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**The impact on Southern Africa of the financial
crises in Asia and Russia**

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The countries of southern Africa have not suffered seriously from "financial contagion", which is the short-term and sometimes devastating impact of financial crises in other countries. The first stage of financial contagion occurs through the markets for foreign exchange, shares and bonds. The second stage, which can be even more devastating, occurs if trouble in financial markets causes a crisis in the country's banking system, as happened in several Asian countries. South Africa's economy is potentially the most vulnerable in Southern Africa to financial contagion, because it has highly developed financial markets which are open to inflows and outflows of foreign capital. However, the economic cost of financial contagion has been limited in South Africa because the country's banking system is sound. Zimbabwe has been similarly protected from the worst effects of financial contagion. Financial markets in the other countries of Southern Africa are very underdeveloped, which limits the first stage of financial contagion; this is fortunate, because some of them have unsound banking systems. All of these countries are actively trying to develop their financial sectors, however, so that their relative immunity to financial contagion may be reduced in the future. This will strengthen the case for maintaining macroeconomic balance, realistic exchange rates, and absolutely sound banking systems.

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The impact on Southern Africa of the financial crises in Asia and Russia

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The impact on Southern Africa of the financial crises in Asia and Russia

Contents	Page
1. Introduction	1
2. The apparent causes of Asian crises	2
3. To what extent did the Asian and Russian crises affect South Africa?	4
4. To what extent did Zimbabwe suffer from financial contagion?	8
5. To what extent did the Asian crises affect other countries in Southern Africa?	11
6. Conclusion	16
7. References	18
8. Figures	a - i

The impact on Southern Africa of the financial crises in Asia and Russia ¹

1. Introduction

This paper analyses the reasons for the relative immunity of the SADC economies from the immediate and damaging effects of financial contagion. The paper examines the impact of the Asian crisis in 1997 and the Russian crisis in 1998.

There are several ways in which Southern African economies might be affected *in the medium term* by these crises, including their impact on the prices of primary commodities exported, reduced demand (particularly in Asia) for Southern African exports, increased competition in other export markets from Asian countries with sharply devalued currencies, and the broader impact of reduced growth of the global economy. The focus of this paper, however, will be on "financial contagion", which is the *immediate* (although sometimes temporary) impact on financial markets in a country, from a financial crisis elsewhere.

Financial contagion can occur with frightening speed, and devastating effect. It occurs through its impact on share prices through foreign sales of shares in equity markets, and on bond prices through foreign sales of domestic bonds, and then immediately on exchange rates through the foreign exchange market as foreign investors convert sale proceeds into foreign exchange. It may also be possible for speculators to short-sell a currency, without prior investment, by borrowing from the domestic banking system to buy foreign currency; but this is only possible where bank liquidity is adequate, and bank regulations do not prevent it.

There may be a second, and even more devastating stage, if the domestic banking system is affected by the initial effects in financial markets. This secondary effect can be more serious than the first, because of the high cost of rescuing insolvent banks, because of the lengthy and difficult process of restoring confidence in the banking system, and because the problems of

¹ Grateful thanks to my colleagues at BIDPA: Abdalla Gergis and Keith Jefferis for their perceptive comments on previous drafts, and Keba Lelatsang for extensive help with the statistics, some of which were very difficult to obtain, and for developing the charts.

banks can spread to parts of the economy relatively unaffected by the initial impact on the exchange rate, and on share and bond prices.

There are several reasons for the relative immunity of SADC economies from financial contagion, but one of the most important reason, it will be argued, is that those SADC countries with developed financial markets have banking systems which are relatively sound and well regulated, having avoided the most serious mistakes made by banks in Asia and Russia. Meanwhile, those SADC countries with banking systems which have severe problems, their economies have escaped the worst effects of financial contagion because they have undeveloped financial markets, in which foreign investors have played very little part.

Section 2 of this paper discusses briefly the causes of the crisis in Thailand in 1997, which is now referred to as the "Asian crisis", probably because it spread rapidly to other Asian economies, but not further afield. Section 3 examines the impact of the Thai and Russian crises on South Africa, because it is the dominant economy in SADC, and because it has by far the most developed financial markets through which financial contagion might occur. Section 4 examines the impact on Zimbabwe, as the next largest economy in SADC, and the country with the largest and most open financial markets after those of South Africa. Section 5 then looks quite briefly at the impact on the rest of the SADC economies; it seems that they have proved relatively immune from financial contagion because of the underdeveloped state of their financial markets, the inability of foreign investors to withdraw from markets in which they had not invested in the first place, and their relative unimportance to global financial markets. A final section draws what conclusions appear to be possible for future policy.

2. The apparent causes of the Asian crisis

The Asian crisis began in Thailand in mid-1997, and spread immediately to those Asian countries which appeared to have similar problems (including especially Indonesia, Malaysia and the Philippines). At that stage, the crisis did not spread beyond the ASEAN region.

Among the factors which explain the crisis in Thailand were that:

- the currency had been pegged to the US dollar, and with higher inflation than in the United States, the real exchange rate had appreciated (this was made worse by the appreciation of the US dollar against other major currencies, especially the Japanese yen)
- the pegged exchange rate encouraged domestic companies to borrow abroad at lower rates of interest than available from domestic lenders, without providing for the foreign exchange risk which was treated as if it did not exist

- domestic banks had lent excessively to finance property development, and to other sectors using property as security; this made banks highly vulnerable to a fall in asset prices, which had also been driven up by the easy availability of bank credit, and by foreign investment in property (financed especially by Japanese banks)
- domestic banks had also borrowed abroad at low interest rates, in order to finance loans denominated in domestic currency, without provisioning for the foreign exchange risk, because the currency peg was treated as if it had eliminated that risk
- banks were also able to ignore the risks they were taking, because of an expectation of government rescue in a crisis (a clear case of moral hazard)
- current account deficits had been financed by short term borrowing.

A financial crisis in Thailand was not anticipated, even though with hindsight it may have been inevitable. Among reasons for not expecting a crisis were that the economy had high savings, high levels of foreign exchange reserves, and a budget surplus. Some "macroeconomic fundamentals" were therefore sound, but this was not enough to prevent a major financial crisis. The currency depreciated by more than 40% in the third quarter of 1997. A large fall in property prices, combined with the currency depreciation, caused widespread insolvency of banks. In turn this meant that foreign lenders tried to recall their loans. The stock exchange was devastated, losing more than three quarters of its value in the second half of 1997; there was a partial recovery in 1998, but in March 1999 the index was only 28% of its value of the beginning of 1997 as shown in Table 1.

Some indication of the tremendous fall in property prices in Thailand is that an auction of bank property loans in December 1998 fetched on average only 22% of their face value, and many were unsold. Office vacancies in Bangkok are currently 30%. In Jakarta, property values have fallen by two-thirds, and in Hong Kong by 60%. Even in Kuala Lumpur, whether government has provided considerable financial support, property prices have fallen by 20% [The Economist, 3 March 1999].

Table 1
Stock exchange prices in crisis Asian economies
(end-1996 to 10 March 1999, US \$ values)

	1 Jan - 31 Dec 1997	1 Jan - 31 Dec 1998	1 Jan - 10 Mar 1999
Thailand	-75.9%	+25.4	-8.9
Malaysia	-69.1%	-1.0	-9.8
Philippines	-61.7%	+7.3	+0.4
Indonesia	-73.3%	-32.4	-17.7

Source: *The Economist*. (various issues)

3. To what extent did the Asian and Russian crises affect South Africa? ²

The largest economy in Southern Africa, by a large margin, is that of South Africa, which has approximately 70% of the collective SADC GDP. Zimbabwe has the second largest economy, at about 5% of SADC. The ability of South Africa to cope with crises in other parts of the world is therefore a major factor in the resilience of the other SADC economies. Most of them import heavily from South Africa. Primary commodity exports tend not to go to South Africa, but the neighbouring countries depend heavily on South Africa as a market for the manufactured exports necessary for economic growth and diversification. Some countries also benefit significantly from their migrant labour working in South Africa. South Africa's ability to resist financial contagion is therefore fundamental to the resistance of other Southern African countries.

Because financial contagion operates through financial markets, the South African economy was and remains the regional economy most vulnerable to financial contagion. Because it has been possible for foreign investors to buy South African shares and bonds for some time, and this has happened on a large scale, it is also possible for large outflows to occur. In theory, it would also be possible for speculators to borrow from South African banks, in order to speculate against the rand; however, there has been for some time a continuous shortage of liquidity in the South African banking system, which the South African Reserve Bank meets by lending to the commercial banks. Any significant speculation against the rand by borrowing from the commercial banks could therefore be prevented by the South African Reserve Bank increasing the cost of its lending.

(a) *Impact of the Asian crisis on South Africa*

It is very striking that South African share prices actually rose in local currency terms over the 18 months to mid-1998. Share prices rose, very slightly, in US dollar terms. This could

² The elements of this section relating to what happened in the first three quarters of 1997 are very much indebted to "The South-East Asian crisis and implications for South Africa" [Centre for Research into Economic and Finance in Southern Africa, *Quarterly Review*, October 1997]

have been offset by (or even been a result of) currency depreciation, but this did not happen. Nor were bond prices affected, as shown by the stability of interest rates. On the contrary, there was a net inflow of foreign capital. Table 2 and Chart 1 (e) illustrate these points.

South Africa's exchange rate did depreciate in nominal terms, by a small amount, over the 18 months, and by slightly more than the rate of inflation, but the differential was small.³ It was also remarkable that the net foreign asset position improved quite substantially, indicating a large net inflow of foreign capital, and that this was achieved without any increase in domestic interest rates. On the contrary, the Treasury Bill rate was a couple of percentage points lower at the end of the period than it was at the beginning; and longer-term interest rates, as shown by bond prices, were also unaffected as shown in Chart 5 (b).

