the commercial currency applicable to interest payments during a given time

Fe - (mean) expected spot exchange value for the financial currency during a given time

T - tax rate applicable to non-residents on income earned (interest payments and profits)

F - spot financial exchange rate

The first term represents non-residents' expected income yield while the second term is the anticipated capital gain or loss. Barr and Kantor(1982) noted that equation 1 is the interest parity condition in the financial currency market.

Assuming an efficient financial currency market in which new profit opportunities are quickly realised then $F = Fe$ and the second term will be zero, so that:

$$r^*/r = Ce(1-T)/F \quad (2)$$

According to Hodge(1990) by including the earnings of a particular security the following equilibrium relationship can be defined:

$$P/P^* = C/F \quad (3)$$

where:

P - the local price of securities in foreign currency terms;
P* - the foreign price of securities in foreign currency terms.

Taking the Johannesburg Stock Exchange shares as an example, an interesting implication of this arbitrage situation can be analysed in that changes in the financial rand discount do not solely depend on foreign investment confidence. The reduced willingness of non-residents to hold South African shares will not affect the discount if the resident investors re-act in a similar manner. If a similar reluctance to hold South African shares exist then share prices will fall proportionately in both London and Johannesburg, leaving the discount unchanged. However, if the expectations of non-residents and residents differ then the financial rand discount will change. Therefore, if new information is available to non-residents such that they now view future earnings more pessimistically than residents, then the share prices in London will fall more than in Johannesburg ensuring that the financial rand discount widens. Note that an increase in the discount rate would lower the effective return on investment by foreign investors whilst, a decrease in the discount will increase the effective rate of return on investment by non-residents.

The next section on the financial rand will further help us to understand the operation of financial rand in its parallel markets viz, the securities and the cash market.

Securities Market.

As mentioned before financial rands can be created and destroyed. Financial rands are created by foreign investors when in the process of purchasing securities and they are destroyed when sold to residents. Residents will therefore never really own financial rands. The financial rand can also be defined as:

$$\text{Financial Rand} = \frac{\$ \text{ Price of S.A securities in Overseas Stock Exchanges}}{\text{Rand price of S.A securities in South Africa}}$$

From the identity above, it is clear that the financial rand will appreciate if a foreign investor purchases S.A. shares in London and sells these same shares in South Africa.

There have been numerous external events that have adversely affected share prices through the financial rand. An example quoted in Shuttleworth's (1989) paper demonstrates this point. The Comprehensive Anti-Apartheid Act of 1988 forbade new investment in South Africa by Americans after 15 November. This led to an increase in demand for financial rands ahead of the deadline, and the financial rand rose to \$0.2525 on 13th November. Arbitrageurs took full advantage of this situation by purchasing shares in London and selling them on the Johannesburg Stock Exchange (JSE). The actions of the arbitrageurs ensured that the share prices dropped on the JSE. Shuttleworth (1989, p222) also noted..

" In fact it appears that the creation of the financial rand was overdone on the 13th November by non-residents wishing to take a long position in anticipation of an even stronger rate on 14th November. In the event, liquidation of positions caused the financial rand rate to fall on that day to close at \$0.2238/88, while Johannesburg share prices recovered their losses."

The example above illustrates the inverse relationship between share price and the financial rand. Since foreign investors buy shares at the financial rand rate and repatriate profits and interest at the commercial rand rate, the dividend yield received

by foreigners increases by the premium of the commercial over the financial rand rate. The following example demonstrates this point clearly where the dividend yield to foreigners is double the yield to local investors. Assume that the financial rand rate is 25 US cents whilst the commercial rate is 50 US cents.

If a foreign investor invests \$50 000 in South African shares with a yield of 5 percent, the all-in yield is;

Financial Rand Rate	= 25 US cents for 1 rand
Commercial Rand Rate	= 50 US cents for 1 rand
\$50 000 converted Fin.Rands	= R 200 000
Yield @ 5 percent	= R 10 000
Less 15 percent non-resident tax	= R 8 500
Repatriated @ the Commercial rand rate	= \$ 4 250

The all-in yield is calculated as follows:

$$\$4\ 250 / \$50\ 000$$

The all-in yield is therefore 8.5 percent for the foreign investor. Already this foreigners yield is larger than the residents yield by 2.5 percent. However, if this exercise were to exclude the tax on non-residents the yield to the foreigners would be 10 percent which is double the yield received by residents (i.e of 5 percent).

The Cash Market.

