NOVEMBER 1994

RESEARCH PAPER THIRTY

MONETARY HARMONIZATION IN SOUTHERN AFRICA

C. CHIPETA and M. L. C. MKANDAWIRE

AFRICAN ECONOMIC RESEARCH CONSORTIUM

CONSORTIUM POUR LA RECHERCHE ECONOMIQUE EN AFRIQUE

Monetary harmonization in Southern Africa

- Other publications in the AERC Research Paper Series:
- Structural Adjustment Programmes and the Coffee Sector in Uganda by Germina Ssemogerere, Research Paper 1.
- Real Interest Rates and the Mobilization of Private Savings in Africa by F.M. Mwega, S.M. Ngola and N. Mwangi, Research Paper 2.
- Mobilizing Domestic Resources for Capital Formation in Ghana: the Role of Informal Financial Markets by Ernest Aryeetey and Fritz Gockel, Research Paper 3.
- The Informal Financial Sector and Macroeconomic Adjustment in Malawi by C. Chipeta and M.L.C. Mkandawire, Research Paper 4.
- The Effects of Non-Bank Financial Intermediaries on Demand for Money in Kenya by S.M. Ndele, Research Paper 5.
- Exchange Rate Policy and Macroeconomic Performance in Ghana by C.D. Jebuni, N.K. Sowa and K.S. Tutu, Research Paper 6.
- A Macroeconomic-Demographic Model for Ethiopia by Asmerom Kidane, Research Paper 7.
- Macroeconomic Approach to External Debt: the Case of Nigeria by S.I. Ajayi, Research Paper 8.
- The Real Exchange Rate and Ghana's Agricultural Exports by K. Yerfi Fosu, Research Paper 9.
- The Relationship Between the Formal and Informal Sectors of the Financial Market in Ghana by E. Aryeetey, Research Paper 10.
- Financial System Regulation, Deregulation and Savings Mobilization in Nigeria by A. Soyibo and F. Adekanye, Research Paper 11.
- The Savings-Investment Process in Nigeria: an Empirical Study of the Supply Side by A. Soyibo, Research Paper 12.
- Growth and Foreign Debt: the Ethiopian Experience, 1964–86 by B. Degefe, Research Paper 13.
- Links Between the informal and Formal/Semi-Formal Financial Sectors in Malawi by C. Chipeta and M.L.C. Mkandawire, Research Paper 14.
- The Determinants of Fiscal Deficit and Fiscal Adjustment in Côte d'Ivoire by O. Kouassy and B. Bohoun, Research Paper 15.
- Small and Medium-Scale Enterprise Development in Nigeria by D.E. Ekpenyong and M.O. Nyong, Research Paper 16.
- The Nigerian Banking System in the Context of Policies of Financial Regulation and Deregulation by A. Soyibo and F. Adekanye, Research Paper 17.

- Scope, Structure and Policy Implications of Informal Financial Markets in Tanzania by M. Hyuha, O. Ndanshau and J.P. Kipokola, Research Paper 18.
- European Economic Integration and the Franc Zone: the Future of the CFA Franc after 1996. Part I: Historical Background and a New Evaluation of Monetary Co-operation in the CFA Countries by Allechi M'bet and Madeleine Niamkey, Research paper 19.
- Revenue Productivity Implications of Tax Reform in Tanzania by N. E. Osoro, Research Paper 20.
- The Informal and Semi-Formal Sectors in Ethiopia: a Study of the Iqqub, Iddir and Savings and Credit Co-operatives by Dejene Aredo, Research Paper 21.
- Inflationary Trends and Control in Ghana by N. K. Sowa and J. K. Kwakye, Research Paper 22.
- Macroeconomic Constraints and Medium-Term Growth in Kenya: A Three-Gap Analysis by F. M. Mwega, N. Mwangi and K. Olewe-Ochilo, Research Paper 23.
- The Foreign Exchange Market and the Dutch Auction System in Ghana by Cletus K. Dordunoo, Research Paper 24.
- Exchange Rate Depreciation and the Structure of Sectoral Prices in Nigeria Under an Alternative Pricing Regime, 1986-89 by Olu Ajakaiye and Ode Ojowu, Research Paper 25.
- Exchange Rate Depreciation, Budget Deficit and Inflation the Nigerian Experience by F. O. Egwaikhide, L. N. Chete, and G. O. Falokun, Research Paper 26.
- Trade, Payments Liberalization and Economic Performance in Ghana by C. D. Jebuni, A. D. Oduro and K. A. Tutu, Research Paper 27.
- Constraints to the Development and Diversification of Non-traditional Exports in Uganda, 1981-90 by G. N. Ssemogerere and L. A. Kasekende, Research Paper 28.
- Indices of Effective Exchange Rates: A Comparative Study of Ethiopia, Kenya and the Sudan by Asmerom Kidane, Research Paper 29.

Monetary harmonization in Southern Africa

C. Chipeta

Department of Economics Chancellor College P.O. Box 280 Zomba, Malawi

and

M.L.C. Mkandawire

National Bank of Malawi

AERC Research Paper 30
African Economic Research Consortium, Nairobi
November 1994

© African Economic Research Consortium, 1994

Published by the African Economic Research Consortium P.O. Box 62882 Nairobi, Kenya.

Printed by The Regal Press Kenya Ltd. P.O. Box 46166 Nairobi, Kenya

ISBN 9966-900-17-9

Contents

List	t of tables t of abbreviations knowledgements		
I	Introduction		j
II	Review of the literature		3
III	Past and current interest in monetary har	monization	8
IV	Alternative models of monetary integration	ion	17
VI	Problems on the road towards monetary	harmonization 3	3 C
VI	Conclusions	3	33
	pendix 1. Monetary unions in Southern A		36
- ~	pendix 2. Tables		43
Note			47
Refe	erences	4	48

List of tables

1.	Intra-SADC trade 1981/86	11
2.	Intra-regional trade as a share of total trade	12
3.	Southern African countries: distribution of gross	
	domestic product (%)	12
4.	Southern Africa: structure of merchandise exports	
	(% of total)	13
5.	Southern Africa: maximum, minimum and mean	
	rates of inflation (%)	14
6.	Southern Africa: maximum, minimum and mean	
	per capita GNP (US \$)	14
7	The relative sizes of Southern African Economies	15
8	Some transaction costs of Malawi's foreign trade	25
9	Malawi's foreign trade	27
10	Malawi government recurrent account revenue (K'000)	29
11	Ratio of parallel market to official exchange rates	29
A.1	Exchange rates and exchange arrangements in	
	Southern Africa, 30th June, 1992	43
A.2	Comparative exchange rate performance in SADC	
	member states 1965-1990	44
A.3	State of exchange rate disparities between member	
	states and required adjustments back to equilibrium	45
A.4	Estimated levels of stable central bank credit to	
	central government	45
A.5	Central bank credit to central government	46

List of abbreviations

CAMA Central African Monetary Area
CMA Common Monetary Area

COSATU Confederation of Southern African Trade Union

EMS European monetary system
ERM Exchange rate mechanism
EAU European Unit of Account

SATUCC Southern African Trade Union Co-ordination Council

WAU West African Monetary Union

Acknowledgements

The authors would like to express their gratitude to the African Economic Research Consortium (AERC) for funding their research. They would also like to thank the Research Coordinator of AERC, as well as resource persons a colleagues in the macroeconomic research network for the many helpful comments and suggestions that they received during the course of the research for this paper However, the authors alone bear responsibility for its contents.

Introduction

At its 1991 Summit held in Arusha, Tanzania, the authority of SADC¹ decided that the organisation should embark on macroeconomic and sectoral policy planning and coordination. As pointed out by the organisation's Executive Secretary in January, 1992, during the Annual Consultative meeting held in Maputo, Mozambique, macroeconomic policy planning and coordination will include the creation of a monetary union.

All member states of SADC, except Botswana, are also members of the Preferential Trade Area of Eastern and Southern Africa (PTA).² According to its Treaty, the aim of the PTA is to promote cooperation and development in all fields of economic activity, including monetary affairs. Monetary cooperation has been interpreted to include establishing a common monetary area with a greater measure of monetary stability in order to facilitate economic integration. To this end, the authority of the PTA decided in 1990 that the organisation should work towards the establishment of a single currency by the year 2000.

Southern Africa already has one monetary harmonization scheme—the Common Currency Area covering South Africa, Lesotho, Namibia and Swaziland. Mozambique has openly expressed interest in joining this currency area. Other countries would like to see the rand become the common currency of Southern Africa.

Objectives

As interest in the formation of a monetary union in the region grows, naturally questions are being asked about the conditions under which a monetary union would be desirable and viable, the desirable form and extent of such a monetary union, the effects and implications of a monetary union for independence in national policy-making, and about the implications of economic disparities among member countries, among other things. In order to address these issues, this study will do the following things:

Research Paper 30

(i) Review the general literature on monetary integration.

2

- (ii) Present the relevant empirical and historical background to monetary integration in Southern Africa.
- (iii) Examine alternative models of monetary integration, their suitability for the Southern Africa region, and the stages involved in reaching the ultimate goals.
- (iv) Analyze the costs and benefits of monetary union under alternative regimes to Malawi, paying attention to trade policy, fiscal policy, and the effects of exchange rate alignment.

II Review of the literature

A monetary union has been defined as an area within which exchange rates bear a permanently fixed relationship to each other. A monetary union with ostensibly fixed exchange rates, but without integration of economic policies, a common pool of foreign exchange reserves, or a single central bank, has been termed a "pseudo exchange rate union" (Corden, 1972). A common feature of monetary unions is that either there must be a single currency, or, if there are several currencies, these currencies must be fully convertible one into the other at immutably fixed exchange rates, thereby effectively creating a single currency (Allen, 1976).

In forming a monetary union, countries are often motivated by the desire to reduce transaction costs associated with the use of separate national currencies and to reduce the unfavourable effects of exchange rate uncertainty on trade and investment. These potential benefits from a monetary union are conditional on the stability of the value of money, or on price stability. The widespread use of a common currency that is stable in value will minimise transaction costs. This argument has led to the call for a single international money or a global currency area (Cooper, 1990).

Another important reason for forming a monetary union is to enhance the anti-inflationary credibility of the monetary policy of member countries. The choice of monetary policy by individual countries is to a large extent conditioned by the choice of the exchange rate regime. If exchange rates are fixed vis a vis a dominant currency, member countries adopt monetary policies that are consistent with those of the country issuing the dominant currency. Reducing the independence of the domestic monetary authority in this way may enhance its anti-inflationary credibility provided that the monetary union is formed with a "hard" currency so that price stability is assured. This credibility gain for the non-German members of the European Monetary System (EMS) has until recently been an important feature of the Exchange Rate Mechanism (ERM) of the European Monetary System.

Monetary policy in a monetary union can be managed under several alternative institutional arrangements. In the presence of a dominant country, that country's currency may or may not circulate in other countries. Either way, its central bank may set monetary policy for the whole union. The potential benefits to the other

Research Paper 30

4

countries are maximised if that currency is the most stable in value. For a long time this has been the case among EMS members whose benefits have derived from the stability of the German mark, itself the by-product of the formal independence of the Bundesbank from the Ministry of Finance and its legal responsibility to ensure stability in the value of the currency. The non-South African members of the Common Monetary Area (CMA) have not derived similar benefit from monetary union because of the instability in the value of the South African rand.