³ Strictly speaking, the comparison should be with the inflation differential, in this case between South Africa and the USA. American prices increased by 2.7% over the same period, which slightly increases the real depreciation of the Rand against the US dollar.

Table 2**Some financial indicators for South Africa, end-1996 to mid-1998**

	Dec 1996	June 1998	% change
Share prices (a)	273	296	+8.4
Rand/US\$	4.68	5.36	+14.5
CPI index	189.7	207.7	+ 9.4
TB rate	16.1%	14.0%	-13.0
Net Foreign Assets (b)	-31.0	-22.8	(+ 26.5)

Notes: (a) Johannesburg Stock Exchange Index, Industry and Commerce (period average)

(b) rand billions, end-period

Sources: IMF *International Financial Statistics*; South African Reserve Bank *Quarterly Bulletin*

Because the foreign exchange market, share prices, and bond prices were little affected by the Asian crisis, there was no significant danger of the second and more damaging stage of financial contagion, namely a crisis in the banking system. However, as will be argued below in discussing the reaction to the Russian crisis, the South African banking system should be effectively immune from financial contagion anyway.

South Africa has also retained some exchange controls on capital account, but although the administration of exchange controls in South Africa is reckoned to be more efficient than in most countries, it is very well established that it is easier to find ways round exchange controls the longer they are in force. This raises questions about the effectiveness of South Africa's exchange controls, which have been in existence for a very long time; it is however in the nature of illegal activity that hard statistical information is almost impossible to obtain.

(b) The Russian crisis of September 1998

In contrast to the Asian crisis of 1997, the Russian crisis of 1998 affected stock markets in the industrial countries, and on this occasion share prices in South Africa as well. The Johannesburg industrial index, having risen sharply earlier in 1998, fell by about 40% in September, showing only slight recovery in October. On the other hand, the exchange rate was largely unaffected; it fell sharply in June (from R5.2 to R5.9 the US dollar), but did not fall further in September when the Russian crisis occurred, instead recovering slightly to R5.8

in October. As in the previous crisis, the exchange rate was again largely unaffected. Depreciation of the rand was of the same order of magnitude as the inflation differential. However, on this second occasion the currency had to be defended by sharply higher interest rates, and there was a net outflow of capital suggesting that the South African Reserve Bank had also to be active in the foreign exchange market in defence of the currency. These changes are shown in Table 3.

Table 3
Some financial indicators for South Africa, Jun-Oct 1998

	June 1998	Oct 1998	% change
Share prices (a)	296	206	-30.4
Rand/US\$	5.36	5.81	+8.4
CPI index	207.7	220.6	+6.2
TB rate	14.0%	20.1	+43.6
Net Foreign Assets (b)	-22.8	-28.9	(-26.7)

Notes: as for Table 2

Why did the Russian crisis have such a major effect on share prices, compared with the impact of the Asian crisis? It may be that the Russian crisis was simply one crisis too many; or it may be that the reaction was overdone, and will be quickly reversed.⁴ Meanwhile, financial contagion so far has only spread to share prices. There has been no second stage of financial contagion, with the South African banks largely unaffected by the crisis, and certainly not rendered insolvent. Some of the reasons for this are

- the major South African banks are long-established and well regulated, with failures and insolvencies limited to relatively small financial institutions
- banks have not lent excessively to the property sector (nor indeed to any other one sector)
- banks in South Africa do not invest in equity or use borrowers' shares extensively as loan security
- banks in South Africa have not borrowed extensively abroad, in order to make loans denominated in domestic currency (as it happens, this would not have created losses during the period being discussed, because of the relative stability of the exchange rate).

⁴ It was not quickly reversed; the share index in Table 3 was still at 200 in January 1999. There was a partial recovery thereafter, but only by 19% by mid-April.

4. To what extent did Zimbabwe suffer from financial contagion?

(a) Impact of the Asian crisis on Zimbabwe

In the first place, Zimbabwe was fortunate because of the ease with which South Africa resisted financial contagion. South Africa is by some margin Zimbabwe's largest trading partner, accounting for 12% of exports and 36% of imports. South Africa is probably also a major source of finance for Zimbabwe, but statistics on this are not readily available. On the other hand, the openness of Zimbabwe's financial markets to flows of foreign capital meant that the country was more vulnerable to financial contagion than the other countries in the region (except South Africa of course). Indeed, foreign investors fuelled an extended rise in the stock exchange in 1996 and the first half of 1997; the industrial index reached an all-time high of just over 12,000 in early August 1997. Yet the stock exchange "had survived the brunt of the Asian crisis nearly unscathed, only to succumb in November to a massive collapse in confidence in the Zimbabwe dollar, reducing one of Africa's most buoyant stock exchanges to shambles" [EIU Country Report, 1st quarter 1998: 23].

The collapse in confidence in the Zimbabwe dollar did not occur until November 1997. The currency was overvalued, but this did not result in it falling in July at the time of the crisis in Thailand. Its eventual collapse was caused by domestic factors, including the government giving in to the demands of war veterans (and the implications of this for the government's budget), renewed statements that white farmers would be expropriated, and a worsening trade position. Thus although foreign investors played a part in the dramatic fall of financial markets, the evidence seems to be that their reassessment of Zimbabwe not caused by the Asian crisis.

The indicators in Table 4 show some of these factors, although not the exact timing described above. The table also shows that the net foreign asset position deteriorated on a massive scale, and that this occurred despite nominal interest rates being pushed up by more than half.

Table 4
Some financial indicators for Zimbabwe, end-1996 to mid-1998

	4th quarter 1996	2nd quarter 1998	per cent change
Share prices (a)	12000 (July '97)	7600	-53.3%
Z\$/US\$	10.7	17.4	+ 62.5%
CPI index	424.4	631.2	+ 49.1%
TB rate	19.3%	31.1%	+ 61.1%
Net Foreign Assets (b)	-3.1	-17.2 (May)	(- 454.8%)

Notes: (a) Zimbabwe Stock Exchange Industrial Index

(b) Zimbabwe dollar billions, end-period

Sources: IMF *International Financial Statistics*; Economist Intelligence Unit *Zimbabwe Country Report*

In addition to the facts already mentioned, much of Zimbabwe's financial turbulence can be attributed to the government's inability to reach agreement with the IMF. There were repeated postponements during 1997 and 1998 of agreement on a new 12-month stand-by loan. Somewhat against expectations, agreement was reached in June 1998, for a loan of US \$175 million, but the government's undertakings lacked credibility:

"The macroeconomic performance targets set by the IMF for 1998 would require an improvement of all economic indicators over their 1997 levels, but as the economic situation has not improved this is widely believed to be unachievable" [EIU *Zimbabwe: Country Report, 3rd quarter 1998*: 17].

Furthermore, almost immediately after the deal was signed and money released, the government imposed price controls on maize meal, threatened price controls on other basic foodstuffs, and raised civil service wages. Paying for this meant that the government was very unlikely to achieve targets agreed for the budget deficit (to reduce it from 8.3% of GDP in 1997 to 5.5% in 1998, with steady further reductions to 2.9% in 2001). Inability, or unwillingness, to reduce the budget deficit was the fundamental reason for having to go to the IMF originally in 1991, and has been the major reason for the lack of success of IMF programmes since then.

It might have been worse. There had not been a boom in asset prices (apart from shares), so that a collapse was less likely. The openness of the stock exchange to foreign inflows and therefore to foreign outflows, provides much of the explanation for large fluctuations in share

prices, but this was not repeated for other domestic assets. As a result, there was no second stage of financial contagion in the form of a domestic banking crisis. Most of the main financial institutions in Zimbabwe are, like those in South Africa, long-established, well managed, and adequately regulated by the longest established central bank in Sub-Saharan Africa apart from the South African Reserve Bank. The banks in Zimbabwe have not invested in property, and do not include shares in their asset portfolios. The government-owned commercial bank has had some problems, but so far these have not led to insolvency [Harvey, 1998: 166-70]. Moreover, a systemic crisis is unlikely because Zimbabank does not dominate the sector as do the government-owned commercial banks in Ghana, Tanzania and Uganda, for example, where governments decided to rescue their commercial banks, at enormous cost [Brownbridge and Harvey, 1998: Chapters 4, 6, 7, 10].

The economy also avoided, until recently, the problems that might have arisen from licencing locally-owned commercial banks. These emerged elsewhere in Africa, often in large numbers. Many of them failed [Brownbridge and Harvey, 1998; Brownbridge, 1998a]. Although these new, small commercial banks have many potential advantages, it was generally costly if they were allowed to be licensed before the reform of banking legislation and banking supervision; Zimbabwe avoided this error.

There were other reasons why the crisis in Zimbabwe was limited. Zimbabwe did not have some of the characteristics which contributed to financial crises elsewhere:

- the exchange rate was not pegged to another currency, still less an appreciating currency, but was floated from 1991, which limited (although it did not completely prevent) overvaluation
- because the exchange rate floated, domestic borrowers were less likely to borrow abroad even though the domestic cost of borrowing was very high in nominal terms (above 30% from 1993)
- the current account deficit was not excessively financed by foreign short-term borrowing.

(b) Impact of the Russian crisis on Zimbabwe

At first glance, the Russian financial crisis of late 1998 might appear to have had a very direct effect on the Zimbabwe dollar. However, a close inspection of Chart 2 (h) shows that the sharp fall of the Zimbabwe dollar began at least a month before the Russian crisis started, and that the worst of the depreciation of the Zimbabwe dollar was over when the Russian depreciation was still in full flow. Overall, the doubling of the cost of foreign exchange in Zimbabwe in late 1998 seems to have had little to do with financial contagion. It was largely

a product of domestic economic circumstances, including the government's participation in the war in the DRC. The decline of the currency occurred despite the government pushing interest rates up higher than ever before, stringent foreign exchange controls being brought back in September and made even more stringent in December, and the forced sale to the central bank of domestic foreign currency accounts.