The players on the cash market include amongst others The Standard Bank of South Africa Limited (Ltd), French Bank of Southern Africa Limited and UAL Merchant Bank Ltd. Shuttleworth(1989) notes..." Strictly, banks are not allowed to deal as principals, but the Reserve Bank appears to tolerate market-making activity as long as positions are kept small (the banks report their financial rand dealings to the Reserve Bank on a daily basis)."

The cash market has developed steadily since September 1985 and involves the actual purchase or sale of financial rands by

foreigners. Galloway(1990,p55) mentioned there was a distinct difference between cash and securities market..

" The important difference between this market and the one discussed above (securities market), is that financial rands are not created or destroyed through the securities market. Rather, financial rands may be created or destroyed through the cash market as a result of, say, disinvestment by multi-national companies (MNC) with South African interests."

The actions of Barclays Bank for example, in the sale of its South African interests resulted in the creation of financial rand balances as funds were being converted into foreign exchange through the cash market and not via the purchasing of shares in Johannesburg or selling of shares in London.

Insulation Properties of the Financial Rand

Galloway(1990) extensively researched the insulation properties of the financial rand with respect to foreign interest rate shocks, risk and the domestic economy under dual exchanges, risk and the equity market, covered interest rate parity and forward exchange losses.

Galloway's analysis of foreign interest rate shocks, departs from the analyses made by Marion(1981) and Gros(1988). Marion argued that no exchange rate system could insulate an economy from foreign interest rate shocks. To analyse the effect of a foreign interest rate shock on the domestic economy, Marion used a portfolio-balance model which in effect is a short run adjustment model . Her analysis is supported by the assumption that residents are allowed to own short-term foreign bonds in their portfolios. The previous section of this study points out that South Africans, due to exchange controls, are not allowed to hold any foreign assets. Marion's analysis is therefore is not fully applicable in the South African context. Galloway's study suggests that the financial rand has allowed for significant differences in domestic and foreign interest rates which implies that the mechanism has resulted in an increase in monetary policy independence. This issue will be discussed in greater detail below (5.2).

With respect to the equity market, as seen above, a depreciation in the financial rand rate due to an increase in risk would raise the value of equities on the JSE, thus insulating the domestic economy. When foreigners holding financial rand balances at commercial banks take a negative view of political and economic developments in South Africa, they may attempt to get rid of these balances in two ways viz:

Firstly, they may buy S.A shares on the JSE and simultaneously sell them in London. This action will depreciate the financial rand, since prices of shares on the JSE will rise whilst prices in London will fall. Secondly, foreigners may convert their financial rand balances into foreign exchange on the cash market. This action will also result in a depreciation of the financial rand in the securities market, in the long-term arbitrage will equate the two rates.

To conclude therefore from the preceding discussion, it is clear that if foreign investors wished to disinvest they would not adversely affect domestic share prices. In fact negative perceptions from foreign investors could result in an increase in the price of domestic shares. It is also clear that the financial rand exhibits insulation properties that are still needed in South Africa today. With investor confidence at a low and with a complex array of uncertainties prevalent in the South African economy at present time, the financial rand is needed so as to protect the domestic economy from external shocks as well as uncontrollable capital flight.

SECTION 5

5. IMPLICATIONS FOR SOUTH AFRICA WHEN OPTING FOR CAPITAL ACCOUNT LIBERALISATION.

5.1) The Implications of the Relaxation of Capital Controls on Foreign Borrowing and Foreign Debt.

As indicated in section 2.4, although capital flows after opening the capital account may reflect a net inflow of capital, private domestic capital may be flowing out. Thus if a political crisis should develop, there will be an outflow of borrowed capital and no likely return of locally owned capital abroad. As Kahn(1987) indicates, an increased foreign debt and the simultaneous rise in investment abroad indicate that this pattern has been evident in South Africa. According to Kaplan(1983), by 1980 South African investment abroad was in excess of one-third of foreign investment into South Africa.

Although exchange controls were not completely lifted for residents in the early eighties, its relaxation (or partial liberalisation) had severe consequences for the structure of South African foreign debt. During the period 1981-1985, the authorities adopted a liberal attitude towards foreign borrowing by private companies. The Reserve Bank at this stage encouraged overseas borrowing but the reporting systems were inadequate in that the Bank was not able to keep tabs of the amounts involved. As seen in the table 1, between 1980 and 1985 total foreign debt increased from \$16.7b to \$27b whilst the proportion of short-term debt to total debt increased from 49,1 percent to 72 percent. The bunching of maturities exacerbated the problems of the Reserve Bank when American Banks began to re-call their loans in 1985, causing a substantial increase in its debt burden.