Alternatively, monetary policy in a monetary union could be set by a supranational institution. In the CFA Franc Zone, composed of the West African Monetary Union (WAMU) and the Central African Monetary Area (CAMA), for example, the central bank of each area sets or co-ordinates monetary policy for the entire area. Given the nature of the exchange rate arrangement, the room to manoeuvre monetary policy is small. Future monetary cooperation in Europe will similarly entail the establishment of a European central bank. An effective commitment to price stability will be a key aim of this central bank. This aim will be enhanced by the independence of the central bank from national governments and by including a commitment to price stability in its statutes.

The goal of price stability inevitably conflicts with an attempt to use monetary expansion to finance government expenditure as an alternative to raising revenue by the conventional forms of taxation. The tendency to employ expansionary monetary policies to increase economic activity or to generate revenue, is said to be strong among several economies (Barrow and Gordon, 1983; Gros, 1989). Seignorage, the benefit that accrues to the issuer of money by virtue of being able to issue interest-free currency rather than having to incur interest charges on borrowing, is justified in terms of the high collection costs and distorting effects of conventional taxes. However, there is no reason to believe that those factors outweigh the costs of high rates of inflation.

The desirable extent of a monetary union has been the subject of many publications on "optimum currency areas". An optimum currency area is one where the advantages for internal trade of further expanding the area of fixed exchange rates are just balanced by the disadvantage of giving up the freedom to devalue and revalue. In other words, it is an area over which the net advantages of monetary cooperation are at an optimum. To maximise the net advantages, there must exist within the area labour mobility, wage/price flexibility, diversification of the economies of the member countries and a high degree of trade interdependence.

Although the benefit of monetary exchange is enhanced by widening the area over which a single currency is used, there are reasons related to macroeconomic shocks which constrain the size of an optimum currency area (Mundell, 1961). It has been argued, for example, that unless labour and capital can freely move between regions, a decline in demand facing one region may lead to unemployment

unless there is flexibility of the nominal exchange rate. Assuming that wages and prices are sticky, then real exchange rate depreciation can be achieved only through a change in the nominal exchange rate. But depreciation would be out of the question if the two regions belonged to the same currency union. For an optimum currency area, therefore, factor mobility must be high.

In practice, labour may not be as mobile between countries (even if they belong to the same currency union) as within the same country. Formal immigration restrictions, foreign exchange restrictions, social services and pensions that are not available to migrants, and language and cultural differences, may limit labour mobility. Mobility of finance capital may be high, but not that of physical capital.

Concerning openness and regional interdependence, it has been asserted that the larger the volume of inter-regional trade within the common currency area, the larger the cost saving from the currency union (McKinnon, 1963). It has also been demonstrated that the usefulness of exchange rate flexibility to achieve external balance, without inducing large internal price changes, is larger when the economy is comparatively closed. In the face of a fall in demand for the country's exports, and assuming that the economy is at full employment, resources must be shifted from production of non-traded goods to production of traded goods to maintain external balance. If the non-traded goods sector is small, a large exchange rate adjustment is needed to transfer those resources. Consequently, the larger the resulting internal prices. Therefore, very open economics are suitable candidates for fixed exchange rates vis a vis their trading partners, including the formation of currency unions.

The twelve EC countries meet this criterion. There is a high ratio of intra-EC trade compared to trade with non-EC trading partners. The United States and Canada also satisfy the trade criterion. There is a large amount of trade among states and provinces in the United States and Canada where the effect of currency unions has been to foster integration. In the CFA Franc Zone, trade among members of the union is relatively low. The currency union among Eastern Caribbean countries also shows only a small amount of intra-regional trade, with exports directed to non-union countries. In these two cases, the size of intra-monetary union trade is not the major reason for currency union. Rather, it is the quest for monetary stability through a single monetary authority.

The diversification or lack of diversification of a country's production structure determines the impact of an adverse shock on the economy. If a variety of goods are exported, and if shocks occur to supply or demand, then their impact on the whole economy will be less than the impact on individual industries. Therefore, other things remaining the same, a diversified economy has less need for exchange rate flexibility to deal with shocks.

Wages and domestic output prices were assumed fixed, at least in the short run, in the early literature that considered the usefulness of exchange rate adjustment

6

for attaining internal and external balance. The usual approach now is to consider wages and prices as sticky rather than fixed and to expect this stickiness to decline in the long run. The response of wages and prices to nominal exchange rate changes may be large enough to reduce the value of nominal exchange rate changes as a means of adjustment.

There are two types of wage/price flexibility worth considering: real and nominal. Changes in a nominal price like the exchange rate are a substitute for domestic price or wage changes and may facilitate real adjustment. But if there is real wage rigidity, employment and net exports would be unaffected by nominal exchange rate adjustments because such rigidity is the same thing as rigidity of the real exchange rate. In contrast, if real wages are perfectly flexible, modification of the nominal exchange rate is helpful as long as nominal wages are sticky. If nominal wages or prices are flexible enough to accomplish the task of changing real exchange rates, adjustment of the nominal exchange rate is not necessary.

With respect to fiscal policy, national actions may have significant effects on other members of a monetary union. If so, there is need for policy coordination to internalise these externalities. The question arises as to the form that policy coordination should take to minimise unfavourable external effects. Much depends on the nature of the external effects. There are essentially two types: macroeconomic effects associated with stabilisation policy and external effects related to budget discipline and credibility of monetary policy. The first type of effect depends on the sign of the shock. The problem could be excessive budget deficits or over-contractionary fiscal policies. The second type of effect implies a sustained bias towards excessive deficits. Therefore, rules or institutionalised procedures that put ceilings on deficits may be the solution for the first type of effects, but not for the second. But both types of effects may be approached through coordination of fiscal policies in a flexible manner. Unfortunately, this relies on discretion. It may be put in place too late, it may be subject to misinterpretation, and it may be difficult to monitor.

Issues of real and nominal economic convergence are also relevant to the discussion of monetary unions. That, in the long run, monetary union implies convergence of inflation rates because of convergence of monetary policy is obvious enough. What is not so obvious is whether real convergence is a prerequisite or a consequence of monetary integration.

The argument that real convergence is a prerequisite for monetary and customs unions follows from the belief that location of economic activity is subject to centripetal forces arising from economic integration. Such forces might be due to positive external economies created in a highly industrialised centre (Myrdal, 1957; Perroux, 1959).

The alternative view, that closer economic and monetary integration will lead to greater real economic convergence, follows from the neo-classical view that the

free movement of goods and services in an exchange rate risk-free environment will lead to equalization of factor prices and output per capita.

Two recent works contain some clarification of the issues involved in this debate (Krugman, 1990; and Krugman and Venables, 1990). These studies lend support to two conclusions: one, that centralization is more likely the greater the size of economies of scale and of the mobile manufacturing sector and, two, that centralization is less likely the greater the size and importance of transport costs.

Another view that has been advanced is that monetary union is viable before nominal and real convergence. This view is based on two assumptions. The first is that free movement of goods and services in the absence of exchange risk will promote equalisation of factor prices and per capita output. In other words, integration will facilitate real convergence. The second is that in the long run there is no trade-off between inflation and unemployment. As such, price stability can be pursued as a goal in its own right. In addition, if the supra-national monetary authority is committed to price stability, this alone may improve the trade-off between inflation and unemployment in the short run. On these grounds, inflation convergence is not accepted as a precondition for the formation of a monetary union.

According to a recent study on this subject, neither theory nor experience identifies a unique level of nominal or real convergence as being associated with a successful monetary union. Each case must be judged on its own merits. The issue of how much convergence of nominal and real economic performance is needed before monetary union is established is at best controversial (Mason and Taylor, 1992).

III Past and current interest in monetary harmonization in Southern Africa

There has been monetary harmonization in Southern Africa earlier involving two groups of countries. One group comprised Malawi (then Nyasaland), Zambia (then Northern Rhodesia) and Zimbabwe (then Southern Rhodesia). Their monetary cooperation took place during the colonial era and lasted two and a half decades from 1938 to 1964. The monetary cooperation essentially involved use of a common currency. Institutionally, this cooperation went through two phases: firstly, the currency board system, secondly, a common central bank when the three countries formed a Federation of Rhodesia and Nyasaland which lasted one decade and was dissolved in 1963 when Nyasaland and Northern Rhodesia won political independence from Britain; the central bank itself was dissolved the following year.

In the case of the other group comprising South Africa, Namibia, Botswana, Lesotho and Swaziland, their monetary cooperation was not abandoned when the last three won independence, also from Britain, or when Namibia got its independence. It continues to exist at present but without Botswana which pulled out in 1975. For many decades their cooperation was on an informal basis until an agreement was signed in 1974 formalizing the Rand Monetary Area; this was modified into a Common Monetary Area arrangement by a 1986 agreement. In this monetary cooperation the dominant partner has been South Africa, right from 1921 when the Reserve Bank of South Africa was established, and the dominant currency has been the South African Rand since the time it was introduced in 1960. The monetary cooperation has been in two major forms: first, circulation of the Rand in other member countries and, after the latter's independence, side by side with their national currencies; second a fixed exchange rate arrangement between their currencies (For further details, see Appendix 1).

A number of lessons can be drawn from the monetary cooperation experience of the two groups of Southern African countries briefly surveyed above. Firstly, geographical proximity appears to have been one of the conducive factors to the selection of co-operating countries, as were similarities in their historical, economic

and political background. Secondly, political will and sovereignty were also conducive. These gave rise to the Central African Federation and the resultant monetary cooperation under expatriate rule, which was later demolished when political independence was achieved in Nyasaland and Northern Rhodesia.

Thirdly, gains from economic integration in favour of Zimbabwe, which was economically better off, were resented by the other members in the Federation just as Namibia, Botswana, Lesotho and Swaziland resent gains from the customs union in favour of South Africa. Fourthly, domination of the Common Monetary Area by South Africa whose inflation rate is imported by other partners and movements in whose interest rates are closed followed by interest rates in other partner countries is resented by Namibia, Lesotho and Swaziland. Loss of the use of the exchange rate as a tool of economic management is also resented by these countries. Inability to use the exchange rate as a policy applied to member countries of the Federation of Rhodesia and Nyasaland as well.

There are three other principal disadvantages of a fixed exchange rate system from which the member countries of the Federation suffered and from which member countries of the Common Monetary Area other than South Africa still suffer. The first is that a fixed exchange rate gives rise to a need to finance a balance of payments disequilibrium. Since the price of the currency is not free to adjust continuously so as to equate demand for and supply of foreign exchange, an overall balance of payments deficit can occur. In order to finance the balance of payments deficit, there is need for the central bank to maintain reserves; while in order to avoid or minimise the external deficit, there is need for governments to formulate explicit objectives with regard to the balance of payments.

The second is that adjustment in the balance of payments cannot be brought about automatically in the balance of payments. For example, if a country's exports are becoming uncompetitive because its price level is increasing faster than that of its trading partners, the resulting tendency for its balance of payments to move into deficit cannot be corrected by a downward movement in the country's exchange rate. Instead, there will be need to manipulate the level of domestic demand or to place barriers on trade and payments in order to protect its external position.

The third principal disadvantage of a fixed exchange rate system is that it binds the authorities to a need to make the balance of payments a constraint on policy. Under a fixed exchange rate regime, a country cannot adopt whatever measures it thinks necessary to achieve domestic policy objectives, without considering their consequences for the balance of payments or without taking into account their effects on other economies. Similarly, a country's domestic objectives can be upset by the imported effects of deflationary or inflationary policies pursued by its trading partners.

The current interest in monetary integration in Southern Africa as stated by the PTA is motivated by the desire to create an environment for economic cooperation that will facilitate intra-regional trade and investment; to reduce the cost of exchanging currencies in intra-regional trade; to save on the use of "hard" currencies in settling intra-regional trade; and, among other things, to improve price stability.