The Zimbabwe stock exchange also continued to decline, as did the net foreign assets position (Table 5). By October 1998, the share price index was less than half its all-time peak in July 1997. However, it did recover (to 7000, from its low of 5800) by the end of the year. Basically, the Zimbabwe stock exchange has been extremely volatile for some time, and although a great deal of this can be attributed to inflow is an outflow is from foreign portfolio investors, the fluctuations do not seem to be particularly associated with the Russian financial crisis. For example, the Zimbabwe stockmarket actually rose for a few months during the most dramatic collapse in Russian share prices, see Chart 4 (h).

Table 5

Some financial indicators for Zimbabwe, July to October 1998

	2nd quarter 1998	October 1998	per cent change
Share prices (a)	7600	5800	-23.7% (c)
Z\$/US\$	17.4	35.8	+99.1%
CPI index	631.2	663.5	+5.9% (d)
TB rate	30.7%	34.8%	+12.0%
Net Foreign Assets (b)	-17.2 (May)	-31.7	(-89.8%)

Notes: (a) Zimbabwe Stock Exchange Industrial Index

(b) Zimbabwe dollar billions, end-period

Sources: IMF *International Financial Statistics*; Economist Intelligence Unit *Zimbabwe Country Report*

(c) Note that the index recovered to above 7000 by end-January 1999.

(d) by the end of 1998, inflation was running at an annual rate of about 45%.

5. To what extent did the Asian crisis affect other countries in Southern Africa?

The other, smaller economies in Southern Africa were less vulnerable to contagion from the Asian and Russian economic and financial crises than Zimbabwe and South Africa (provided always that South Africa itself remained stable, because of the considerable regional

dependence on its largest economy). Zimbabwe and South Africa are the only countries in the region to have significant stock exchanges and bond markets in which foreign investors might be interested.

Without such financial markets, there are only very limited ways in which financial contagion could occur. Foreign withdrawal from financial markets is a major mechanism for causing an exchange rate crisis; without prior foreign investment in such markets, there is little or no scope for foreign attacks on currency in the absence of markets for derivatives.

Investors in fixed assets, for example manufacturing plant or commercial property, do not invest in the expectation of being able to exercise a quick reversal of their investment. Markets for such assets are not at all liquid, so that even if investors were to change their assessment of an economy, there would be no mechanism by which they could suddenly withdraw. Indeed, they would in most cases be foolish to try. Even if they could sell a fixed asset and acquire local currency, the market in foreign exchange (where such a market exists) is generally too small and too shallow to accommodate the conversion of large amounts of domestic currency into foreign exchange (Botswana is, as in so many things, an exception, because of having exceptionally large foreign exchange reserves). At best, assuming that repatriation of investment capital would be allowed, an investor would only be able to convert the proceeds of the sale into foreign exchange over an extended period of time; this rules out what is normally described as financial contagion.

The relative absence, or extremely small size, of financial markets in SADC is beginning to change. A number of countries have created stock exchanges in the last few years. However, in all cases (except Mauritius) they are at present extremely small. The number of companies quoted ranged in 1997 from two in Tanzania, to 13 in Namibia (and 40 in Mauritius). The following table shows the stock exchanges covered in the publications of the International Finance Corporation [1998]. This excludes two of the SADC markets which have recently started stock exchanges (Mozambique and Tanzania), but they have a minimal number of quoted shares. To put these markets in global perspective, statistics for the United States and Germany are also given.

Table 6**SADC stock exchanges: number of companies quoted and market capitalisation, 1997**

	Number of companies quoted	Market capitalisation (US\$ mn)	Annual turnover % range (1994-7)
Botswana	12	615	9.0-12.3
Mauritius	40	1665	4.6-8.2
Namibia	13	689	4.0-16.2
Swaziland	4	129	0.1-122.7 ^(a)
Zambia	6	705	1.8-2.5 ^(b)
Zimbabwe	64	1969	7.6-17.1
South Africa	642	232,069	6.5-18.3
Germany	700	825,233	124.7 ^(c)
United States	8851	11,308,779	90.3 ^(c)

Note: (a) annual turnover on the Swaziland stock exchange was less than 1% in each of the years 1994 to 1996. The number of quoted stocks fell from 6 to 4 in 1997, suggesting there may have been a takeover in 1997, which would account for the very high turnover ratio.

(b) 1996 and 1997 only.

(c) 1997 only.

Source: International Finance Corporation *Emerging Stock Markets Factbook 1998*

The Botswana and Namibia stock exchanges also have dual listings, of South African companies with local activities. From the companies' point of view, this is presumably done largely for public relations purposes. From the point of view of local investors, it makes the purchase of shares in a small number of large South African companies more convenient, and where exchange controls still exist (they were abolished in Botswana in 1999) it provides additional opportunities to buy foreign shares. As with local shares, however, turnover tends to be extremely low. On the Botswana stock exchange, for example, in a typical week there are several local shares in which there are no transactions; activity in the foreign companies is even less, with no turnover at all in some weeks in any of the dual listed shares. Moreover, transactions in the dual listed shares on these peripheral stock exchanges have virtually no net impact on foreign exchange markets.

In these circumstances, it is hardly surprising that the smaller SADC stock exchanges have been largely immune from financial contagion. The markets are also shallow, so that any foreign investment must be undertaken by investors with a relatively long-term view. They must know from the beginning that market depth and liquidity is quite inadequate for any

rapid getaway following a change of sentiment. It can take several days, or even weeks, to buy shares in the first place, and just as long to sell; the basic components of liquidity (sale at short notice, and in a market so deep that the prices not affected) are almost totally absent.

Other countries in the region also have very small stock exchanges and bond markets, or none at all. This means that private international capital flows cannot easily have a short-term impact on these economies. In turn, this protects them from the crises of confidence, and banking insolvency, that can result from internationally-induced asset price changes.

It is theoretically possible for a speculative attack to be launched from abroad on these minor regional currencies. A foreign speculator could borrow from domestic banks, and use the domestic currency to buy foreign exchange. This of course assumes that domestic banks are currently allowed to lend to non-resident borrowers, and that there is a liberalised market in foreign exchange. However, the scope of such an attack can be limited by banking regulation of the lending of domestic currency to non-resident borrowers. For example, in Botswana the commercial banks (which dominate the monetary system as in most African countries) may not lend more than four times their unimpaired capital to all non-resident borrowers combined. This sets an upper limit of P2 billion, or about the equivalent of three months imports of goods and services, and about 8% of the foreign exchange reserves. Countries with lower levels of foreign exchange reserves than Botswana could of course set a lower limit on such lending by commercial banks.

If this analysis is correct, any apparent correlation between the Asian and Russian crises on the one hand, and movements in financial markets in the smaller SADC countries on the other hand, is almost certainly spurious. In fact, inspection of the graphs in Charts 1 to 4 show occasional short periods where events in the foreign currency and share markets of Thailand and Russia appear to be moving in the same direction as some of the currencies and shares of the small SADC countries, but in each case there have also been periods where they moved in exactly opposite directions. Even where, as in the example of Malawi's currency and the Russian effect, the two occurrences moved in the same direction, it would be hard to argue for the one causing the other. Malawi's currency began to depreciate long before the Russian crisis, and even the acceleration of that depreciation correlates poorly with movements in the Russian currency.

It is just as well that financial markets are so undeveloped that the first stage of financial contagion is unlikely to occur in the smaller members of SADC, because some regional

banking systems are fragile, notably in Tanzania and Zambia. The government-owned banks in Tanzania, which comprised the entire banking system, had bad debts of more than 80% of their loan portfolios in the mid-1990s. The cost of writing off these bad debts and recapitalisation was estimated at more than 10% of GDP, and with a strong possibility that the problem and its costs would be repeated within a few years. The scale of the problem in Zambia was less, simply because the government-owned commercial bank (ZANACO) has not had more than about 25-30% of the commercial bank market, and it was relatively well managed "with bad debts believed to be a small share of total loans" [Harvey, 1993]. While this situation has probably deteriorated since that was written, the cost of writing off bad debts must be smaller than in Tanzania because ZANACO's total loan portfolio is less than 3% of GDP.

The situation of banking systems in Angola and Congo is dominated by war. Until quite recently, something similar applied to Mozambique. Moreover, central and commercial banking were combined in the Bank of Mozambique until 1992, and a review of the 30 largest borrowers showed that 99% of loans were non-performing [Harvey, 1996: 142-8]. It may be too soon to know whether subsequent reform has been effective. Malawi had serious problems in the early 1980s, but was unusual in moving to deal with them quickly, and successfully [Brownbridge, 1998b: 193-4]. Banking systems in the other Southern African countries are relatively sound. All the regional economies could lose direct foreign investment, if the Asian and Russian crises make potential investors regard all developing countries as more risky. There is already some evidence of a fall in the flow of foreign direct investment into developing countries; but bad, although serious, is not what is meant by financial contagion.

This relative immunity from financial contagion is not anything to be proud of, because it arises from the insignificance of the smaller regional economies, and their lack of financial development. However, all the smaller SADC members, except from those involved in major wars, are actively trying to develop their financial sectors. The objective of every new stock exchange is to increase the number of quoted companies, to widen the range of investors, and to develop greater depth and liquidity in order to make higher turnover ratios possible. These are legitimate objectives, because financial markets cannot perform their roll in increasing allocative efficiency if the financial markets themselves are inefficient. It is also part of overall economic policy to develop sufficient economic strength that financial markets can be liberalised, allowing free entry and exit to foreign participants. The irony is that *the greater the success in achieving these objectives, the more vulnerable will these economies become to financial contagion*. Just as the larger global economies are beginning to worry about the

consequences of financial globalisation, those few countries which are immune from financial contagion are actively pursuing policies which will remove that immunity. To the extent that they succeed, there will be increasing pressure on them to maintain macroeconomic balance, and absolutely sound banking systems, because of the risk of speculative attacks on their financial markets if their fundamentals make them seem probable.