Table 1

South Africa's Foreign Debt 1980-1985

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Dollar value of debt (\$ billion)	16.7	18.7	22.4	23.9	25.5	27.0
Rand value of debt (R billion)	12.6	18.1	24.3	29.1	48.2	60.1
Rand value of debt as % of GDP	20.3	25.4	30.4	32.6	45.7	50.1
Short-term debt as % of total debt.	49.1	57.9	56.5	65.8	68.0	72.0

Source: Kahn, B(1987)

South Africa therefore has already experienced the negative impact of opening the capital account when considering the structure of foreign debt. Certainly if South Africa were to opt for capital account liberalisation without proper foreign debt management by the Reserve Bank, South Africa could well find itself in the same position as in 1985, with its debt burden being substantially increased. Thus before considering a policy of liberalisation of the capital account the Reserve Bank should adopt a strict debt management plan.

If South Africa were to liberalise its capital account, it is likely to experience capital inflows through foreign borrowing. However this does not necessarily imply that there will be a net inflow of capital. Indeed as will be discussed in 5.2 and 5.3, South Africa could well experience a strong net outflow of capital (as in 1961), which would mean that the Korean and Chilean experience (as described 3.2) would not occur domestically. South Africa therefore should expect a depreciation of the commercial rand rate which means that the real interest rate would have to be even higher to compensate for this depreciation.

Also, as indicated by Cuddington(1986) and Khan and Ul Haque(1985), capital flight has been shown, in a number of countries, to have caused a build-up of gross foreign debt, an erosion of the tax base and, to the extent that there has been a net real resource shift out of the country, a reduction in domestic investment. Typically, when capital controls are lifted, residents prefer to invest their own money abroad and invest domestically with borrowed foreign capital because of a larger perceived risk at home than abroad. Given the uncertainty of private property in the " new South Africa " , it seems that the incentives for capital flight are high and rising as political instability and violence increases, whereas the risk on assets held abroad is negligible.

5.2) South African Deficit and Savings.

As demonstrated in Section 3, the controlling of a country's fiscal deficit is of paramount importance in ensuring a "successful" capital account liberalisation. As explained prior to liberalising the domestic capital market, the fiscal deficit has to be controlled. Argentina's experience indicates that large fiscal deficits in the wake of a liberalised capital account caused uncontrollable inflation. In South Africa one observes that on the surface South Africa is not in a reasonable position when looking at its government deficit before borrowing (see figure 1). The higher than expected expenditure and the considerably lower than expected income for the fiscal 1992/93 led to a deficit before borrowing and debt repayment of R29,4 billion, or 8,8 percent of gross domestic product.

Figure 1, does however indicate, that the South African economy has not been characterised by persistently large government deficits. The overall deficit before borrowing averaged 3.1 percent in the 1980's and the central government has managed to keep the deficit below 3 percent of GDP during the budget years of 1989/90 and 1990/91. Based upon the arguments as explained in section 3, it is quite clear that the fiscal deficit would have to be reduced from its 1992/93 percentage of GDP of 8,8 percent