The ultimate aim is to establish a monetary union that will involve the use of irrevocably fixed exchange rates; a single currency or parallel currencies; full harmonization of economic, fiscal and monetary policies of member states; full convertibility of the currencies of member states; full integration of the financial structures of member states; pooling of foreign reserves; and the establishment of a common monetary authority. The question may be asked whether Southern African nations satisfy the conditions for a monetary union.

The level of factor mobility in the sub-region is fairly high. For example, there are believed to be 400,000 to 450,000 migrant workers from SADC member states working in South Africa. In addition, there are about 200,000 semi-permanent migrants there. Botswana, Lesotho and Mozambique receive significant sums from migrant workers (SATUCC, 1991). There are several South African nationals working or doing business in SADC member states. Many citizens of SADC live and work in SADC countries other than their own. Labour migration promotes efficient allocation of manpower resources and should, under competitive conditions, help to reduce inequality in labour earnings among different countries. However, almost all countries in the sub-region have placed some restrictions on the free movement of labour to safeguard employment for their nationals. Future economic cooperation may assist in reducing these restrictions. But the speed with which this will be done will depend on how rapidly the various countries can solve their unemployment problems. The seriousness of the problem can be gauged from the fact that in South Africa alone, between 40 and 50 per cent of the potential workforce is estimated to be without formal employment (COSATU, 1991).

With respect to capital flows, there is strong South African investment presence in Botswana, Namibia and Zimbabwe. South Africa has also been involved in electricity generation in Mozambique and, more recently in water development in Lesotho. Both to protect these investments and to the advantage of other investment opportunities in the SADC sub-region, it is in the best interest of South Africa to forge closer economic cooperation with other Southern African countries.

There is mutual interdependence with respect to transport as well. Six of the SADC member states are landlocked and in varying degrees use the South African transport system which is an important alternative. For some the natural and most economic routes are through South Africa. Eighty per cent of SADC traffic passed through South Africa in 1980. The proportion of SADC traffic passing through that country is now down to 30 per cent, but still significant. For Northern

Transvaal, the Limpopo Corridor represents the shortest route to the sea. It is therefore a matter of economic logic and common sense that SADC member states should promote monetary integration with post-Apartheid South Africa.

For those countries that are members of SADC, their total intra-SADC trade as a proportion of their total trade is small (Table 1). Moreover, the share of intra-SADC trade in total trade has not increased since the formation of SADCC in 1980. In fact it may have even declined (SADCC, 1988). However, once South Africa is brought on to the scene, the picture changes completely, showing a relatively higher degree of trade interdependence.

For the SADC sub-region and individual member states of SADC, South Africa is the single largest trading partner in Africa, reflecting complementarity of their economies, geographical closeness and common historical ties. Between 1983 and 1986 for example, SADC exports to South Africa amounted to just over US \$1 billion and her imports from South Africa totalled US \$5.5 billion. SADC trade with South Africa thus amounted to over US \$6.5 billion. This was more than three times the amount of intra-SADC trade which amounted to only US \$2 billion between 1983 and 1986 (SADC, 1988). For the SADC member states, imports from South Africa represent 30 per cent of total imports, while exports to South Africa are 7 per cent of their total exports. And, for South Africa, the SADC subregion is an important market that absorbs 10 per cent of its exports, more than it sends to the EEC. In these circumstances, further monetary integration would have an immediate impact on the economies of the Southern African sub-region.

The share of intra-regional trade (once South Africa is included) in the total foreign trade of individual member countries is shown in Table 2. The export share for Lesotho is extremely high, as is the import share of Botswana, Lesotho and Swaziland. The export and import shares of Malawi and Zimbabwe are significant, as are the import shares of Mozambique and Zambia. Only Tanzania and Angola have low intra-regional export and import shares.

Table 1 Intra-SADC trade 1981/86

Year	SDR Mlns	Share in total trade	
1981	548	4.7%	/#/
1982	536	4.7%	
1983	495	4.5%	
1984	• 512	4.5%	
1985	417	3.8%	
1986	384	4.2%	

Source: SADCC Regional Economic Survey, 1988.

In terms of diversification of national economies, some countries are heavily dependent on a single sector (Table 3). These are Botswana (mining), Mozambique (agriculture) and Tanzania (agriculture). Moderately dependent on a single sector are South Africa (mining), Zambia (mining) and Angola (agriculture). Lesotho, Swaziland and Zimbabwe have well diversified economies.

Table 2 Intra-regional trade as a share of total trade (%)

_	•	Exports		_	Imports	
	1983	1986	1983/86	1983	1980	1983/86
Angola		_	-		_	-
Botswana	-	-	0.7	-	-	70.0
Lesotho	-	-	90.0	-	-	95.0
Malawi	20.5	17 <i>.</i> 5	17.6	49.5	36.0	45.2
Mozambique	11.5	2.0	-	15.7	18.1	15.7
Swaziland	-	-	-	-	-	80.0
Tanzania	1.0	0.5	-	5.1	1.5	-
Zambia	2.11	-	5.1 ²	21.01	-	25.1 ²
Zimbabwe	32.43	23.3	23.3	35.3 ³	27.6	28.1
South Africa	-	-	-	-	-	_

Source: SADCC Regional Economic Survey, 1988.

Southern African countries: Distribution of Gross Domestic Product (%) Table 3

	Agriculture	Industry ¹	Manufacturing	Services	
Angola	46 ²	23²	3 ²	31 ²	
Botswana	3	57	6	40	
Lesotho	24	30	14	46	
Malawi	33	20	14	46	
Mozambique	65	15	-	21	
Namibia	11	38	5	50	
Swaziland	24²	30 ²	20²	46²	
Tanzania	59	12	10	29	
Zambia	17	55	43	29	
Zimbabwe	13	40	26	47	
South Africa	5	44	26	51	

Includes manufacturing, construction, mining and utilities.

Source: World Bank Development Report 1992 and Sub-Saharan Africa

from Crisis to Sustainable Growth.

¹1980 ²1983/85

²1987

The export trade of Southern Africa is less well diversified. Angola, Malawi, Mozambique, Tanzania and Zambia are highly dependent on the export of one group of primary commodities. Lesotho is also dependent on the export of primary commodities. Only Botswana, Zimbabwe and South Africa have diversified export bases (Table 4). The implication of this is that most of the countries in the region need a flexible exchange rate vis a vis non-regional trading partners to deal with fluctuations in primary commodity prices.

With the exception of South Africa, Namibia and Swaziland, all the countries in the region are undertaking structural adjustment programmes. Among other things, these programmes aim at removing controls on prices and wages and hence to increase the role of the market in price and wage determination. This is helping to improve the flexibility of prices and wages. In the countries that are not undertaking structural adjustment programmes, market forces are already given prominence in the determination of prices and wages.

As regards nominal and real convergence, as measured by the range of inflation rates and the standard deviation, the dispersion of inflation rates in Southern Africa has increased since 1978 (Table 5). So has the dispersion of per capita GNPs (Table 6). The task of converging these variables has, accordingly, increased.

Although the extent of economic integration between South Africa and other Southern African economies is high, the relationship between them is essentially one between core and periphery. Some indication of dominance can be found in Table 7. In terms of land mass, the size of South Africa is exceeded slightly only

 Table 4
 Southern Africa : Structure of merchandise exports (% of total)

	Fuels minerals and metals	Other primary commo- dities	Machinery and transport equipment	Other manufac- tures	Textiles and clothing
Angola	82	5		12	**
Botswana	20	17	3	61	
Lesotho	0	64	0	36	
Malawi	0	95	0	5	3
Mozambique ¹	14	84	0	2	1
Namibia Swaziland					**
Tanzania	 5	84	 1	10	3
Zambia ²	93	4	1	2	
Zimbabwe ²	17	43	3	37	
South Africa	14	12	3	71	1

¹⁹⁶⁵

1987

ource: World Development Report, 1992.

by Angola. The large land mass gives it a diversified natural resource base. Its population of 35.9 million in 1990 exceeded that of every other Southern African economy and constituted about 30.4 per cent of the total population of the region. South Africa's GNP per capita of US \$2,530 exceeded that of Botswana the richest country in the SADC by US \$490 and that of Mozambique, the poorest, by a factor of over 30. South Africa's GDP, exports, imports and the money supply (M1) also exceed those of the best performers in the SADC by large factors.

The theory of monetary integration suggests that a currency union will impose macroeconomic discipline on its members. The principle of one price, for example, should lead to convergence of price levels, at least for tradeable goods. Similarly, arbitrage should ensure convergence of interest rates. Empirical evidence suggests, however, that where you have in a currency union a dominant or core member and small members in the periphery, in the long run consumer

Table 5 Southern Africa: Maximum, minimum and mean rates of inflation (%)

	Maximum	Minimum	Mean	Standard Deviation	
1978	16.4	5.7	9.8	3.4	
1979	18.1	9.7	11.8	3.4	1,0
1980	30.3	5.4	16.4	7.1	- 4
1981	25.6	9.6	16.4	4.8	- X
1982	28.9	9.4	14.4	5.9	
1983	27.1	10.3	17.3	5.4	
1984	36.2	6.7	17.0	8.5	
1985	33.3	9.0	17.3	7.3	
1986	60.0	10.3	20.6	15.3	
1987	55.0	8.1	19.9	14.3	1
1988	55.5	7.4	20.9	14.6	٠.
1989	96.4	9.4	23.7	26.1	
1990	75.0	11.4	22.0	20.5	

Source: Statistical Offices of Member Countries.

Table 6 Southern Africa: Maximum, minimum and mean per capita GNP (US \$)

THE RESERVE OF THE SECOND SECO	1980	1989	1990	(m. 148
Maximum	2,300	2,470	2,530	
Minimum	230	80	80	
Mean	640	774	818	7:
Standard Deviation	643	686	752	

Source: World Development Reports.

price inflation is largely determined in the core. Uncontrolled interest rates also converge to core country levels (Honohan, 1992).

Another aspect of the desirable extent of the currency area in Southern Africa is whether it should encompass SADC or extend to the whole of the PTA. As stated at the beginning, both SADC and PTA intend to pursue monetary harmonization programmes with a view ultimately to establishing a single currency. As they proceed, duplication of effort and even conflict will arise as all members of SADC (except Botswana) are also members of the PTA.

In order to avoid duplication and potential conflict, the 1991 Summit of the PTA proposed a merger between the two organisations. The proposed merger has not taken place. Instead, SADC and PTA will continue to exist as autonomous organisations following the decision of the Summit of SADC taken on 17th August, 1992, in Windhoek, Namibia, to reject the proposal of the Authority of the PTA that the two organisations should merge into a Common Market of Eastern and Southern Africa (COMESA). The reason given for taking this decision is that SADC and PTA have distinct objectives and mandates.

With emphasis on tariff reduction, the development of appropriate monetary institutions and instruments and on monetary harmonization, the activities of the PTA have in the past been seen as largely complementing those of the SADC. As SADC proceeds to integrate the economies of its members through similar programmes, duplication of efforts which in the past was confined to the development of the real sectors of the economy, will no doubt increase.