6. Conclusions

It would be presumptuous to try and conclude very much from this brief paper. To the extent that any conclusions are possible, it would seem that Southern Africa has escaped much of the "contagion" experienced elsewhere. The most vulnerable country is South Africa, because of the very much greater development of the South African financial markets, and their increasing exposure to international capital flows. The contagion has been limited in South Africa, however, because the economy has avoided many of the worst characteristics which contributed to crises elsewhere; unsound banking, asset price booms, excessive short term foreign borrowing, and foreign borrowing based on expectations of a fixed dollar exchange rate (the South African Reserve Bank did encourage private sector foreign borrowing by providing subsidised forward cover, but the very large cost was born by the government and did not therefore endanger the borrowers or their banks). The stability of South Africa is basic to the smaller economies in the region, so that this relative immunity (if sustained) protects them from financial contagion.

The paper also suggests some very simple lessons for Southern African countries, namely to avoid the mistakes listed in Section 2. Most of these mistakes should be avoided anyway, regardless of the dangers of financial contagion. Macroeconomic balance is a fundamental prerequisite for sustainable growth and development. And there is strong evidence that sound banking and financial sector development assist economic growth; the case for this is strengthened at the margin by the argument that sound financial institutions are one of the ways of preventing the second and more costly stage of financial contagion.

More generally, the governments of major industrial countries, and the international financial institutions that they dominate, appear from the recent IMF/World Bank meetings, and the financial press, to have realised at last that complete freedom of international capital flows can be far from optimal, and indeed highly dangerous to global economic welfare. Unfortunately, there is no consensus, either among economists or among governments, as to

how to tame this tiger (or, to change the metaphor, how to get all the unwanted effects back into Pandora's box).

BIDPA, Gaborone, March 1999

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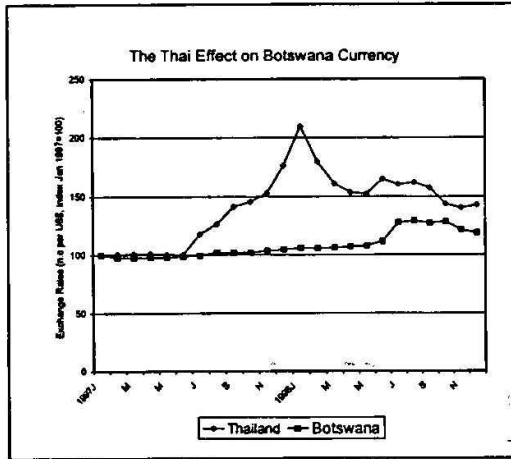
Harvey, Charles (1993) *The role of commercial banks in recovery from disaster in Ghana, Tanzania, Uganda and Zambia* (IDS Discussion Paper 325)

Harvey, Charles (1996) *Constraints on sustained recovery from economic disaster in Africa* in Harvey (editor) *Constraints on the success of structural adjustment programmes in Africa* (Macmillan, Basingstoke)

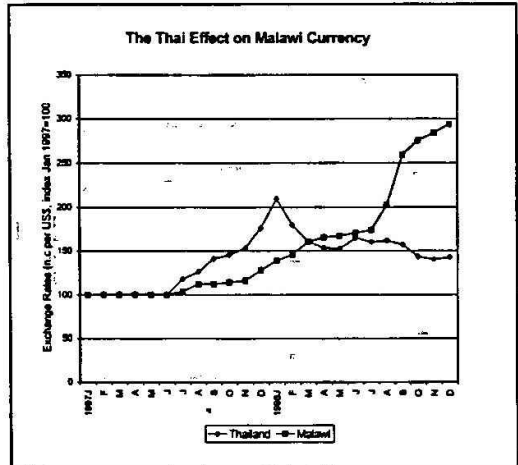
Harvey, Charles (1998) *The limited impact of financial sector reforms in Zimbabwe* in Brownbridge and Harvey (1998)

Chart 1. The Thai effect on SADC currencies

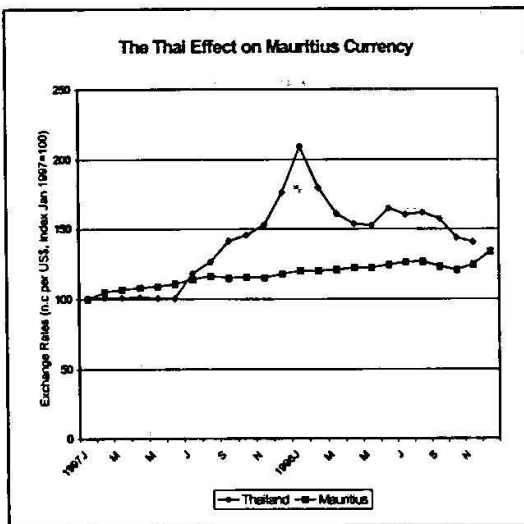
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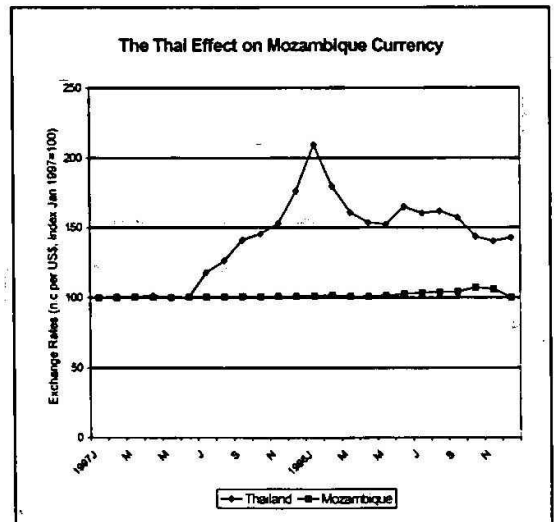
(b) Malawi



(c) Mauritius

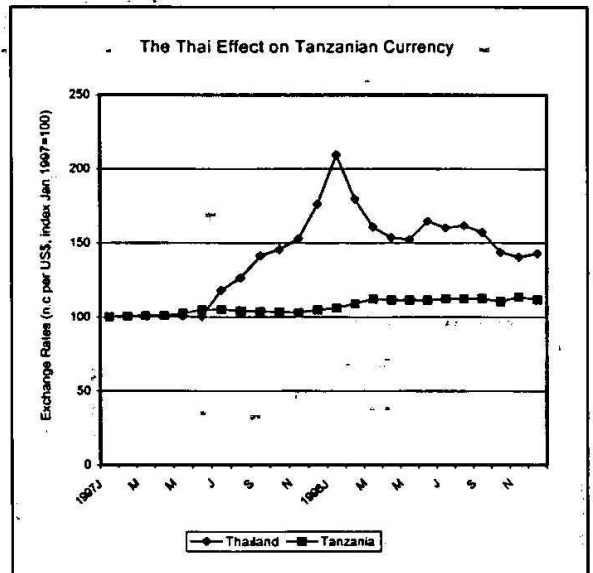
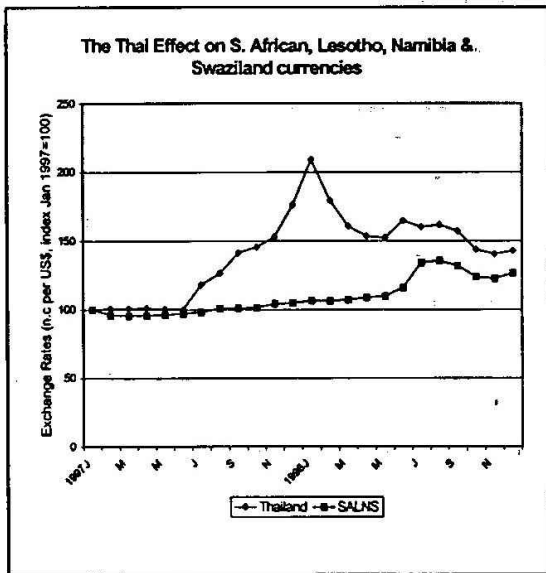