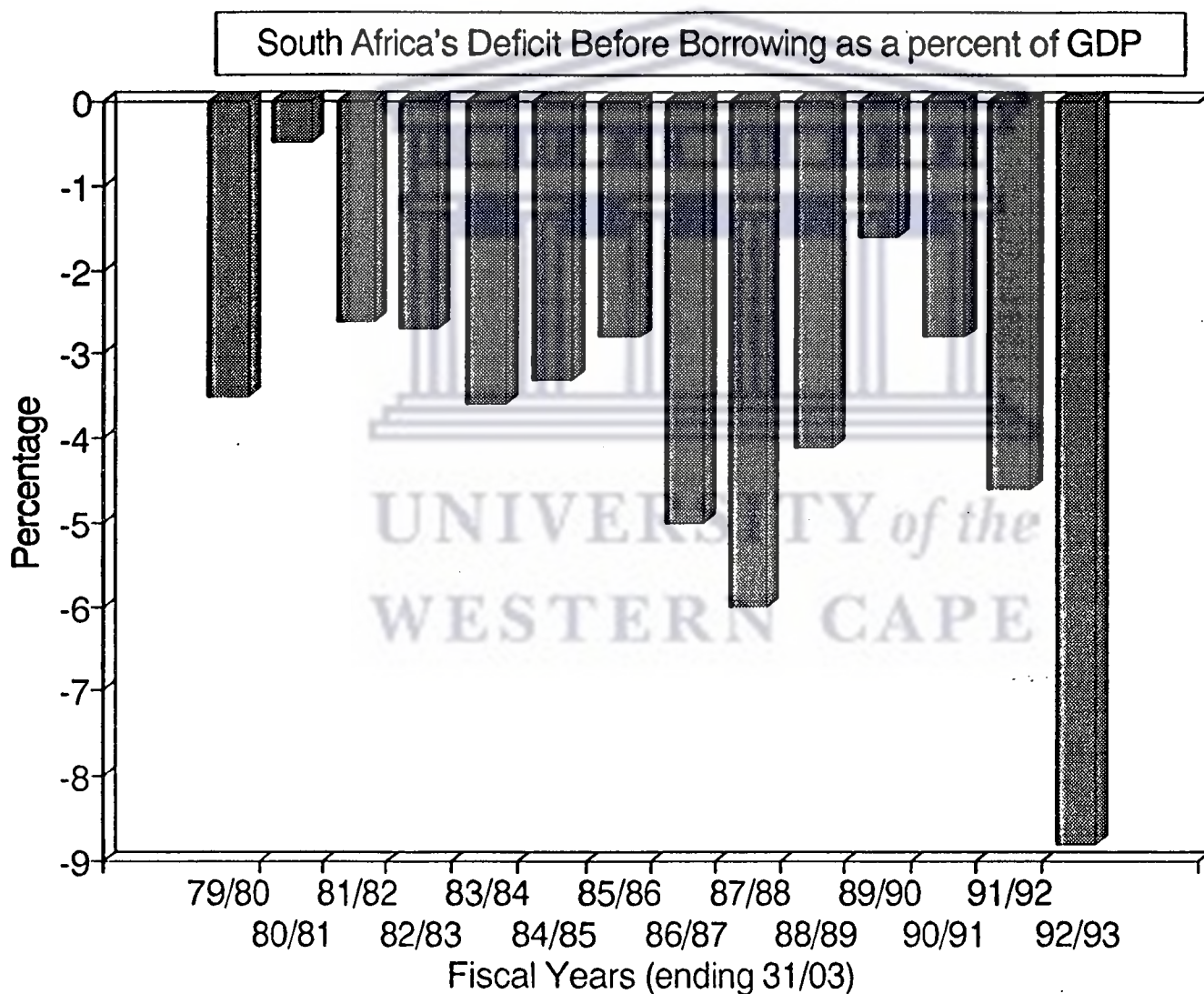


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Handwritten text in the right margin, oriented vertically and upside down. The text is partially obscured by a vertical line and includes the word "SOPHOCLES" written vertically. Other illegible characters are present, possibly including "1" and "2".

to more acceptable percentages as in the 1980's, before South Africa can consider liberalising the capital account. Experiences in the Southern Cone countries, demonstrated that the fiscal deficit has to be controlled even before a liberalisation of the capital account can be considered. Thus, the rising trend of the South African fiscal deficit implies that South Africa should not opt for a capital account liberalisation at this stage.

Figure 1



During 1990/91, the primary surplus was about 2 percent of GDP whilst private savings was 17 percent of GDP and public saving 5 percent. Private savings has been instrumental in the financing of capital outflows and the government deficit at slightly negative real interest rates. During the 1985/86 (the crises period) private saving exceeded private investment by 10 percent of GDP, it subsequently fell to 4 percent of GDP.

The financing of the public sector deficit depends largely on the availability of domestic private and foreign savings, on the desired level of private investment and on the depth of the capital market. The relationship between the public sector deficit and savings is given by the identity below:

$$\text{Pub Investment} + \text{Pri Investment} = \text{Pub Savings} + \text{Pri Saving} + \text{For Saving}$$

or:

$$\text{Pub Investment} - \text{Pub Saving} = \text{Public Deficit} = \text{Pri Saving} - \text{Pri Investment} + \text{For Savings}$$

where:

Pri - Private

Pub - Public

For - Foreign

The above identity states that the public deficit (i.e. public investment - public savings) has to be financed by a country's net savings (i.e. private savings - private investment) and foreign savings. The level of private savings, the desired level of private investment and the desired current account deficit (i.e. foreign savings) would therefore determine the sustainability of the public deficit. Since 1985 South Africa has become a net exporter of capital and one can observe that the South African desired current account balance has been largely determined by the economy through lack of access to foreign capital and foreign debt repayment obligations. A change in the foreign position such as

experienced by South Africa can be dealt with in three ways viz. (1) reduced public sector deficits, (2) higher private savings or (3) lower investment. South Africa's adjustment (to its change in its foreign position) was a reduction in investment spending. In 1985 investment spending in South Africa declined by 4 percentage points of GDP, in addition South Africa also experienced a rise in gross domestic expenditure by 2 percentage points.