Table 7 The relative sizes of Southern African economies

1754 5 <u>- 1</u> -							
	Population (Millions) Mid-1990	Area ('000s of Sq. km)	GNP Per Capita in US\$ 1990	GDP (Millions US\$ 1990)	Merchandise Exports (Millions US\$ 1990)	Merchandise Imports (Millions US\$ 1990)	Money (Millions US\$ 1990)
Angola	10.0	1,247	610	7,700	3,000	1,200	313
Botswana	a 1.3	582	2,040	2,700	1,753	1,606	103
Lesotho	1.8	30	530	340	59	621	182
Malawi	8.5	118	200	1,600	412	576	n.a.
Mozambi	que 15.7	802	80	1320	127	796	n.a.
Namibia	1.8	824	824	n.a.	n.a.	n.a.	77
Swazilani	8.0 b	17	810	n.a.	557	632	
Tanzania	24.5	945	110	2,060	300	935	
Zambia	8.1	753	420	3,120	2,138	977	294
Zimbabw		391	640	5,310	1,633	1,851	917
South Afr	ica 35.9	1,221	2,530	90,720	26,612	18,258	19,457

Source: World Development Report 1992 and African Development Indicators.

16 Research Paper 30

On the way towards establishing an economic community, SADC may put in place a free trade area, or a customs union or a common market. The formation of any one of these three modes of economic integration would subject SADC members who are also members of the PTA to two trade regimes which would complicate commercial relations. Among other things, they would have to decide which regime to apply vis a vis each other if, say, both SADC and PTA were preferential trade areas or free trade areas. The Summit of SADC is aware of the potential conflict arising from duplication in the activities of the two organisations. Towards avoiding duplication, it is looking for ways and means by which relations between SADC and PTA can best be harmonized.

Should the PTA make progress on its programme of monetary harmonization, the SADC may wish to work closely with the PTA to ensure convertibility of the currency of the SADC member state that is not a member of the PTA and ultimately to establish a common currency. If the PTA fails to make progress, SADC will go ahead with its own plan to establish a system of convertible national currencies and, ultimately, to establish a common currency for its constituency.

IV Alternative models of monetary integration

Introduction

From what has been discussed previously, it is clear that monetary union comprises the following elements:

- use of a common currency or, if there are several currencies, existence of a
 permanently and rigidly fixed exchange rate relationship between the
 currencies of the area;
- (ii) a common monetary and fiscal policy to ensure collective control over the rate of creation of high powered money and the expansion of government debt;
- (iii) a union management of the common pool of foreign exchange reserves, external debt and exchange rate policy;
- (iv) harmonization of domestic credit achieved by the imposition of maximum credit ceilings. The allocation and distribution of domestic credit between sectors are retained by the national monetary authorities;
- (v) existence of a regional monetary authority or central bank in the case of a common currency which is the sole issuer of the common currency; and
- (vi) a common development bank to finance regional and national projects to assist in the integration process and reduce economic disparities between the union member countries.

There are many forms of monetary integration which, in a sense, are a continuum of options or stages, beginning with a very loose association that

18 Research Paper 30

permits a great degree of independent national action in economic and monetary policy formulation to the most restraining or full monetary union. In increasing order of economic sophistication, these options are: limited currency convertibility; the European Monetary Union Model; the parallel union currency model; the single common currency model; and the complete monetary and economic union – the U.S.A. model.

The following sketch gives a brief description of each of these forms of monetary integration, their suitability for the Southern Africa region, the stages involved in reaching the ultimate stages, and potential costs and benefits of each form of monetary integration.

Limited currency convertibility

Where the creation of a single currency is considered to be a drastic step, countries may decide to do no more than create convertibility at market clearing or fixed exchange rates among their separate national currencies. Referred to as limited currency convertibility, this is not as ideal as a single currency system. But, it does permit unrestricted exchange and use of the currencies of the countries within the sub-region. In other words, all exchange restrictions vis a vis the currencies of the sub-region are eliminated. Limited currency convertibility is an important step towards a monetary union for a group of countries that agree to harmonise or unify their exchange rate policies and adopt a policy of uniform variation of their exchange rates with the rest of the world.

An UNCTAD study which was undertaken for the ECOWAS group of countries defined limited currency convertibility in a narrower sense as "... a set of co-ordinated national exchange arrangements undertaken by those regional member countries imposing payments restrictions on their current transactions with other countries which would provide for a programme of faster liberalisation for intra-regional payments than for payments in respect of the rest of the world" (Frimpong-Ansah, 1983). The narrowness of this definition is rooted in a gradualist philosophy of moving toward a monetary union on a step-by-step basis. However, this approach fails to provide any firm commitment on the part of member countries to maintain fixed exchange rates between their currencies and leaves virtually untouched the wide latitude to carry out independent and divergent monetary and economic policies that can militate against efforts to achieve greater monetary and economic integration in a region.

Instead of adopting a decision to create a monetary union immediately, the PTA decided in 1991 to first work towards limited currency convertibility to be achieved between 1997 and 2000. An informal exchange rate union will also be established during this time. Under the proposed union, the exchange rates of regional currencies will be fixed to each other and vary in unison against third

currencies. This will be done by pegging to the ECU or the UAPTA. However, there will be no coordination of macroeconomic policies or a common central bank.

In reaching this decision, consideration was given to the difficulties that member states would face in reducing large budget deficits and hence huge domestic bank borrowing requirements, and in adjusting misaligned exchange rates within a reasonable time period to create conditions for full monetary integration. Reduction in budget deficits is subject to a number of uncertainties in the region. In addition, as a number of countries were still undertaking structural adjustment programmes, it was felt that it was best to complete their economic adjustment first. Lastly, among other things, central banks were not keen to lose their independence in policy making immediately.

Before the proposed PTA scheme to introduce limited currency convertibility is implemented, member countries will, wherever necessary, be expected to reduce budget deficits and hence government bank borrowing requirements and to adjust exchange rates to their market levels.

Malawi's fiscal deficit is relatively low and so are government borrowing requirements from the banking system. As such, no major adjustments in these variables are required (PTA, 1990). In fact, it has been simulated that to sustain recent rates of economic growth, the country could do with a higher rate of central bank credit expansion to government, assuming an inflation rate of 10 per cent per annum. If the target rate of inflation were lower, there might be need to reduce the budget deficit and bank credit to the government.

The main cost to Malawi would be associated with exchange rate adjustment. The country's currency is overvalued. In 1990 a devaluation of 43 per cent was necessary to correct overvaluation (PTA, 1990). The currency has since been devalued by more than 50 per cent, but the degree of overvaluation is still high. Inevitably, further devaluations will exacerbate inflation.

The other cost would be the loss of autonomy over the exchange rate. Malawi would not be able to use the exchange rate as an instrument of adjustment since it would (a) be fixed in relation to other regional currencies and (b) vary in unison with other regional currencies vis a vis third currencies. Otherwise, there would be no transfer of autonomy in several areas of monetary and fiscal policy to a central authority or loss of freedom to issue currency. Other potential benefits might accrue to the economy from reducing the rate of inflation to an acceptable level, and from reducing illegal foreign exchange markets and currency smuggling.

The European Monetary System (EMS) Model

The EMS is an arrangement by the participating European countries to ensure closer financial cooperation and create a zone of monetary stability in the

RESEARCH PAPER 30

20

European Community. The system essentially involves the harmonisation of exchange rates through co-operative intervention in their foreign exchange markets to eliminate or minimize exchange risks in their trade and other economic relations. Its long-term goal is economic and monetary unity in which a single currency replaces the existing national currencies. The foundation of the EMS is said to be deeply anchored in the shared desire of all the common market countries to seek growth and better resource allocation through greater exchange rate stability.

The EMS replaced the earlier system set up for narrowing the margins of fluctuation between EEC countries popularly referred to as the "Snake". The new system includes some of the operational and institutional elements of the "Snake". There are also new features such as the European Currency Unit (ECU). The ECU is a composite monetary unit based on a basket of the community's currencies and is identical to the former European Unit of Account (EAU). But, unlike the EAU, there is provision spelling out the procedure for its periodic revision. As a hub around which the system revolves, it serves as a numeraire for fixing central rates; a reference unit for the operation of the divergent indicator; a denominator for operations in the intervention and credit mechanisms; and as a means of settlement between monetary authorities of the EEC. The three mechanisms on which the EMS is based are the exchange rate and intervention mechanism, the accounting and settlement mechanism and the credit mechanism.

The exchange rate and intervention mechanism provides for unlimited compulsory intervention on the exchanges of bilateral limits of fluctuation between participating currencies and the divergence indicator which helps to determine when action should be taken by the authorities responsible for the currency whose rate exceeds certain limits which are fixed in terms of the ECU. All the EEC currencies have an ECU-related central rate, with the exception of the pound sterling. By linking together the ECU-related central rates, the bilateral central rate for each of the currencies participating in the EMS is obtained. The bilateral intervention limits are calculated by applying to each of the bilateral central rates the maximum margin of fluctuation of plus or minus 2.25% (6% of the Lira). The participating countries are obliged to keep the rates of their currencies within these bilateral limits. The solidarity of the community is ensured by a modest and limited attempt to pool their reserves, expand existing credit mechanisms and provide measures designed to strengthen the economies of the less prosperous member states of the community.

The credit mechanisms which are in three parts consists of:

(i) the very short-term financing (45-90 days) provided by the participating central banks, used for the purposes of intervention in the foreign exchange

- markets of the member states;
- the short-term monetary support (also provided by the central banks) to finance needs arising from temporary balance of payments deficits and granted for a period of 3-9 months;
- (iii) the medium-term financial assistance (2-5 years) granted by the European Council to any member facing external payments problems and subject to agreement on the part of the borrowing country to adhere to certain economic and monetary conditions.

The measures aimed at strengthening the economies of the weaker members of the community include the granting of interest rate subsidies for loans to such countries by community institutions including the European Investment Bank. Such loans are used mainly to finance infrastructural projects or programmes. There is also the provision for the progressive establishment at a future date of specific long-term aid in favour of countries which have structural or developmental problems in some of their regions. Such aid is given at present through community guarantee for privately or publicly issued stocks by member countries facing long-term structural problems.

In general, the EMS may be described as a loosely integrated monetary zone characterised by a close alignment of the participating members' exchange rates; some harmonization of monetary policy through co-operative intervention in their exchanges; some cooperation in fiscal policy but the retention of substantial national autonomy in most major areas of economic and financial policies.

The proposed PTA unification of exchange rates set for 2000-2024 will entail the harmonization of exchange rates along the lines of the EMS to ensure closer financial cooperation and create a zone of monetary stability. Exactly how the PTA arrangement will work is not known. But it is likely to involve close alignment of the members' exchange rates, some harmonization of monetary policy through co-operative intervention in the exchange markets, coordination of monetary and fiscal policy through a common monetary institution and the pooling of foreign exchange reserves.

The implementation of the scheme will require the use of sophisticated mechanisms to maintain stability in exchange rates which will have to be learnt. Furthermore, foreign exchange markets will have to be developed. Whether the national banks will have the resources to offer credit facilities to fund balance of payments deficits is another matter. Although the PTA has a development bank, its resource base will have to be increased substantially to adequately finance the development of least developed member states. Given the low degree of economic integration in the PTA region, the desirability of an EMS-type arrangement is on the whole questionable.

22 RESEARCH PAPER 30

Under this arrangement, which will be put in place between 2000 and 2024 in the PTA, the potential benefits accruing to Malawi enumerated above are expected to be greater because of the formation of a formal exchange rate union involving full convertibility of currencies, immutably fixed exchange, the formation of a common monetary authority and coordination of monetary and fiscal policy. In addition, Malawi may benefit from the credit mechanisms for financing external deficits, from development finance, from improved efficiency of domestic monetary management, and from increased external capital inflows.

Although the national central bank will be retained with the power to issue the national currency, there will be loss of autonomy in major areas of monetary policy, loss of the exchange rate as an internal policy of adjustment, and loss of other monetary and fiscal policies to control inflation.