(d) Mozambique



(e) S. Africa, Lesotho, Namibia & Swaziland

(f) Tanzania



(g) Zambia

(h) Zimbabwe

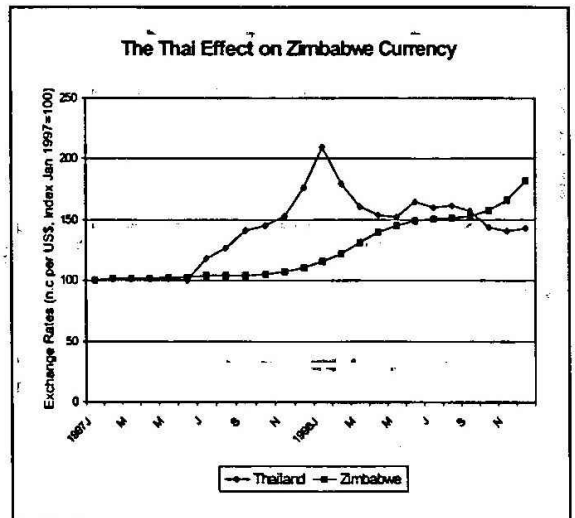
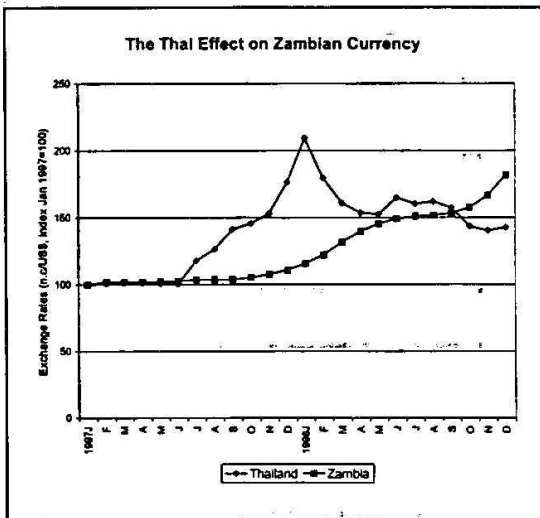
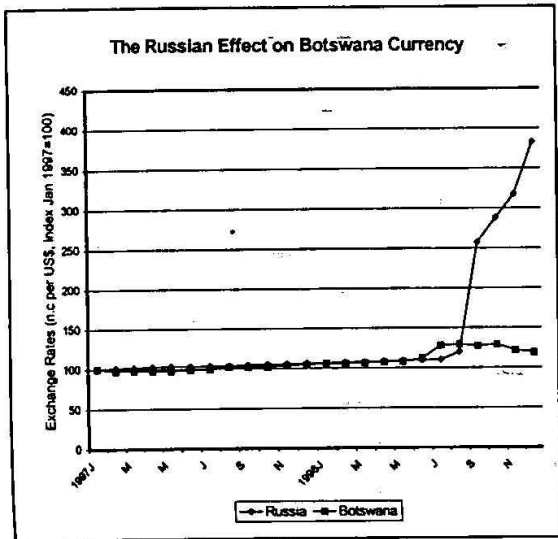
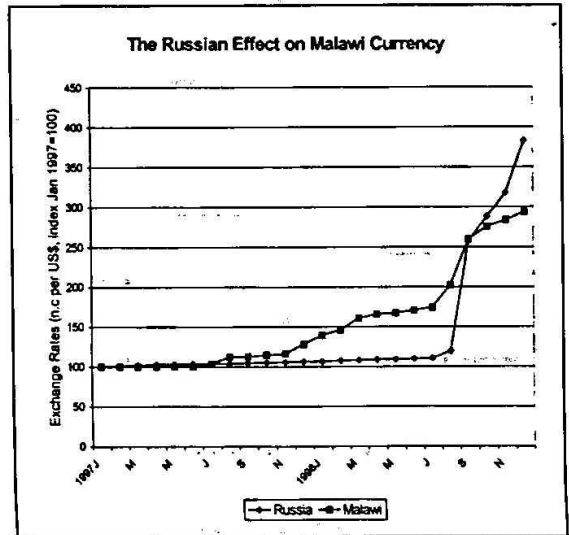


Chart 2. The Russian Effect on SADC currencies

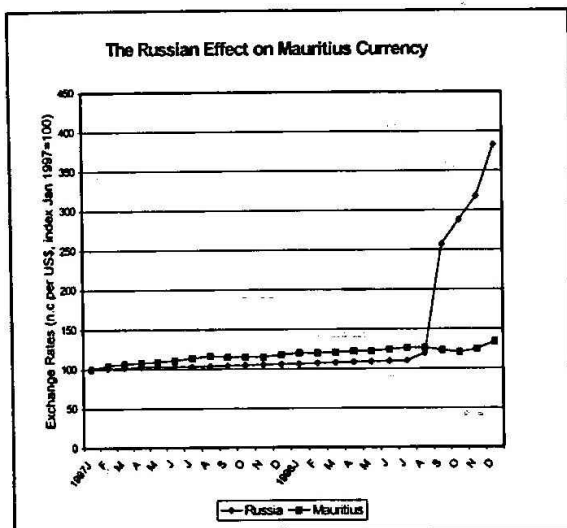
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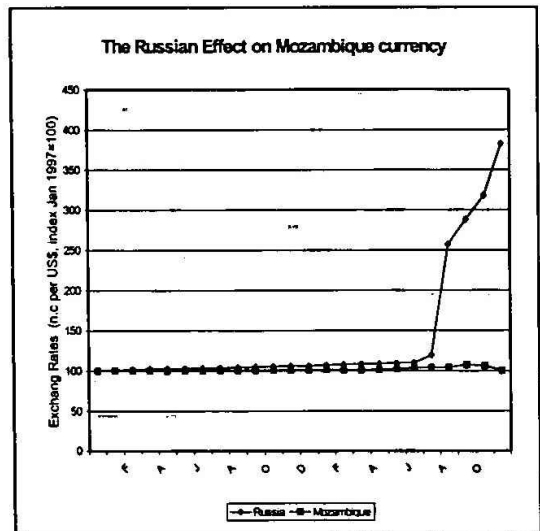
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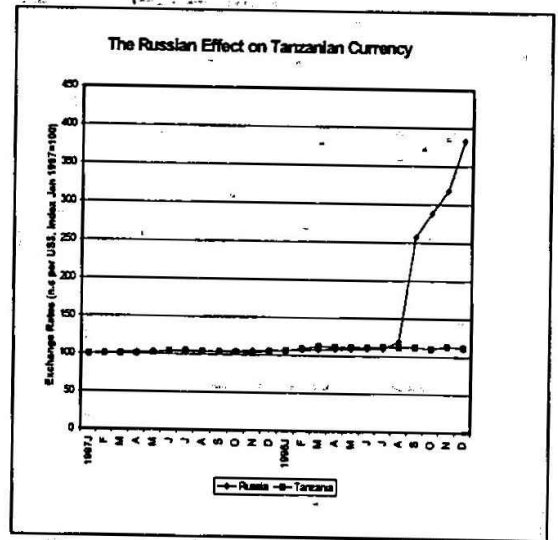
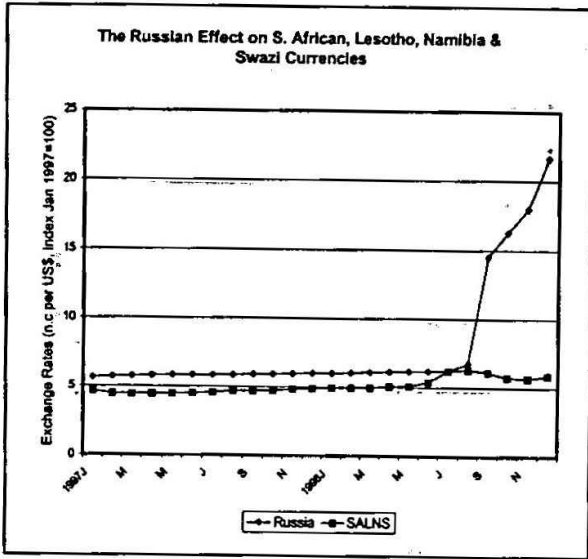


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(e) S Africa, Lesotho, Namibia & Swaziland

(f) Tanzania



((g) Zambia

(h) Zimbabwe

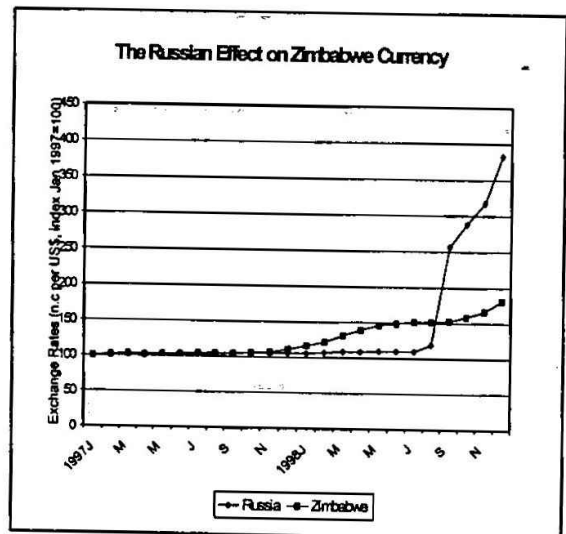
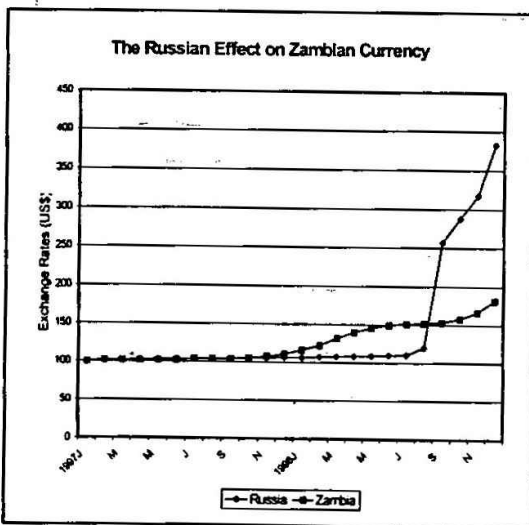
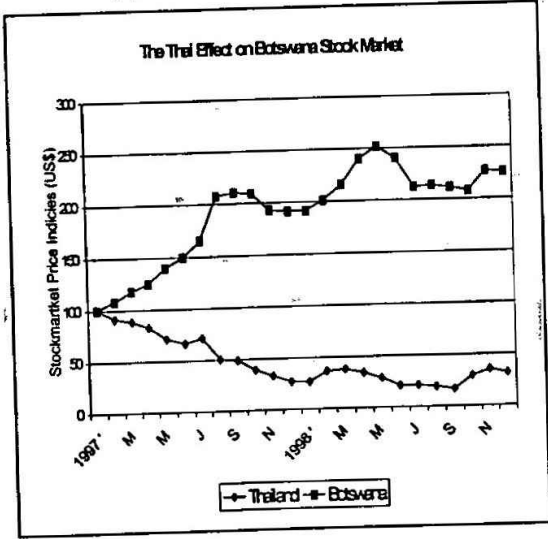
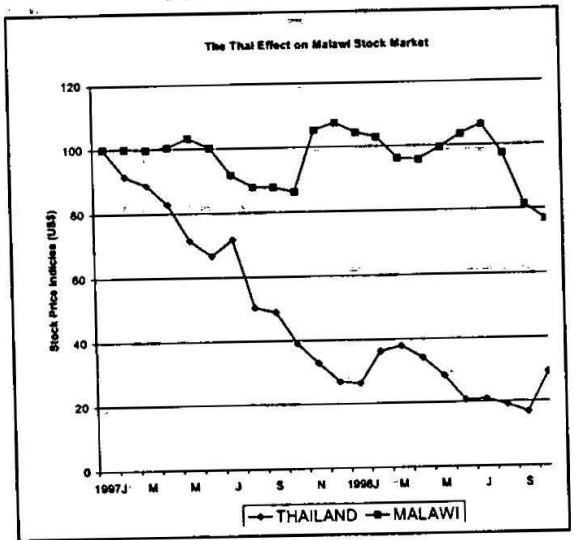