It is important to look at savings and the deficit in context of the fragile macroeconomic position that South Africa finds itself in today. Private savings are on a declining trend and are being dominated by corporate savings (see Table 2). Since the mid-1970's corporate saving consistently exceeded investment by corporations. The costs of financing the deficit are rising as a reduction in mandatory requirements channelling financial savings to finance the government has led to higher interest rates on public borrowing. It is very likely that the declining trend in average private savings rate will be maintained as a result of redistribution to poorer groups. Evidence shows that South Africa needs to ensure fiscal discipline, however this is easier said than done since huge pressures exist for the government to increase its expenditure in services to the Black population.

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Table 2**GROWTH AND SAVING: SOUTH AFRICA, 1960 - 1970**

	1960-69	1970-79	1980-89	1990
Growth in GDP (average annual)	5.8	3.3	2.0	-0.5
Net Investment as % of GDP	13.9	14.9	6.7	3.0
Gross Domestic Savings as % of GDP	24.1	26.2	24.8	21.5
Composition of GDS	100.0	100.0	100.0	100.0
Personal Saving	32.0	25.2	9.4	3.5
Corporate Saving	10.7	16.5	27.6	17.1
Government Saving	14.1	10.5	-1.9	3.0
Depreciation	43.2	47.8	64.9	76.3
Personal Saving as % of GDP	7.7	6.6	2.3	0.8
Corporate Saving as % of GDP	22.6	4.3	6.8	3.7
Government Saving as % of GDP	10.4	2.8	-0.5	0.6

Source: Loots, L(1992)

As can be seen by table 2, not only was GDP growth low in the 1980's, but South Africa also experienced inflation which hovered around 15 percent. This in effect added to the household tax burden through bracket creep (inflation pushing people into a higher tax bracket) at the same time there was a shift away from corporate tax as a proportion of government revenue, towards a greater share derived from indirect taxes. As Loots(1992) indicates, the combination of all these changes resulted in significant shifts on both the lending and borrowing sides of personal saving. On the lending side, the share of

"discretionary" savings i,e funds flowing to banks and building societies in the form of fixed deposits in total household lending fell from over 60 percent in the 1960's to less than 20 percent in the latter half of the 1980's. As noted by Loots(1992), the benefit of this falling share went to "contractual" savings (long-term commitments to life-insurers, retirement funds or pension funds)(see Table 3).

Table 3
HOUSEHOLD LENDING AND BORROWING

LENDING					BORROWING			RATIO L/B	
	TOTAL	BANKS	LIFE ASS.	OTHER	TOTAL	BANKS	TRADE CREDITS	BANKS	TOTAL
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
1970 - 74	2117	1113	813	191	1427	660	767	1.69	1.48
	100.0	52.6	38.4	9.00	100.0	46.3	53.7		
1975 - 79	3842	1706	2002	134	2525	1117	1408	1.53	1.52
	100	44.4	52.1	3.5	100.0	44.2	55.8		
1980 - 84	11491	4612	6719	160	9873	4884	4989	0.94	1.16
	100.0	40.1	58.5	1.4	100.0	49.5	50.5		
1985 - 89	23254	3976	18773	505	17667	7809	9858	0.51	1.32
	100.0	17.1	80.7	2.2	100.0	44.2	55.8		

Source: Loots, L(1992)

* Including Building Societies

South African citizens have therefore hugely increased their contractual savings in insurance companies and banks such as Old Mutual, Sanlam, Standard Bank etc. These companies due to exchange controls could not re-direct domestic savings abroad to fully take advantage of portfolio diversification (as discussed in section 2.5). Therefore capital controls can prevent the placement abroad of long-term institutional savings managed by pension funds. It is therefore very likely that if South Africa were to liberalise

its capital account, it would experience strong capital outflows both from residents (in the form of a share of personal savings) and domestic companies (in the form of corporate savings and personal savings invested in these companies). This will in effect lead to a depreciation of the real exchange rate. South Africa therefore, may not follow the Latin American experience, in that, the Latin American experience indicates that countries could expect an appreciation of the domestic currency when the capital account is liberalised due to a large injection of capital (see Section 3). South Africa would in all probability experience a depreciation of the commercial rand due to a stronger outflow of capital, primarily due to political instability factors.

5.3) Monetary Policy in South Africa.

Section 3 also indicated the importance of interest rates when deciding to liberalise the capital account. Edwards(1987,p27) noted in this regard,..

" The first principle of reform sequencing, therefore, is that international capital controls should only be lifted after the domestic financial market has been reformed and domestic interest rates have been raised. In turn, interest rates can be raised only after the fiscal deficit is under control."