Parallel Union Currency Model

A "parallel currency" arrangement is a system whereby a common union currency is issued to circulate side by side with national currencies to which it has a defined and fixed relationship.

The concept of a parallel currency was first mooted in Europe in the early 1970's as an intermediate stage through which the European Community could progress towards the ultimate goal of achieving a monetary union. In one proposal, it was suggested that a common currency to be called "Europa" should be issued to circulate side by side with the national currencies of the community whose exchange rates against the Europa should be given a defined and fixed relationship. As indicated earlier, an important condition for the proper functioning of a monetary union is that the currencies function as a single currency whether or not separate currencies are retained. The attraction of this model, therefore, is that it offers a workable solution for a region which wants a monetary union but manifests a symbolic or sentimental attachment to its national currencies. For the system to work there must be an irrevocable commitment to a permanently fixed exchange rate and full and costless convertibility. The proponents of this model argue that it will help to avoid the problem of premature substitution of a union currency for the national currencies which could cause widespread confusion, suspicion and disruption of existing monetary systems.

Under this model, the parallel union currency can be used as the reference numeraire for the national currencies and circulate with them. It should be freely interchangeable with the national currencies at fixed rates between it and the other national currencies. A major element of the system is the establishment of a union monetary authority with powers to issue the parallel as well as the national currencies. This will guarantee the needed elasticity in the supply of each national

currency in exchange for any of the other national currencies. As in the single currency model, it must be stressed that an essential element for the success of the system is that there must be true and convincing commitment to a monetary union by the governments of the member states.

In this system national central banks are retained but their existing autonomy in monetary and credit management is reduced in favour of the union monetary authority which is jointly exercised by the member states.

The parallel union currency model is certainly a more advanced stage than the ones that have been considered so far. It is a model that was adopted by the Rand Monetary Area after the attainment of political independence by Botswana (which left the area in 1975), Lesotho and Swaziland. The Rand Monetary Agreement of 1974, which brought it about, paved the way for the setting up of national central banks in Lesotho and Swaziland and for the issue of separate national currencies. Under the agreement, South Africa compensates Swaziland and Lesotho for allowing its currency to circulate in those countries. The reverse does not apply the Lesotho Loti and the Swaziland Lilangeni do not circulate in South Africa. The exchange rate between the three currencies is fixed at unity.

The retention of national central banks and a national currency under this model appeals to member states. However, autonomy in monetary and credit management is reduced in favour of a union monetary authority exercised jointly by member states. Where, as in the Common Monetary Area, one member state is a dominant partner, not only may the union policies be largely influenced by it, but also economic developments in this country may have a large impact on the economic stability of the other member countries.

This model will probably appeal to SADC because of the association with it of three of its current member states (Lesotho, Namibia and Swaziland), the past association with it by Botswana, and the potential membership of South Africa in the SADC. SADC would like South Africa to join it on terms of equality with other member states. Adopting the rand as the union currency would not be consistent with that aim. In any case, the South African economy has been quite unstable for a long time and the rate of inflation has been high. These problems are likely to continue and could impact adversely on the stability of the partner economies. For this reason, the adoption of an independent currency as the union currency for the SADC region would be more acceptable.

Single Common Currency Model

Suppose that This model involves an arrangement by which a number of countries are grouped in a monetary area with a single currency and a common monetary authority, which performs the following primary functions:

(i) the issuance of the common currency;

24

- (ii) the holding and management of the external assets of the member countries in a common pool; and
- (iii) the management of the monetary and some aspects of the fiscal policies of the member countries, so as to facilitate monetary stability and the full and unlimited convertibility of their currency against the external reference currency to which it is immutably pegged.

A major element in the successful functioning of the system is provided by the link with an external convertible currency and the support of the issuing government which guarantees the unlimited convertibility of the union currency.

This is the model that, after adopting the parallel union currency model, SADC may wish to work towards. The PTA has decided to adopt a single currency in 2025. The loss of national sovereignty may be outweighed by the benefits of the monetary union. Finding the support of a government that is willing to have the union currency linked to its currency and to guarantee the unlimited convertibility of the union currency may pose a problem.

An attempt has been made to quantify the potential costs and benefits that would accrue to Malawi under a single common currency model or a parallel union currency.

Transaction Cost Savings

There would be savings of foreign exchange transaction costs under a monetary harmonization phase where the volume of buying and selling of foreign exchange by transactors has been reduced as under a Parallel Union Currency Model, and more so where foreign exchange buying and selling has been eliminated completely as under a Single Common Currency Model. In turn this would be conducive to the growth of inter-regional trade among co-operating countries.

For Malawi savings on transaction costs are illustrated in Table 8 through the foreign exchange profits (gross revenue from exchange and commission) made by the only two commercial banks operating in the country. In 1989 commercial banks' foreign exchange profits totalled K27.8 million and rose to K38.2 million in 1990 and K46.2 million in 1991. Their profit from Malawi's transactions with SADC, plus South Africa as a potential member, have been estimated using the percentage share of Malawi's merchandise trade (imports plus exports) with SADC and South Africa in Malawi's global trade, which in 1989 was 35.3%; this proportion is assumed not to have changed in 1990 and 1991 on which direction of trade data is not yet available. Using this proportion, commercial banks' profits from Malawi's transactions with SADC and South Africa are estimated at K9.8

million in 1989, rising to K13.4 million in 1990 and K16.3 million in 1991 (Table 8).

The K9.8 million estimated foreign exchange transaction cost for 1989 relating to SADC and South Africa was 1.3 per cent of Malawi's trade with this region, a proportion which also applied to the country's global trade. This and the other foregoing estimates require some qualifications. Firstly, the foreign trade data used includes transactions by the government, essentially imports, which are not handled through commercial banks; they are, however, a smaller proportion of the country's total imports. Secondly, commercial banks' profits from foreign exchange trading include dealings relating to services other than freight and insurance of imports and exports.

It is unambiguous that the saving in transaction costs involving foreign exchange would tend to induce Malawi's importers and exporters to increase the volume of trade with Southern African countries. Within the country, however, the net effect of such saving is ambiguous. While importers and exporters would benefit, banks would lose the profit and consequently the government would also lose some income tax revenue.

Savings in Foreign Exchange

Savings in foreign exchange would take place partially under a Parallel Union Currency arrangement, as is true for imports from South Africa in the case of

Table 8 Some Transaction Costs of Malawi's Foreign Trade (K'000)

	1989	1990	1991
Malawi's imports and domestic exports ¹			
a) All countries	2,128,97		
b) SADC (with South Africa)	752,545		
c) Column (b) as % of (a)	35.3%²	35.3%²	35.3%²
Commercial banks' profit on foreign exchange dealing]; ³		
d) All countries	27,774	38,174	46,161
e) SADC (with South Africa)	9,804	13,475	16,294
35.3%, i.e. column (c) as % of (d)	,		•
f) Column (d) as % of (a), or (e) as % of (b)	1.3%		

¹Includes transactions not handled by commercial banks.
²Assuming no change in the proportion from the one in 1989.

Source: Various annual reports and accounts of commercial banks

³Includes foreign exchange dealing on services not related to merchandise. The figures are for a calendar year.

Swaziland, Namibia and Lesotho, where the rand circulates, and fully under a Single Common Currency arrangement. For Malawi, foreign exchange savings would assume considerable importance because she is a net importer from the SADC region (K47 million in 1987, rising to K122 million in 1989), more so when South Africa is added to the grouping (K209 million in 1987, increasing to K565 million in 1989) as shown in Table 9. In fact Malawi is more of a net importer from Southern African region than from the rest of the world (see 'other countries' in Table 9) to which she is sometimes a net exporter as was recently the case in 1986 and 1987, after which she reversed into a net importer in 1988 and 1989. Under a Single Common Currency arrangement such former net trade deficit positions would be fully paid through the use of the common currency, thereby fully representing foreign exchange saving. The savings in foreign exchange received from outside the region in the form of export earnings, grants and loans now used on purchases from the region would therefore be available for use outside the region. However under a Parallel Union Currency arrangement and other partial monetary harmonization arrangements, trade deficits would have to be still cleared through the use of hard currencies, so that foreign exchange saving would also be partial. As monetary harmonization progresses, some trade will tend to be diverted from outside to within the region, thereby also leading to some saving of foreign exchange; although that may have its own costs.

Loss of tax revenue

Under a Single Common Currency Model or any form of monetary cum trade cooperation among Southern African countries which would, inter alia, remove tariff barriers to foreign trade, Malawi's central government would lose considerably in terms of tax revenue from foreign traded goods. This is essentially in the form of receipts from duties on imports and surtax which is additionally levied on them; there are no export taxes in Malawi. On the basis of the average for the four years to 1989, no less than an estimated 41 per cent (row c of Table 10) of tax on imports was on goods originating from the Southern African region including South Africa; in 1978 the proportion was 36 per cent or K69 million and rose to 47 per cent or K199 million (row b) in 1989.

As a proportion of revenue on the recurrent account of the central government budget, tax revenue on imports from the Southern African region constituted an average of 18.4 per cent during the four years to 1989. This would not be a small revenue loss arising from regional cooperation that, among other things, removed tariffs on intra-regional trade.

Loss of use of exchange rate as a policy tool

Loss of use of the exchange rate as a policy tool would be of considerable concern to Malawi when regional monetary cooperation, which entails such loss, is established. This is so because Malawi trades with the rest of the world more than with the Southern African region, more so for the proportion of exports than imports (Table 9). Thus Malawi would lose use of the exchange rate through devaluation/depreciation of the Kwacha to sustain or improve performance of a much greater proportion of her exports which is shipped outside the Southern African region; it averaged 85 per cent from 1986 to 1989.

Parallel foreign exchange markets

Although their exact size is not known, parallel foreign exchange markets exist in all the countries in the region. The existence and growth of these markets is a reaction to formal inconvertibility of the regional currencies reflected in exchange control regulations that limit the use of these currencies in international transactions and the limited number of dealers through whom foreign currency transactions can

Table 9 Malawi's Foreign Trade¹ (K'000)

	1986	1987	1988	1989
SADC (without South Africa)				
Imports	33,534	65,336	88,019	144,572
Exports	45,402	17,852	26,212	22,921
Net imports (-)	+11,868	-47,484	-61,807	-121,651
SADC (with South Africa)				
Imports	172,186	291,727	425,784	658,945
Exports	78,390	83,390	114,922	93,600
Net imports (-)	-93,796	-208,556	-310,862	-565,345
Other Countries				
Imports	300,786	362,212	654,367	739,858
Exports	370.677	519,317	627,109	636,569
Net exports (-)	+64,891	+157,105	-27,258	-103,711
All Countries				
Iports	477,972	653,939	1,080,151	1,398,804
Exports	449.067	602,488	742,031	730,169
Net imports (-)	-28,905	-51,451	-338,121	-668,635
		,	,	* * * *

¹ Imports are on a C.I.F. basis. Exports are on F.O.B. basis and exclude re-exports. Source: Malawi Government, National Statistical Office, *Monthly Statistical Bulletin*, June 1992

28 RESEARCH PAPER 30

be effected, among other things. Foreign exchange transactions in parallel markets benefit the participants to the extent that they can obtain foreign currency more easily and more conveniently without restriction and without having to fill forms and wait. For this service, however, they pay a high premium above the official exchange rate. As shown in Table 10, the premium is usually high in the presence of an overvalued exchange rate. To narrow or eliminate this premium, it is important to pay particular attention to fiscal and monetary policy because direct devaluation merely to bring the official rate to the parallel rate does not always achieve this if fiscal and monetary imbalances persist in an economy.