Chart 3. The Thai Effect on SADC stock markets

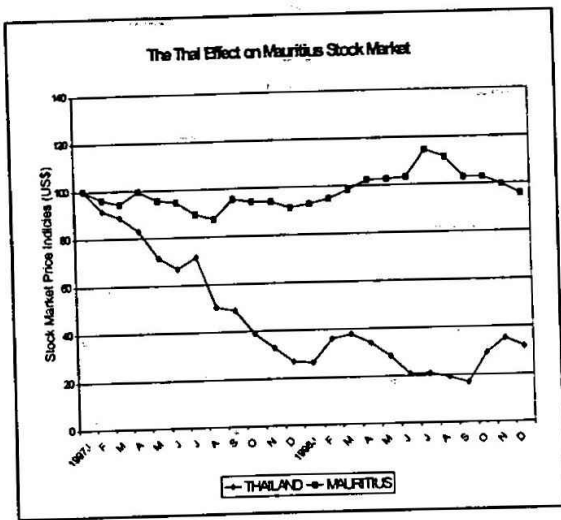
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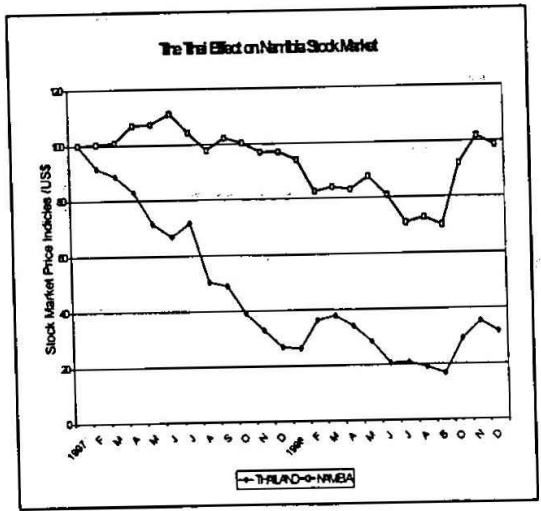
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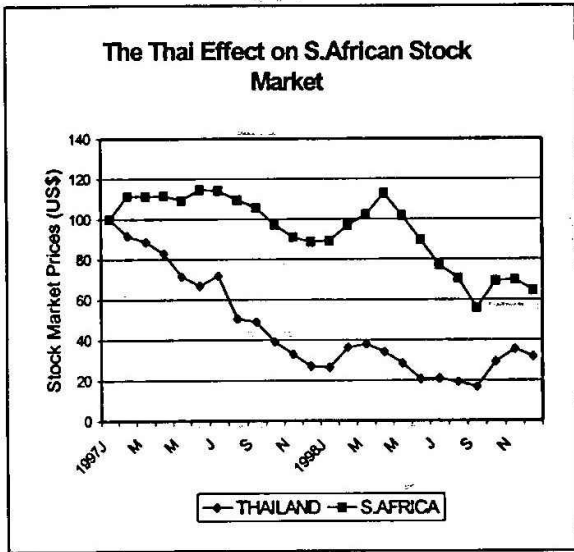
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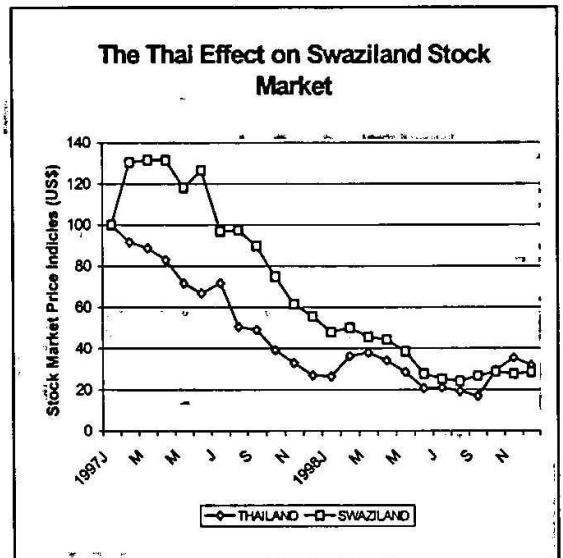
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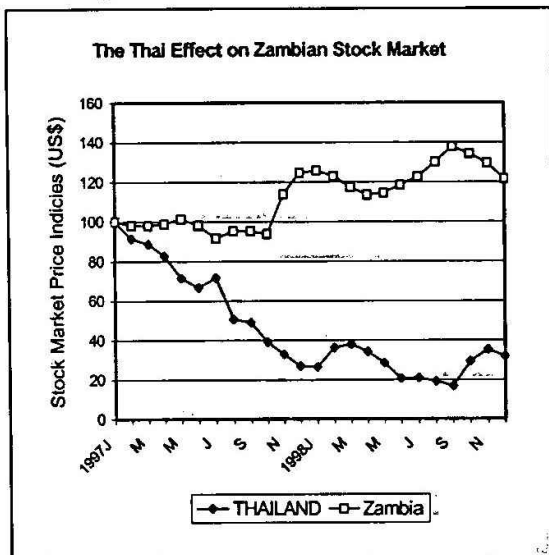
(e) South Africa



(f) Swaziland



(g) Zambia



(h) Zimbabwe

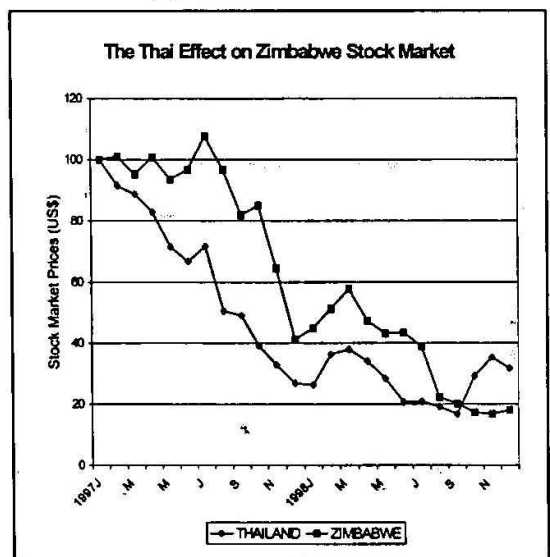
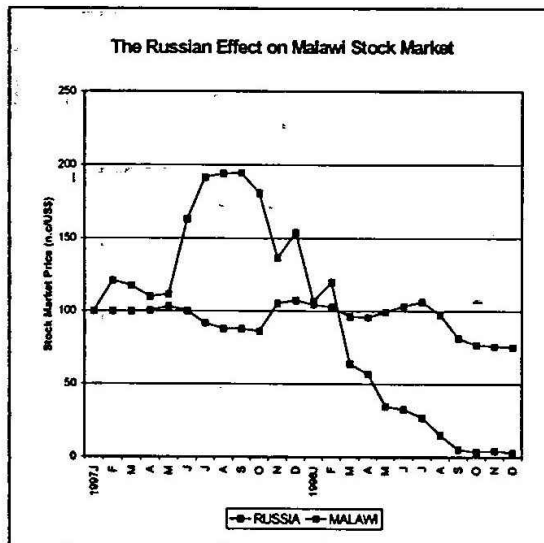


Chart 4. The Russian effect on SADC stock markets

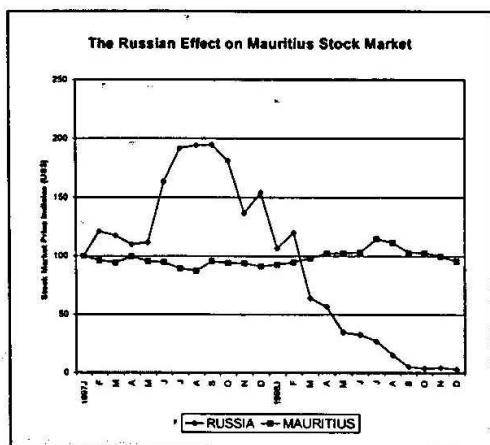
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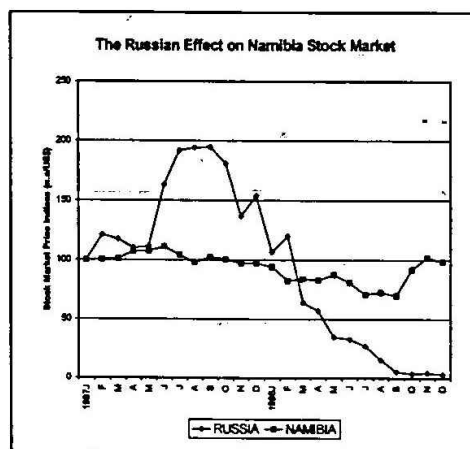
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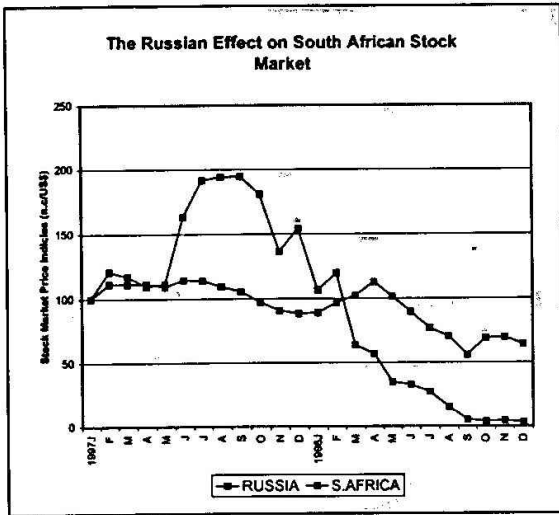
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(d) Namibia