According to Chris Stals, governor of the Reserve Bank, South Africa does not however have an interest rate policy but in fact we have a money supply policy. If the Reserve Bank restricts the money supply by 10 percent one finds that nominal interest rates are inclined to be relatively high. The Reserve Bank therefore controls the interest rates by either increasing or decreasing the money supply. The Reserve Bank has vigorously argued that the only way to control inflation in South Africa is to have a restrictive monetary policy.

Stals describes current monetary policy as "generous" when observing that the current money supply growth is 10 percent when the supply of goods and services are declining by 1 percent. One can also observe the close interaction between the monetary policy

South Africa has and the inflation rate during 1987. In this year the money supply was increased by 27,5 percent and annual rate of inflation which was approximately 18 percent. High nominal interest rates are becoming a feature of the South Africa economy which only reflects the weaknesses in this economy. Stals⁵ suggests that interest rates

" are an instrument for getting the message across that we have problems in this country - low savings, high outflow of capital, high demand for funds to finance non-productive programmes, important as these may be. South Africa could afford to have such low interest rates owing to existence of exchange controls."

The above statement by Chris Stals is substantiated by Galloway's(1990) detailed econometric analysis of South Africa's dual exchange rate system. Galloway's introduces his econometric analysis by investigating the insulation properties of the financial rand when considering foreign interest rates shocks. For his analysis, Galloway looked at three periods since 1980.

The first period is from 1980 to January 1983. This period was characterised by the existence of dual markets. The second period, February 1983 to August 1985, saw the abolition of the dual exchange rate system, which was replaced by a unified system with a managed float. The third period was September 1985 to 1990. This period saw the re-introduction of the dual exchange rate system.

Galloway tested two versions of interest parity conditions over these three periods. The first equation tested was interest parity under dual exchange rate systems. Since there is no market for forward financial rands in South Africa, Galloway tested Levich's (1985) interest parity condition (see equation 4) under the dual exchange rate system. Thus, Galloway tested this equation in periods one and three. Galloway then tested equation 5 in period two to determine whether domestic interest rates responded to foreign interests when the financial rand was abolished.

⁵ All quotes by Chris Stals from Weekend Argus July 1993.

$$r = \alpha_0 + \alpha_1 r^* + \alpha_2 (F/C_e) + u_t \quad (4)$$

$$r = \alpha_0 + \alpha_1 r^* + \alpha_2 ([C - C_e] / C) + u_t \quad (5)$$

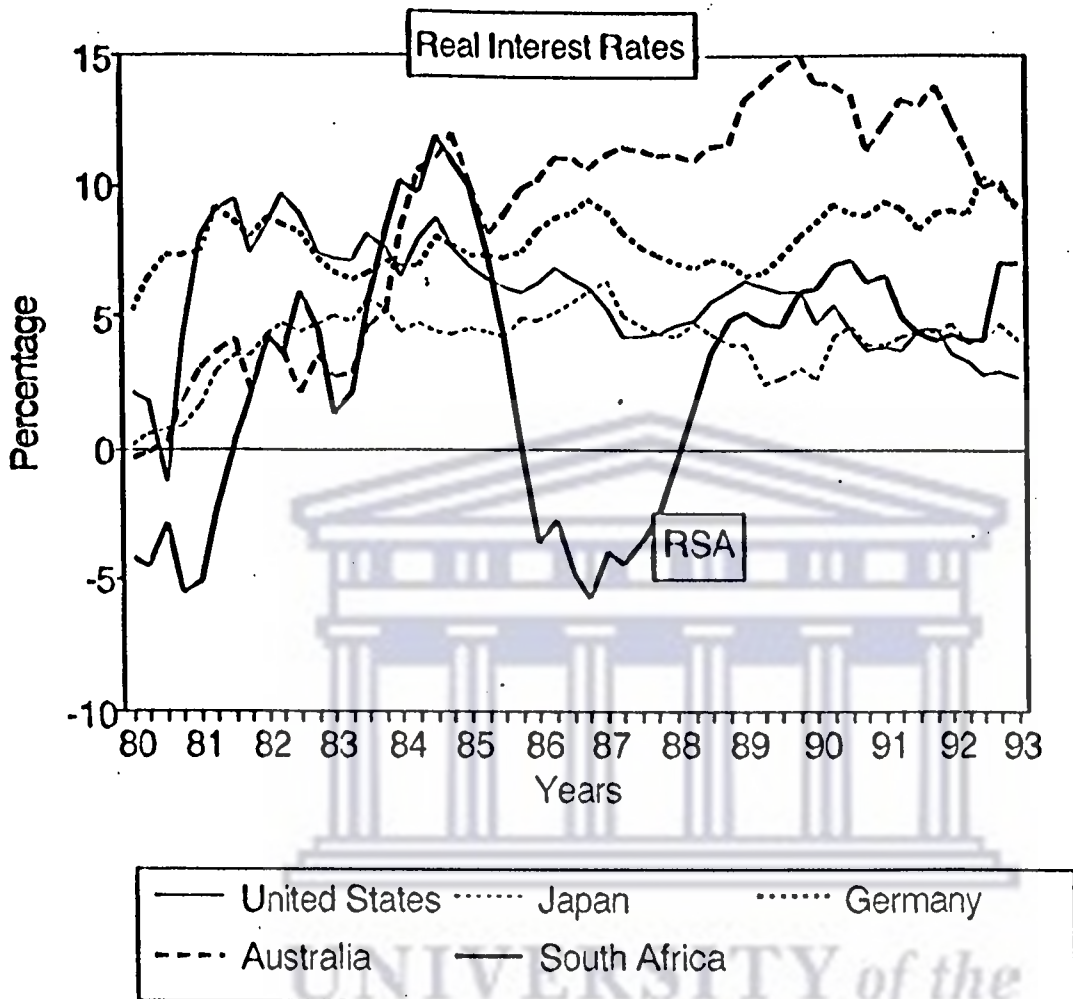
where:

u_t = the error term.

Galloway's results confirm that for the first and third periods South Africa's dual exchange rate system does exhibit insulation properties. Figure 2, indicates that the real interest rate of South Africa in these periods were in fact negative and way below those of other major countries. Therefore South Africa's dual exchange rate system appears to have insulated the economy during these periods. If this were not so South Africans would have placed all their savings in the countries with high positive real interest rates. The regression results in periods 1 and 3 therefore support the hypothesis that domestic interest rates are insulated against foreign interest rate shocks. This supports previous assertions that monetary policy independence can be achieved in countries with dual exchange rate systems with a flexible commercial rate.

The results of equation 5 (tested in period two) suggests that domestic interest rates did respond to foreign interest rate shocks when the financial rand is abolished. Figure 2 indicates the upward trend of real interest rates during 1983/1985 when the financial rand was abolished.

Figure 2



Galloway's results together with a causal observation of Figure 2 therefore indicates that South Africa has some monetary independence under its dual exchange rate system. It also becomes quite clear that South Africa's current real interest rate is too low when compared with other major countries. Therefore, if South Africa were to adopt a policy for capital account liberalisation it would have to increase its real interest rates above those of other major countries so as to ensure that to a certain extent capital outflows are limited and capital inflows are stimulated. It is essential to note that the real interest rate would have to be increased to such an extent that it would compensate for the

political risk which is inherently built into the financial rand mechanism. In other words, the real interest rate would have to compensate those foreign investors who have gained through the financial rand mechanism in terms of a higher all-in-yield. The real interest rate would also have to be increase to offset any expected devaluation of the commercial rand, since any devaluation of the commercial rand would lower the effective return on investment by foreigners.



CONCLUDING REMARKS.

This paper attempted to show that capital liberalisation policies should be carefully researched before implementation since these policies have failed in a number of countries. Clearly there are many considerations when opting to liberalise the capital account as indicated when observing the economic impacts of such policies. However, as Hanson(1992) and Edwards(1987) mention one must always consider whether one's country can satisfy the preconditions for international financial liberalisation.

The major precondition for capital account liberalisation is a stable macroeconomy. As Khan and Ul Haque(1985) noted, the most important role of the government is to reduce uncertainty by the provision of a stable financial and macroeconomic environment. Experience indicates that capital flight occurred (in the major debtor countries) in the wake of relatively high and variable rates of inflation, large fiscal deficits and overvalued currencies. The combination of these imbalances lead to the transfer of domestic savings to overseas markets. South Africa is currently unable to satisfy the preconditions for capital account liberalisation, in that the political situation is unstable and the fiscal deficit is high.

Therefore, as implied in this paper, if South Africa were to opt for liberalise it would have to:

- a) resolve political conflict as quickly as possible,
- b) control its expanding fiscal deficit,
- c) allow real interest rates to be kept in line with world interest rates, and;
- d) adopt a stringent debt management plan.

BIBLIOGRAPHY

Balassa, Bela, Development Strategies in Semi-Industrial Economies, Oxford, England, Oxford University Press, 1982.

Cuddington, J (1986), Capital Flight: Estimates, Issues, and Explanations. Princeton Studies in International Finance, No.58 December 1986.

Deardoff, A & Hanson, J (1978). Accumulation and a Long - Run Hecksher - Ohlin Theorem. Economic Inquiry, Vol.16, April 1978.