The establishment of currency convertibility would reduce the need for parallel foreign exchange markets, but it would not eliminate it as long as facilities through which currencies could be exchanged were limited and as long as prices for goods and services were not equal in different member countries. The establishment of a single common currency would eliminate the need for parallel exchange markets.

Complete Monetary and Economic Union (USA) Model

This is the ultimate or ideal goal of any monetary integration effort. It is characterised by the issuance of a single currency for the region, thereby eliminating all exchange risks and payments restrictions within the area. It entails the complete displacement of all existing autonomous national banks with regional banks in a federal reserve type system such as operates in the U.S.A. A common external exchange rate and monetary and credit policies replace the multiplicity of national policies in the area. The freedom by each member country to create money for the purpose of deficit financing are severely constrained by the policies pursued by the central monetary authority and hence this aspect of fiscal autonomy is also given up. To introduce this model into a community of sovereignty states requires political unification.

Although there is no federal-type government in Southern Africa now, SADC will be working towards the establishment of one in the future. The Treaty of SADC has set as one of the objectives of the organisation the evolution of common political values, systems and institutions. Initially, SADC will set up a regional parliament and a regional tribunal (SADC, 1992).

Table 10 Malawi Central Government Recurrent Account Revenue (K'000)

	Foreign Trade Tax Revenue ¹							
		1986	1987	1988	1989			
	Import duty Surtax	117,973 73,478	34,894 181,638	105,871 211,549	143,951 279,189			
a)	Total all countries of which:	191,451	216,932	317,420	423,140			
b)	SADC and South Africa (i.e. column (a) \times col. (c))	68,922	96,752	125,063	199,299			
c)	Imports from SADC and South Africa as % of total imports	36.0%	44.6%	39.4%	47.1%			
	Total	Recurrent A	ccount Revenue					
d)		456,560	552,321	696,030	866,629			
e)	Column (b) as % of (d)	15.1%	17.5%	18.0%	23.0%			

¹There are no export taxes in Malawi Source: Table 8. Reserve Bank of Malawi *Financial and Economic Review*, No. 4, 1991, Statistical Annex Table 3.1.3

Table 11 Ratio of Parallel Market to Official Exchange Rates¹

	1984	1986	1988	1990
Botswana	1.71	1.36	1.14	1.03
Lesotho				
•	1.03	1.11	1.04	1.04
Malawi	1.53	1.11	1.22	1.20
Mozambique	34.16	48.23	n.a.	n.a.
Swaziland	1.03	1.11	1.07	1.04
Tanzania	3.73	4.92	2.13	1.50
Zambia	1.26	1.25	3.67	4.00
Zimbabwe	2.25	1.33	1.74	1.36
South Africa	1.03	1.11	1.04	1.04

 $^{^{} ext{1}}$ A measure of the premium on the official exchange rate. The premium is high in the presence of an overvalued exchange rate. Source: World Bank and UNDP African Development Indicators, p. 45.

V Problems on the road towards monetary harmonization

Monetary reforms

Every country in Southern Africa has its own currency (Namibia will issue one soon). Every country (except those in the CMA) also determines its own exchange rate regime. Angola pegs its currency to the US dollar; Botswana, Malawi, Tanzania and Zimbabwe peg theirs to trade weighted baskets of currencies; Mozambique and Zambia determine their exchange rates on the basis of a set of indicators. Along with divergencies in economic conditions and policies, differences in exchange rate arrangements have resulted in very different nominal exchange rates in these countries (Appendix 2, Table 1).

To make matters worse, according to the PTA (1990), the real effective exchange rates of most of the countries have diverged from their equilibrium levels for most of the past two and a half decades (Appendix 2, Table 2). Most exchange rates have suffered from overvaluation which has introduced a bias against exports. Zambia and Tanzania, among the countries for which data is available, experienced high degrees of overvaluation and hence suffered most from consequent price distortions. Of the countries included in the PTA study, only Lesotho and Swaziland escaped from the costs of protracted overvaluation. South Africa and Namibia, not included in the PTA study, have also experienced less overvaluation. In all the four countries, membership of the Common Monetary Area prevented adoption of macroeconomic policies that create instability in the exchange rate. Outside of the CMA, only one other country, Zimbabwe, has demonstrated reasonable stability in its nominal exchange rate, according to the PTA (1990) study. Except for a brief period during the late 1970's, the nominal exchange rate remained close to the real effective rate.

The problem of divergent nominal exchange rates can be minimised by pegging all the regional currencies to the same reference currency, or the SDR or to some other trade weighted basket of currencies. Fixing the external value of regional

currencies in this way will ensure stability in the value of one currency vis a vis others. Ideally, currencies should be pegged to the external currency or basket of currencies at the same rate. In practice, it may be difficult to agree on a common external value.

Considering the advantages of full monetary harmonization, the PTA decided in 1991 to work towards the establishment of a single common currency by the year 2025. The long lead time will give member states sufficient time to carry out necessary economic adjustments. As we understand it, the process of creating one currency will entail the establishment of limited currency convertibility followed by the establishment of an informal exchange rate union (1997-2000) and the formation of a formal exchange rate union (2000-2024) before full monetary harmonization in 2025. Each stage will start after the successful completion of the preceding stage. Two sets of problems will attend this process.

The first relates to the degree of exchange rate adjustment that will be required. As it has been pointed out above, most of the currencies of the region are overvalued. The degree of overvaluation has no doubt declined from the excessive levels of the late 1970s and the first half of the 1980s. Under structural adjustment programmes, several countries are making exchange rate reforms necessary for harmonization. For these countries, the rate of currency devaluation that will be required is relatively small (Appendix 2, Table 3). For a few that do not appear to show evidence of results of significant exchange rate reforms, the rate of devaluation would be high. Lesotho, Swaziland, and perhaps South Africa and Namibia, may need to revalue their currencies.

The second and serious problem relates to the amount of adjustment in the growth of central bank credit to government. This is required to prevent excessive creation of money which would undermine the value of the common currency by fuelling inflation. As shown in Appendix 2, Table 4, there are differences in rates of growth of credit to government, reflecting underlying economic structures. All rates, except the actual, assume a 10 per cent rate of inflation. Whether a uniform rate of credit expansion were adopted or not, it is clear that a cut would be necessary in Zambia, Tanzania and Lesotho. A target rate of inflation below 10 per cent would require a cut in a larger number of countries.

In terms of institutional capacity, there should be little difficulty with harmonization of monetary policies as the Common Monetary Authority would take care of this. Divergent economic conditions may necessitate different policies, and this could be potential cause of conflict. With respect to the flow of short-term credit to the public and private sectors, the PTA plan envisages arrangements similar to the ones in place in West and Central African Monetary Unions. For development finance, a new institution will not be set up. Instead, reliance will be placed on the PTA Trade and Development Bank.

Fiscal reforms

The Technical Study Group that prepared the PTA report on monetary harmonization observed that the average level of permissible unified credit expansion to central governments would be of the order of 15-20 per cent of previous year's tax revenue. For some countries, such a limitation on credit would be tolerable as already their borrowing requirements are manageable. For others, it would lead to a sizeable unfunded budget deficit (Appendix 2, Table 5). In this group, there will be need to raise revenue or cut down expenditure or to do both over a long period which will slow down progress towards monetary harmonization. The most expeditious approach would be to seek budgetary aid or expanded financial support for structural adjustment programmes.

Lessons for SADCC

The above illustrates the problems that would have to be resolved if the PTA were to work towards monetary harmonization. The PTA plan is based on the assumption that convergence of fiscal and monetary policies and hence inflation rates is necessary before full monetary union. This assumption is believed by some economists to be neither necessary nor sufficient for monetary integration. The act of monetary integration creates the fiscal and monetary discipline that ultimately produces nominal convergence.

The PTA dilemma also reflects the fact that the grouping is not an "optimum currency area". Total intra-regional trade in absolute terms has fallen since the PTA was created. As a proportion of total trade, it is less than 5 per cent. The gain from saving in transaction costs made possible by monetary integration would thus be small. A few large exporters to the region, Kenya and Zimbabwe, might make significant gains out of it. As presently constituted, the gains to SADC might also be small. When South Africa is included in the SADC the picture changes for the better.

VI Conclusions

The aim of a monetary union in Southern Africa is to create a favourable environment of the integration of national economies. Such an environment is expected to be created by reducing transaction costs associated with the present use of separate national currencies in intra-regional trade and by reducing the unfavourable effects of exchange rate uncertainty on intra-regional trade and investment. Another reason for creating a monetary union would be to enhance the anti-inflationary credibility of member states.

The literature on the desirable extent of a monetary union suggests that the benefits from such a union will be greatest when labour and capital mobility among member countries is high; when economies within the monetary union are open and there is a high volume of trade between them; co-operating economies have a diversified economic and export base, which obviates the need for exchange rate flexibility; and, among other things, when nominal wage and price flexibility is considerable. Economic cooperation in the SADC since 1980 has not created favourable conditions by integrating the economies of member states. The proportion of intra-regional trade to external trade has remained relatively low, the structure of production and exports has not been diversified, labour and capital has not become more mobile, and nominal wage and price flexibility is not considerable. All these factors would work against the success of a monetary union. The inclusion of South Africa improves the prospects for success of a monetary union in the sub-region as it improves several of the criteria put down above. It must be stressed, however, that close economic ties between the member states may not be enough to ensure sustainable monetary integration. Close political ties among member states are also necessary to give monetary integration extra legitimacy and the institutional mechanisms for its management. Something along the lines of a federal type of political arrangement would serve this purpose.

At present nominal and real divergences among potential members' economies are very large. These divergences could undermine the viability of a monetary union because (i) greater integration could lead to more centralised activity because of the attractiveness of an already established industrial centre which 34 Research Paper 30

would accelerate divergence; (ii) it could lead to political pressure on the single monetary authority, whose independence could be compromised; and (iii) countries with high inflation rates and weak competitive positions may have to incur large input losses to restore competitiveness which could offset efficiency gains from a single currency. The decision of the PTA to start with currency convertibility does not reduce the risks posed by nominal and real divergences. The PTA is focusing on nominal divergences which may be easier to reduce. But, given the large budget deficits of some member states and the consequent large bank borrowing requirements, and given the large divergence in several countries between actual and equilibrium exchange rates, it is unlikely that the requisite adjustments will be accomplished by 1997 to facilitate the establishment of currency convertibility. Under these circumstances, planning for monetary harmonization is premature and can easily represent a diversion from more practical issues like reducing tariff and non-tariff barriers.

Southern Africa has had experience with two monetary unions - the Southern Rhodesia Currency Board (later Central African Currency Board, then the Bank of Rhodesia and Nyasaland) and the Common Monetary Area. Both unions had their origin in colonial times. The interest of the external (colonial) power kept the former union intact. As soon as two of the member countries attained political independence, the monetary union broke up so that they could exercise autonomy in economic management. With the independence of Northern Rhodesia and Nyasaland came the end of the free movement of labour and capital between the three Central African countries as well as restrictions on trade between them. The latter monetary union has survived the political independence of several of its members because it satisfies most of the criteria for an optimum currency area.