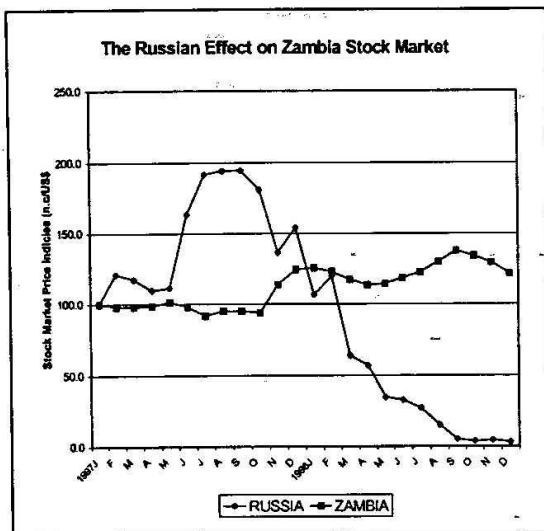
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(f) Swaziland



(g) Zambia



(h) Zimbabwe

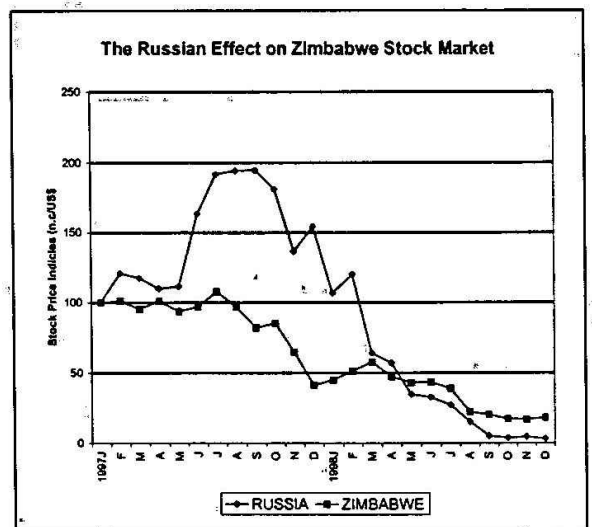
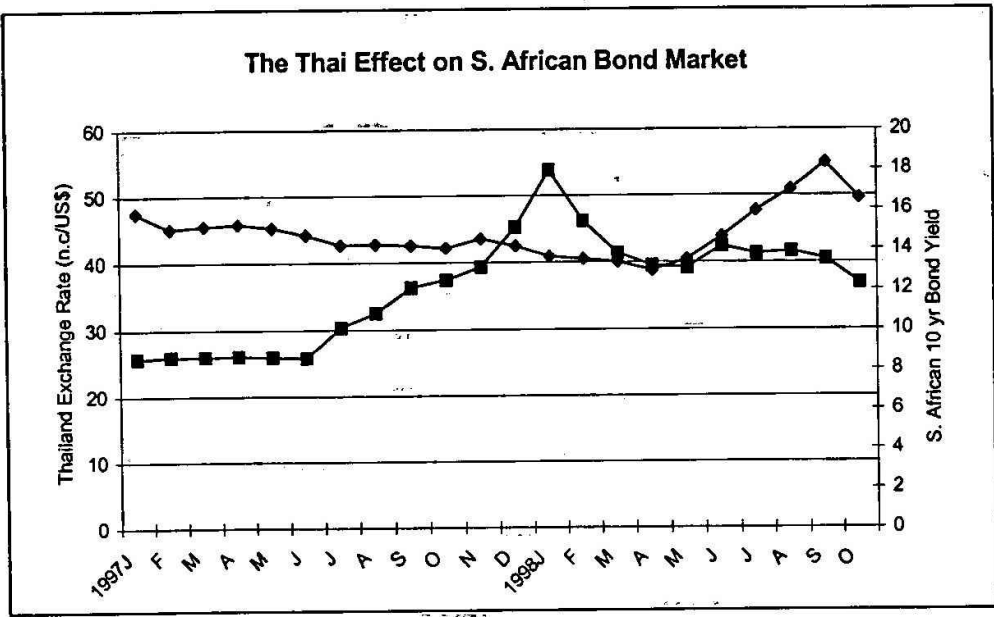
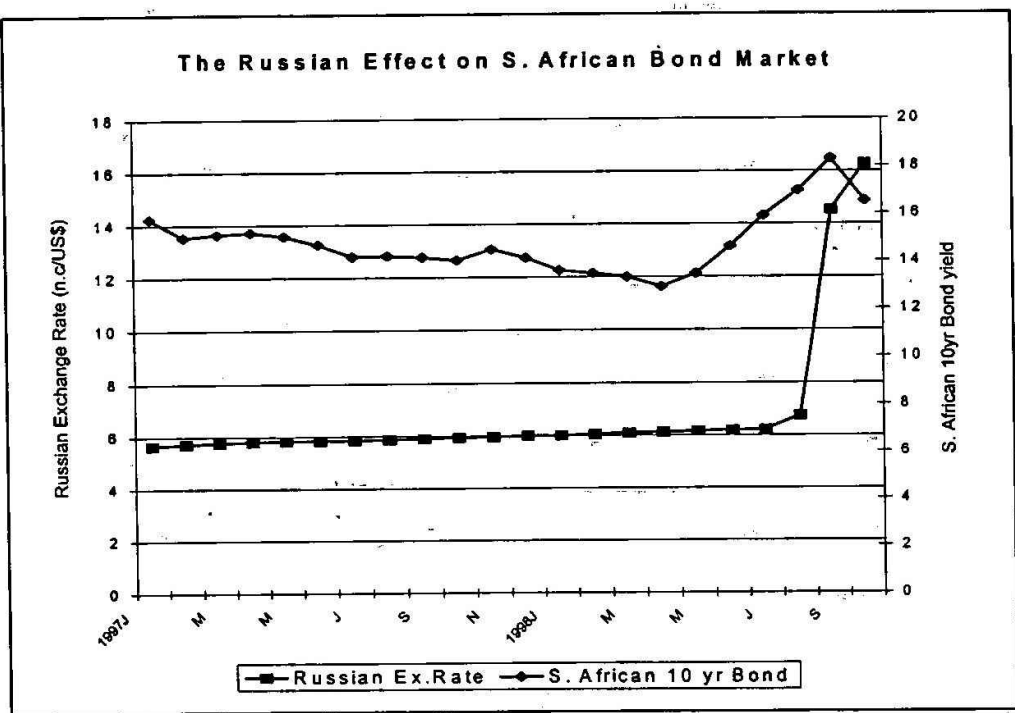


Chart 5. The Thai and the Russian Effect on the South African Bond market

(a) The Thai Effect



(b) The Russian effect



BIDPA Publications

Working Paper Series

BIDPA Working paper 1

Granberg, Per

A Note Concerning the Revision or rebuilding of the MEMBOT Model. Some Preliminary Observations and Suggestions. BIDPA, 1996. RESTRICTED.

The paper discusses the structure of the existing MEMBOT model (Macroeconomic model for Botswana). The limitations of the current model are identified and a need to revise it is noted.

BIDPA Working Paper 2

Granberg, Per

A Study of the Potential Economic Effects of AIDS. Some Preliminary Thoughts. BIDPA, 1996.

Given the current rate of HIV/AIDS infection in Botswana, there seems a need to analyse its economic impact. It is suggested that BIDPA may take an initiative towards this end. The paper presents some preliminary and tentative ideas about such a project.

BIDPA Working paper 3

Duncan, Tyrrell (ed.)

Study on Poverty Alleviation in Botswana: Inception report. BIDPA, 1996

This inception report sets out the various steps planned in completing the study, which comprises a statistical review of poverty utilising the 1985/86 and 1993/94 Household Income and Expenditure Survey. The study will focus six special areas: Basic Education, Preventative Health, Labour Based Public Works, Destitute Policy, Financial Assistance Policy and Arable Lands Development Programme.

BIDPA Working Paper 4

Isaksen, Jan.

Main Ingredients for a Public - Private Sector Strategy for Private Sector Employment Creation in Botswana: Prepared for the Fourth Private Sector Conference on Employment Creation, Francistown 26 - 28 May 1996.

The paper attempts to draw lessons from policy experiences in Eastern Asia. On the basis of such lessons, the paper suggests a number of practical policy steps which hopefully would be relevant to the policy debate in Botswana. It argues that a resumption of rapid economic growth through diversification and industrialisation are the most important contributions to the acceleration of employment creation in Botswana.

BIDPA Working Paper 5

Granberg, Per.

A Revised Poverty Datum Line for Botswana. BIDPA, June, 1996

The paper is part of a larger study of poverty and poverty alleviation in Botswana, undertaken by BIDPA for the Ministry of Finance and Development Planning. The paper presents revised estimates of the Poverty Datum Line (PDL) for Botswana, needed to analyse the household income and expenditure survey for 1993/94 and 1985/86 in terms of poverty.

BIDPA Working Paper 6

Gergis, Abdalla.

Regulation, Privatisation and Commitment in Botswana: Paper presented at BNPC's First Stakeholder Consultative Conference on Productivity: Productivity - Key to the future, November 6, 1996.

The paper notes the challenge facing Botswana, giving particular attention to the changing role of the state and the need to adjust the regulatory environment. Recent economic developments in Botswana are discussed, as are the questions of international competitiveness and the search for a new engine of growth for the economy.

BIDPA Working Paper 7

Fidzani, N.H., P. Makepe and J. Tlhalefang

The impact of trade liberalisation on Botswana's beef and maize sectors. BIDPA 1997

The paper examines the Botswana beef and maize sectors in terms of structure, main activities and market distortions. The origins and sources of these distortions are analysed to determine how their removal would bear upon the various stakeholders. The paper also attempts to sketch implications of regional integration.