Dornbusch, R. & Helmers (1991), The Open Economy: Tools for policymakers in developing countries, EDI series in Economic Development, Oxford Press, August 1991.

Fischer, B & Reisen, H (1992), Towards Capital Account Convertibility. Development Centre Policy Briefs, No.4, 1992.

Galloway, D (1990), Dual Exchange Rates: Theory, Insulation Properties and the South African Experience, Masters Thesis 1990.

Garner, J & Leape, J (1991). South Africa's Borrowings on International Capital Markets: Recent Developments in Historical Perspective. London School of Economics -Centre for the Study of the South African Economy and International Finance, Research Paper No.5, August 1991.

Goldin, A (1992), External Financial Assistance and Post - Apartheid South Africa. Economic Policy Series, No.9, July 1992.

Gros, D (1988), Dual Exchange Rates in the Presence of Incomplete Market Separation. IMF Staff Papers, 437 - 460.

Hanson, A (1992), Opening the Capital Account, A Survey Of Issues and Results. Policy Research Working Papers, May 1992.

Hodge, D (1990), Dual Exchange Rates as a Mechanism for Coping with Speculative Capital Movements, Studies in Economics and Econometrics Vol14 No.2, August 1990.

Ize, A & Ortiz, G (1987), Fiscal Rigidities, Public Debt, and Capital Flight., IMF Staff Papers, Vol. 34 No. 2, June 1987.

Kantor, B and Barr, G.D.I (1983), A Theory of the Financial Rand Discount., The Investment Analyst Journal, 21 (June), 12-19

Kahn, B (1987). Exchange Controls and Exchange Rate Policy in the South African Economy, Social Dynamics, Vol.13, No.1, 1987.

Kahn, B (1991). Budgeting for a Future South Africa: Fiscal Policy & The Constraints on Deficit Spending. Economic Policy Series, No.3, May 1991.

Kahn, B (1991). Capital Flight and Exchange Controls in South Africa. London School of Economics - Centre for the Study of the South African Economy and International Finance, Research Paper No.4, August 1991.

Kahn B, Senhadji A, & Walton M (1992). South Africa: Macroeconomic Issues for the Transition. Informal Discussion Papers on Aspects of the Economy of South Africa, Paper No.2, May 1992.

Khan, M & Ul Haque, N. (1985), Foreign Borrowing and Capital Flight: A Formal Analysis., IMF Staff Papers, Vol. 32 No.4, December 1985.

Krueger, Anne O.(1986), Problems of Liberalisation, Economic Liberalisation in Developing Countries (Chapter2 p16-38), Edited Choksi Armeane M. and Papageorgiou , 1986.

Lachman, D & Bercuson, K (1992). Economic Policies for a New South Africa. International Monetary Fund Occasional Paper 91, January 1992.

Loots, L (1992), Savings and Growth in the South African Economy, EPRP publication - 1992.

Marion, N.P. (1981). Insulation Properties of a Two Tier Exchange Market in a Portfolio Balance Model. *Econometrica*, 48, 61-70

McKinnon, Ronald I.(1973), Money and Capital in Economic Development, Washington, The Brooking Institution, 1973.

Sebastian Edwards (1984), The Order of Liberalisation of the External Sector in Developing Countries, Princeton University, December 1984.

Sebastian Edwards (1986), Stabilisation with Liberalisation: An Evaluation of Ten Years of Chile's Experience with Free Market Policies 1973 - 1983, *Economic Liberalisation in Developing Countries* (Chapter10), Edited Choksi Armeane M. and Papageorgiou, 1986.

Sebastian Edwards (1987), Sequencing Economic Liberalisation in Developing Countries. *Finance and Development*, Vol.24 No.1, March 1987.

Shuttleworth, A.B. (1989), The Mechanics of the Financial Rand Market. In: *Leading Issues in South African Macroeconomics - Selected Readings*, by P.A. Black and B.E. Dollery, Southern Book Publishers, 1989. >

Williamson, J (1991). Costs and Benefits of Liberalisation the Chilean Capital Account. Institute for International Economics, 22th April 1991.

RESEARCH PAPERS / MONTHLY PUBLICATIONS.

Determinants and Systemic Consequences of International Capital Flows, A Study by the Research Department of the International Monetary Fund, Occasional Paper No.77, IMF Washington DC March 1991.

Nedbank Monthly Economic Profile, Nedbank Economic Unit, February 1993.

London School of Economics - Centre for the Study of the South African Economy and International Finance, Quarterly Report, February 1992.

NEWSPAPER ARTICLES.

Weekend Argus Business Supplement 3 July 1992.



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