The association with the Common Monetary Area by three current members of SADC (Lesotho, Swaziland and Namibia), the past association with it by Botswana, together with the potential membership of South Africa in SADC and the evident need for some harmonization of monetary and exchange rate policy as a key pillar of an integration programme had led to suggestions that the Common Monetary Area should be enlarged and the Rand become a "regional currency". This may be a false appeal. Adopting the currency of any single member as a regional medium of exchange would not be consistent with the aim of promoting a new relationship based on equality among member states. In any case, the South African economy has been unstable for some time and the rate of inflation has been high. These problems may intensify in future as a new democratic government steps up public spending to redress domestic social imbalances and could impact adversely on the stability of other member states. For these reasons, working towards the creation of an independent currency for the SADC region would be more acceptable.

With specific reference to Malawi, participation in a Southern African Monetary Union will bring benefits to the economy, but it will also give rise to costs. It is difficult to ascertain potential net benefits because not all benefits and costs are readily quantifiable. For example, it is not easy to quantify the benefits from price stability or the costs to the economy due to loss of the exchange rate as a policy tool. Among the benefits that can be estimated are savings in foreign exchange transactions costs and savings in foreign exchange itself by having to use a regional currency to effect transactions with regional partners. Under a single common currency arrangement, the estimated sum of these two for 1989 amount to K574.8 million. The loss in tax revenue from elimination of tariffs on intra-regional trade for the same year has been estimated at K199.0 million. The difference between the two, K375.8 million, represents the estimated net benefit. On the basis of this estimate, it is beneficial to Malawi to participate in monetary union and economic integration involving the elimination of tariffs.

Appendix 1. Monetary Unions in Southern Africa

Southern Rhodesia Currency Board served not only that country (now Zimbabwe) but also Northern Rhodesia (now Zambia) and Nyasaland (now Malawi) from 1938 to 1954. This followed monetary agreements between governments of Northern Rhodesia and Nyasaland with that of Southern Rhodesia. The Currency Board was introduced under the Southern Rhodesia law in 1938 to consolidate the position of currency in circulation which comprised a variety of notes and coin that had been introduced in Central Africa by a variety of interested parties, namely traders, travellers, missionaries, settlers and expatriate commercial banks (Barclays and Standard). The Pound Sterling was their main currency in the early colonial period of these countries.

There were two original objectives of the currency board system. First, to devise a method whereby the governments concerned would benefit from the profits arising out of the issue of notes and coin for circulation in their territories. Second, to ensure the speedy and certain convertibility of local currency into sterling at a fixed rate of exchange.

The Southern Rhodesia Pound, which the Southern Rhodesia Currency Board issued, was legal tender for and circulated in all the three countries that the Board served. The currency was 100 per cent backed by sterling, paid into a Currency Fund which was kept in London as follows: i) partly in liquid form; ii) partly in United Kingdom Government securities; iii) securities guaranteed by the UK Government; and iv) gold and trustee investment securities within the UK Trustee Act. Securities registered locally in the member countries were excluded. An amendment in 1947 removed this limitation and permitted that a sum not exceeding 20 per cent of the Currency Fund could be invested in local registered stocks issued, and if so wished, by the governments of Southern Rhodesia, Northern Rhodesia and Nyasaland which were allocated respective maxima of 10 per cent, 7 per cent and 3 per cent. However, no investment in such stocks (which in fact were issued only by Southern Rhodesia) took place during the life of the

Currency Board, it seems because of the preference by all the three governments for the 100 per cent backing of the currency by sterling; the latter was earned from exports.

As to the achievement of the two original objectives of the currency board system, the first one was hardly achieved in that, for a number of reasons, little surplus income was earned by the Currency Board for distribution to the three member governments; distribution was in proportion to the value of the currency circulating in each country. The second objective was achieved, i.e. ensuring 'speedy and certain' convertibility of the local currency into sterling at a fixed exchange rate. However, the wisdom of achieving that through as much as 100 per cent currency backing has been questioned by many in the sense that it is inconceivable that all the currency in circulation could have been presented for conversion into sterling or other strong currency at the same time. Thus a good part of the sterling held in the currency fund could have been better used for economic development in the three participating poor countries through importing the required goods and services or for financing balance of payments deficits.

The external value of the currency was defined by the Southern Rhodesia law in terms of sterling, so that it could only be changed through Parliament of that country. Thus the Southern Rhodesia Currency Board had no direct control over the currency's external value, and the Board's freedom of action was also constrained by the fact that the same Southern Rhodesia Pound was circulating in the other two countries as well; it had no means of controlling the monetary system.

In March 1954 the Southern Rhodesia Currency Board assumed a federal character following the birth of the Federation of Rhodesia and Nyasaland in late 1953, also referred to as the Central African Federation. Its name was appropriately changed to the *Central African Currency Board*, so too was its composition to reflect the broadened political character. The re-named Board was an interim measure pending the establishment of a Federal Central Bank, before which the Southern Rhodesia Pound was to continue as legal tender in all the three territories. The Board's surplus income was now spent on the process of setting up a central bank and no longer distributed to the member governments. Its Currency Board was no longer allowed to invest in local registered securities of the member governments; this deprived the Currency Board of its potential of financing development in member territories through local financial instruments, in addition to its being allowed to continue to hold member governments' securities issued in Sterling in London - in practice it held some sterling securities of the Southern Rhodesia Government only.

On 1st April 1956, the *Bank of Rhodesia and Nyasaland* acquired the assets and liabilities of the Central African Currency Board and started to operate, with no detailed objectives written in its Act of 1956 other than being assigned the

38 RESEARCH PAPER 30

responsibility 'for regulation of the monetary system of the Federation'. The central bank became the sole issuer of currency, i.e. the Federal Pound, in the three countries; the Southern Rhodesia currency also continued to circulate in the Federation for some years.

Although the external value of the currency was no longer legally defined, in practice it was also defined in terms of the Pound Sterling, and on a one to one ratio. The Act required the bank to maintain foreign exchange reserves in Sterling, gold and other foreign assets convertible into sterling or gold, with all of these adding up to a minimum requirement of 25 per cent of its liabilities to the public, a ratio which was well exceeded during the bank's life. Apart from small proportions kept as balances with the US Federal Reserve System and the Reserve Bank of South Africa as well as gold, the rest of the foreign reserves were kept in Sterling. Although the bank was legally empowered to deal in various foreign currencies, it mainly dealt in Sterling through London, through which commercial banks had therefore to acquire other foreign currencies needed by their customers. It can be argued that this arrangement delayed personnel of the central bank (later to be split into three independent central banks following the dissolution of the Federation) in broadening their contacts and knowledge that could have resulted from dealing significantly in other foreign currencies as well.

The considerable weight given to the independence of central banks before the second world war was reduced in the post-war period particularly in the Commonwealth countries. Before the Second World War maintenance of fixed and stable exchange rates of currencies was a major goal of economic/monetary policy, which was essentially a function of central banks. After the war, economic conditions within a country were given more and more prominence than reacting to external conditions, and the role of governments in their domestic economies grew, public debt also grew, thereby calling for greater collaboration between a central bank and the government; other economic policy tools emerged in addition to monetary policy tools which alone were now considered inadequate. This was in contrast to the earlier period when central banks were largely privately owned and controlled, many of them following the example of the Bank of England; the post-war period saw many of them become state owned and controlled.

That also became true of the Bank of Rhodesia and Nyasaland which became wholly owned by the Federal Government, the Governor-General of which was required by the Bank's Act to appoint a nine-member Board of Directors. These comprised the Governor and Deputy Governor of the bank; at least two with connections in commerce and finance, two from industry and one from agriculture. Thus the policy of the Government had an upper hand, and prior approval of the Minister of Finance was required by the bank in the exercise of its powers. Nevertheless, a fair degree of independence was accorded to the bank through

excluding from its board civil servants and ministers; and employees, officials, directors and shareholders of commercial banks - which the central bank was to control.

Since the bank was required to be the banker to the Federal and Territorial Governments, their accounts were transferred to it from commercial banks in 1957 and 1960 in the case of the Federal Government and the Southern Rhodesia Government, respectively; for the Northern Rhodesia Government the transfer was effected in 1961 when the bank's branch was opened in Lusaka. In Nyasaland, even after a branch was opened in Blantyre in 1962 the ordinary accounts of the Government remained at commercial banks; here the development of close relationship between the Federal Central Bank and the government delayed because of the hostile attitude towards the concept of the Federation and uncertainty about its constitutional future.

The Bank was required to act as agent for issuing and managing public debts of the Federal and Territorial governments and for administering exchange control. It was also authorised to lend to the Federal and Territorial Governments through advances and purchase of securities; but with legal limitations imposed on its lending only to the Federal Government, may be because it was thought that the federal central bank would have been less able to resist pressure from its parent Federal Government in the case of need for increased borrowing. Interestingly enough, in contrast to the governments of most developing countries in Africa, the Federal and Territorial Governments borrowed little from the Central bank, thereby hardly contributing to domestic inflationary pressures.

The central bank had at its disposal a number of traditional monetary policy tools for controlling the activities of commercial banks and non-banks. Of these tools, the cash reserve ratio and the liquid assets ratio requirements were employed during its life time, as was the technique of announcing the central bank's minimum rate of discount/rediscount. However use of these tools had limited effect because of large reserves of commercial banks (which had access to facilities at their head offices abroad) and the openness of the federal economy and its balance of payments position.

The Bank of Rhodesia and Nyasaland wound up its business in 1964 and distributed its assets and liabilities among the successor central banks of the member countries. This followed the dissolution of the Federation of Rhodesia and Nyasaland in 1963. The main reason for dissolution was political opposition by indigenous people to the Federation. This was supported by economic reasons, the major one being unequal distribution of benefits from Federation, especially the substantial government budgetary gains by Southern Rhodesia, and to some extent Nyasaland, at the expense of Northern Rhodesia; as well as unequal industrial and commercial development favouring Southern Rhodesia. Each of the three

governments wanted to exercise its own direct control over the affairs of its own economy including foreign exchange reserves, exchange rates, credit expansion by banks and non-banks as well as money supply. The result was establishment of separate central banks in each of the three countries.

It is also worth noting that the establishment of the Federation of Rhodesia and Nyasaland back in 1953 had also been based on political and economic reasons. Politically, the Federation was a strategy of expanding the dominion controlled by white settlers. Economically, it was argued that the Federation would: firstly contribute to the prosperity of member countries through enlarging a unified market; secondly provide insurance against income and revenue instability arising from output and price fluctuations of the few primary products on which each country depends; thirdly facilitate efficient joint economic planning thereby ensuring effective exploitation of the resources of the member countries; fourthly contribute to economic development through encouraging foreign capital inflows; fifthly, it was argued that the three economies were so complementary and interdependent that it was inevitable to have some form of political association. However, the list of principal economic aims of the Federation did not include monetary integration, some of which existed in practice as we have seen above.

The present Common Monetary Area comprising South Africa, Namibia, Swaziland and Lesotho was preceded by the Rand Monetary Area which operated up to March 1986. For a long time before the Rand Monetary Area was formally established in March 1974, coins and notes of various currencies circulated in the Southern Africa area, introduced at different times by various parties consisting of European hunters, explorers and missionaries. The foregoing mix continued to circulate freely even when the British administration in each of the territories had promulgated various laws governing legal tender by the beginning of this century.

As years passed, the Pound Sterling became the currency circulating in the Southern African area. It was succeeded by the South African Rand when the Reserve Bank of South Africa was established in 1921. This in turn was replaced by the South African Rand in 1960, again not only in South Africa but also in Botswana, Lesotho and Swaziland, although without any formal agreement. This situation continued in these three countries even in their early years of independence from Britain; so that their combined area together with South Africa came to be commonly referred to as the 'rand area', which in effect was a unified monetary area with no restrictions on payments and movements of notes and coin of the South African Pound, the only currency in circulation then.