BIDPA Working Paper 8

Isaksen, Jan.

Data Requirements and Methodologies for Multi-country Research.

The paper was presented at a workshop on developing a research agenda for accelerated development in Sub-Saharan Africa held in Harare, Zimbabwe, March 1997. It presents data and methodology for co-operation at national, regional and continental levels in research. It concludes that there is need for international co-operation build on national priority research.

BIDPA Working Paper 9

Gergis, Abdalla

"To Privatised", What is & How? Paper presented at seminar on "Competition, Productivity and Privatisation: Commonwealth Experiences and for Botswana" organised by BIDPA and BNPC under the sponsorship of the Commonwealth Secretariat, Gaborone 21-23 April, 1997 BIDPA, 1997

The paper was presented at a seminar on Competition, Productivity and Privatisation. It draws on lessons of experience as well as existing knowledge about privatisation, briefly addressing the main issues discussing how privatisation can be planned and implemented successfully.

BIDPA Working Paper 10

Greener, Robert

The Impact of HIV/AIDS and options for intervention: results of a five-company pilot study. BIDPA, 1997

The paper was written for the Botswana National Task Force on AIDS at the workplace. It presents results from a study of the impact of HIV/AIDS, based on a sample of five companies in Botswana. It concludes that the impact to date has been small, because the HIV epidemic is still too recent to have developed into an AIDS epidemic.

BIDPA Working Paper 11

Harvey, Charles.

The role of Africa in the global Economy: the contribution of regional co-operation, with particular reference to Southern Africa. BIDPA' 1997

The paper was written at the request of the Vice President and Minister of Finance and Development Planning. The paper notes that Africa's importance in the world economy has declined over the years and argues that this, and the extreme poverty in most of Africa, calls for analysis of ways to reverse the trend. Prospects for regional co-operation and integration are discussed as possible ways to accelerate economic growth in Southern Africa.

BIDPA Working Paper 12

Ditlhong, Molapisi.

Poverty Assessment and Poverty Alleviation in Botswana BIDPA 1997

The paper discusses the nature and extent of poverty in Botswana, drawing data from the Study of poverty and poverty alleviation in Botswana conducted by BIDPA for Ministry of Finance and Development Planning.

BIDPA Working Paper 13

Gergis, Abdalla

Competition, Productivity and Privatisation. BIDPA 1997.

A summary report of the proceedings of the Seminar on Competition, Productivity and Privatisation.

BIDPA working paper No. 14

Lisenda, Lisenda

Small and Medium-Scale Enterprises in Botswana: Their Characteristics, Sources of finance and Problem BIDPA, December 1997.

The study analyses the characteristics of Small and Medium-Scale Enterprises (SMEs) in Botswana highlighting the educational background of owners and exposure to business related training, geographic location of enterprises, premises of operation, age of enterprise, and size of enterprise by number of employees, sales and total investment and activity. Also considered are administration and financial sources of the enterprises. Record keeping is assessed by size of enterprise, gender of operator and source of finance of enterprise. Problems faced by SMEs are highlighted.

BIDPA Working Paper No. 15

Granberg, Per.

A simple formula for forecasting the Botswana urban population total. BIDPA,

February 1998

The paper establishes a simple relationship between urbanisation and economic growth. The relationship is intended as a simple "annex" to the revised MEMBOT model (forthcoming), capable of providing quantitative estimates illustrating the likely nature of urban population changes under alternative economic scenarios.

BIDPA Working Paper No. 16

Sesinyi, Magdeline.

Minimum wages and employment: literature review and background on minimum wages in Botswana. BIDPA, 1998.

Gives a brief literature review on minimum wages and their possible effects on employment, with particular focus on the likely effects of minimum wage introduction on the two excluded sectors, namely the Domestic and Agricultural Sectors. It briefly outlines research results on minimum wages from past studies, highlighting their main recommendations. The paper concludes that minimum wage increases results in trade-off, and no matter how well intended come with a price in the form of lost jobs for some and increased benefits for others.

BIDPA Working Paper No. 17

Jefferis, Keith, Charles Okeahalam and Tebogo Matome

International Stock Market Linkages in Southern Africa. BIDPA, 1999

Stock markets are taking on an increasingly prominent role in financial development, and many developing and transition economies are establishing stock markets as part of financial reform processes. In theory stock markets can contribute to the mobilisation of savings and the allocation of investment, but there are questions as to whether this works in practice. One important issue is whether stock markets are efficient (in the financial sense), and a related question is whether share prices reflect economic fundamentals; both of these questions are important in addressing whether stock markets properly allocate capital. Another issue relates to the question of international linkages between markets: with greater integration of capital markets globally, financial market developments appear to be rapidly transmitted between markets around the world. While this can have beneficial impacts, in terms of improving the global allocation and pricing of capital, it may be disruptive if international capital flows are large relative to national markets and economies. This paper addresses pertinent issues in the context of stock markets in three southern African countries: Botswana, Zimbabwe and South Africa.

BIDPA Working Paper No. 18

Dumcombe, Richard

The Role of Information and Communication Technology in Small and Medium Enterprise Development in Botswana. BIDPA, October 1998

The paper analyses the role of information and communication technologies (ICTs) in small and medium enterprise (SME) development in Botswana. It outlines the economic and policy background to SME development, and presents an analysis of the SME sector with regard to firm size, location and market sector. It presents the results of a pilot survey of firms in the SME sector examining the information and communication practices of a small sample of firms. Current developments in information and communication technologies are outlined, and some preliminary findings relating to ICT impact on SMEs are summarised. Finally, some policy considerations are mentioned and the objectives of the main fieldwork phase of the project are outlined

By Harvey, Charles

The impact on Southern Africa of the financial crises in Asia and Russia BIDPA, June 1999

The countries of southern Africa have not suffered seriously from "financial contagion", which is the short-term and sometimes devastating impact of financial crises in other countries. The first stage of financial contagion occurs through the markets for foreign exchange, shares and bonds. The second stage, which can be even more devastating, occurs if trouble in financial markets causes a crisis in the country's banking system, as happened in several Asian countries. South Africa's economy is potentially the most vulnerable in Southern Africa to financial contagion, because it has highly developed financial markets which are open to inflows and outflows of foreign capital. However, the economic cost of financial contagion has been limited in South Africa because the country's banking system is sound. Zimbabwe has been similarly protected from the worst effects of financial contagion. Financial markets in the other countries of Southern Africa are very underdeveloped, which limits the first stage of financial contagion; this is fortunate, because some of them have unsound banking systems. All of these countries are actively trying to develop their financial sectors, however, so that their relative immunity to financial contagion may be reduced in the future. This will strengthen the case for maintaining macroeconomic balance, realistic exchange rates, and absolutely sound banking systems.

BIDPA Working paper 20

Jeferris, Keith *The Long Term Impact of Structural Economic Change on Government Spending*. BIDPA, June 1999

Botswana's current economic objectives centre on diversification away from its historical dependence on diamonds and government. Such diversification will change the structure of the economy, and has important implications for the ability of government to raise revenue through taxation and therefore for its ability to finance its expenditure. This paper explores the likely impact of diversification on government's revenue raising ability and hence on the magnitude of its overall role in the economy. It uses projections over a 20-year period to simulate possible scenarios for taxation and the size of government. The key point is that any diversification will cause government revenues to fall, in relative terms. The diamond sector is extremely profitable, and those profits are taxed at a very high rate; as the economy diversifies, other sectors will emerge that will be less profitable and less highly taxed. The projections in this paper show that under a variety of different assumptions about sectoral growth rates, and taxation and spending, government will have to significantly reduce its role in the economy. Such a change will have major implications for choices to be made about the allocation of public expenditure.

Publications Series

1. Gaolathe, Ndaba "Botswana's booms and recession experience: a discussion" IN: Salkin J.S., D. Mpabanga, D. Cowan, J. Selwe, M. Wright (eds.) *Aspects of the Botswana Economy*. Gaborone: Lentswe La Lesedi, 1997 pp: 37 - 52.

In the years around 1990, the Botswana economy experienced a period of "boom" conditions, eventually followed by a "burst". The paper sets out to analyse this experience, trying to explain the underlying factors, and to draw out policy lessons.

2. Gergis, Abdalla (ed.)

Botswana's New Industrial Development Policy BIDPA/MCI. Gaborone: Government Printer, 1997.

The publication contains the proceedings of the joint BIDPA/MCI seminar held in September 1996. The volume includes the seminar report on group discussions of the draft industrial development policy and the background papers presented by speakers at the seminar. The report summarises the issues raised during the two days of discussions.

3. Gergis, Abdalla (ed.)

Prospects of EU/MCP relationship with particular reference to Botswana: Conference held at the Grand Palm Hotel, Gaborone 25 - 26 September 1997: Conference highlights Gaborone: Government Printer 1998.

This document presents highlights of the conference and of papers presented by speakers. The report captures the essence of the debate on the future of Lome Convention and highlights main issues that emerged from the consultation process.

4. Granberg, Per.

Exchange rate, inflation and competitive: an analysis of the relationship between Botswana's Exchange and Inflation Rates and its implication for the competitive strength of her producers

The publication contains findings of the project: Study of Botswana's exchange rate policy. The publication details simple input/output based model for analysing the exchange rate question, and employs it to draw out the implications for various sectors of the economy, under alternative exchange rate scenarios. It goes on to analyse the available statistical evidence, and draw comparison to model results. Finally, it discusses the rationale, and possible revision, of the current exchange rate policy for a broader perspective with special reference to the likely implications of following a significantly different policy.

Serials

1. BIDPA Briefing

A quarterly newsletter, with topical supplements, that provides regular comment and analysis on all aspects of Botswana economy.

2. The BIDPA Newsletter

A quarterly newsletter reporting on events, projects and general activities of the Botswana Institute for Development Policy Analysis (BIDPA).