The four countries' exchange controls continued to function under a wider agreement of Scheduled Territories, a term which replaced that of the Sterling Area in the UK Exchange Control Act of 1947. This wider arrangement consisted of most of the Commonwealth member countries, in each of which were established

compatible exchange controls and regulations, although they were not identical. To conserve scarce foreign exchange, the gold and dollar reserves of the Scheduled Territories were managed by the UK in a common pool in London, into which surpluses of net foreign exchange earning members were generally deposited and from which requirements of net foreign exchange spenders were met. In June, 1972, the UK reclassified South Africa, Swaziland, Lesotho and Botswana as non-scheduled territories and subjected them to UK exchange controls on capital movements.

Consequently, in July 1972, South Africa's regulations introduced the distinction between 'rand area' and the rest, thereby abandoning the distinction based on the Scheduled Area arrangement. Nationals of the other three countries were treated as residents of South Africa in respect of transactions with non-rand area countries. In principle, the three countries continued to exercise jurisdiction over their respective earlier exchange control arrangements, but in practice they co-operated with South Africa in exercising similar exchange controls to prevent loopholes experienced when they belonged to the Scheduled Territories arrangement. Almost all of their private overseas transfers were effected through commercial banks in Johannesburg so that problems hardly arose.

The informal 'rand area' was formalised into the Rand Monetary Area on 20th March 1974 when the Rand Monetary Agreement was signed by the four countries namely South Africa, Botswana, Lesotho and Swaziland; a result of the wish to regularise the status of the Rand following independence of the last three countries. In 1975 Botswana withdrew from the Agreement; the agreement allowed a free flow of currency between countries of the Area. South Africa agreed to pay compensation to Lesotho and Swaziland for allowing the circulation of the Rand in their countries; this was to be side by side with their respective national currencies (i.e. Loti and Lilangeni) which the agreement gave them the right to issue. However, the Loti and Lilangeni did not circulate in South Africa.

Following the 1974 Agreement, the exchange rates between the Rand, Loti and Lilangeni were fixed at unity, without variation of the par value or around it being permitted. All the three currencies were to be mutually and unconditionally convertible into each other at the fixed exchange rate. To the new administrators in Swaziland and Lesotho, this had some advantage of relieving them from the need to decide on balance of payments and monetary policies.

The 1974 Agreement was modified on 1st April 1986 through a new Trilateral Monetary Agreement which replaced the Rand Monetary Area with the *Common Monetary Area*, largely on the initiative of Lesotho and Swaziland following three macroeconomic developments perceived to exert adverse effects on their economies:

(a) the external value of the Rand tended to be extremely variable and exhibited a downward trend; (b) the inflation rate in the three countries was typically higher

42 RESEARCH PAPER 30

than in neighbouring countries, major trading countries in Europe and the U.S.A.; (c) the foregoing two developments compelled South Africa to re-introduce the financial rand, providing a more favourable rate for non-resident investors and a less favourable rate for withdrawals of capital from the country. The re-introduction of the financial rand in 1985 led to the closure of the South African foreign exchange market for four days to 1st September 1985 to try to protect their external position. This in turn gave problems to financial transactions by Lesotho and Swaziland. According to the new agreement of April 1986 the Rand was no longer legal tender in Swaziland, which also reserved the right to introduce its own foreign exchange regime. Nonetheless the free flow of currency was retained between the Common Monetary Area countries, in all of which the rand continues to circulate.

Appendix 2. Tables

Table A.1 Exchange rates¹ and exchange arrangements in Southern Africa, 30th June,

Member (Country)	Currency pegged to	Exchange rate	Exchange rate otherwise determined
Angola (kwanza)	US \$	55.0	
Botswana (pula)	basket	2.0838	
Lesotho (loti)	rand	1.00	
Malawi (kwacha)	basket	4.01929	
Mozambique (metical) ²		3,754.72	
Namibia (rand) ³	•		2.7740
Swaziland (lilangeni)	rand	1.00	
Tanzania (shilling)	basket	300.00	
Zambia (kwacha) ²			160.878
Zimbabwe (dollar)	basket	4.958325	
South Africa (rand) ³	basket		2.7720

¹Market rates in currency units per U.S. dollar. ²Adjusted according to a set of indicators. ³Floating. Source: IMF Survey, October 26, 1992, p. 328.

44

 Table A.2
 Comparative exchange rate performance in SADC member states 1965-1990

Year	Lesotho	Malawi	Swaziland	Tanzania	Zambia	Zimbabwe
	400.00	100.00		400.00	400.00	400 =0
1965	100.00	100.00	100.00	100.00	100.00	100.00
1966	98.83	101.61	100.20	90.90	138.85	99.7
1967	96.31	101.89	98.64	105.04	150.26	102.37
1968	96.82	114.69	100.37	111.27	196.37	100.5
1969	96.29	110.69	99.86	139.32	208.15	100.9
1970	93.53	127.90	97.83	128.87	205.01	101.5
1971	103.89	131.93	109.09	141.41	197.72	114.8
1972	88.72	127.06	96.50	152.66	176.44	96.9
1973	80.50	141.25	92.04	169.07	243.83	112.3
1974	85.76	175.64	102.99	173.97	202.08	121.1
1975	95.75	164.59	113.94	183.14	266.06	141.3
1976	84.17	153.15	94.31	211.26	245.23	140.2
1977	91.39	194.27	105.93	223.47	225.31	135.3
1978	93.12	164.38	103.12	215.28	180.11	125.9
1979	91.73	145.72	102.28	273.56	217.93	112.0
1980	87.38	127.60	99.90	307.83	165.85	114.1
1981	99.23	160.58	118.43	377.16	165.31	110.3
1982	85.81	142.04	104.35	398.79	228.57	116.7
1983	102.84	121.24	118.71	402.55	206.31	93.9
1984	122.45	167.57	143.39	314.78	161.96	102.5
1985	119.70	160.39	146.22	319.07	80.14	100.7
1986	103.66	139.72	120.79	195.55	55.46	90.6
1987	108.37	144.34	126.53	113.56	98.77	80.6
1988	113.02	146.33	135.71	96.03	135.25	99.6
1989	77.88	162.96	92.51	97.09	128.50	114.9
1990	80.02	175.51	90.91	104.03	113.46	124.6

Note: Over 100 denotes overvaluation, under 100 denotes under-valuation, 100 denotes equilibrium of exchange rate.

Source: PTA (1990), p. 29. These indices are ratios, in percentages, of the nominal exchange rate to the equilibrium exchange rate of each country, calculated by using the purchasing power parity.

Table A.3 State of exchange rate disparities between member states and required adjustments back to equilibrium

Country	Index of undervaluation	Adjustment %	Country	Index of overvaluation	Adjustment %
Lesotho	80.2	24.97	Malawi	175.51	-43.02
Swaziland	90.91	10.00	Tanzania	104.03	-03.87
			Zambia	113.46	-11.86
			Zimbabwe	124.61	-19.65

Note: Over 100 denotes overvaluation, under 100 denotes undervaluation, 100 denotes equilibrium of exchange rate.

Source: PTA (1990), p. 65. These ratios are indices are ratios, in percentage of the nominal exchange rate to the equilibrium exchagne rate, calculated by using the purchasing power parity.

Table A.4 Estimated levels of stable Central Bank credit to central government

Simulated Annual Growth Rate of Real GDP							
Country	1%	2%	3%	compare: present rate of credit expansion			
Lesotho	7.1%	7.3%	7.4%	22.1%			
Malawi	20.7%	20.8%	20.9%	14.8%			
Swaziland	21.3%	21.4%	21.5%	-19.8%			
Tanzania	22.0%	22.1%	22.3%	27.3%			
Zambia	17.8%	17.8%	17.9%	27.8%			
Zimbabwe	10.2%	10.4%	10.6%	10.8%			

Note: Based on 1970-78 data, Inflation is assumed at 100%

Source: PTA (1990), p. 69.

Table A.5 Central Bank Credit to Central Government

Values in millions of National Currencies

	1980	1981	1992	1983	1984	1985	1986	1987	1988
Swaziland				,					"-
 1. 15% of Previous Year's Revenue 2. Actual Credit 3. Difference 	19 5 14	22 6 16	20 7 13	27 7 20	27 20 7	32 26 6	35 32 3	37 12 25	49 4 45
Zambia									
 1. 15% of Previous Year's Revenue 2. Actual Credit 3. Difference 	89 1183 -1094	115 1394 -1279	121 1657 -1536	126 2009 -1883	152 2419 -2267	164 5327 -5163	234 6699 -6465	454 3966 -3912	623 6457 -5834
Zimbabwe									
 1. 15% of Previous Year's Revenue 2. Actual Credit 3. Difference 	92 122 30	124 197 –73	169 339 –167	227 290 –63	280 165 115	305 52 268	320 92 228	378 308 70	441 275 166

Note: Simulated at 15% of Previous Year's Fiscal Revenue

Source: PTA (1990), p. 70.

Notes

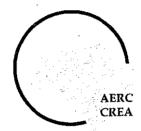
- 1. Southern African Development Community consisting of Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe.
- 2. Membership consists of Angola, Burundi, Comoros, Djibouti, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, Somalia, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

References

- Allen, P.R. 1976. "Organization and Administration of a Monetary Union", Princeton Studies in International Finance No. 38, Princeton University, June.
- Barrow, R. and Gordon, D. 1983. "Rules, Discretion and Reputation in a Model of Monetary Policy", *Journal of Monetary Economics*, Vol. 12, July, pp. 101-21.
- Cooper, R.N. 1990. "What Future for the International Monetary System?" mimeo, December.
- Corden, W.M. 1972. "Monetary Integration," Essays in International Finance No. 93, Princeton University, April.
- COSATU, 1991. Secretariat Report 1991 Fourth National Congress, Johannesburg. Frimpong-Ansah, H. 1983. "A Preliminary Study on Financing Mechanisms at Central Bank Level in the ECOWAS Sub-Region In Support of a Process of Trade Liberalization and for the The Settlement of Debtor Balances in the West African Clearing House," UNCTAD/ECDG/135, Geneva.
- Gros, D. 1989. "Seignorage in the EC: The Implications of the EMS and Financial Market Integration," IMF Working Paper WP/89/7, January.
- Honohan, P. 1992. "Price and Monetary Convergence in Currency Unions: the franc and rand zones," *Journal of International Money and Finance*, Vol. 11, pp. 397-410.
- Krugman, P. 1990. "Increasing Returns and Economic Geography", NBER Working Paper No. 3275, March.
- Krugman, P. and Venables, A. 1990. "Integration and the Competitiveness of Peripheral Industry", in Jorge Braga de Macedo and Christopher Bliss (eds.), Unity with Diversity within the European Economy: The Community's Southern Frontier, Cambridge, Cambridge University Press.
- Mason, P.R. and Taylor, M.P. 1992. *Policy Issues in the Evolving International Monetary System*, Occasional Paper No. 96, IMF.

- MacKinnon, R.I. 1963. "Optimum Currency Areas" *American Economic Review*, Vol. 53, September, pp. 717-25.
- Mundell, R.A. 1961. "A Theory of Optimum Currency Areas," *American Economic Review*, Vol. 51, September, pp. 657-65.
- Myrdal, G. 1957. Economic Theory and Underdevelopment Regions, London.
- Perroux, F. 1959. "Les Formes de Concurrence dans le Marche Commun", Revue d'Economie Politique.
- PTA. 1990. The Monetary Harmonization Programme of the Preferential Trade Area for Eastern and Southern Africa Report of a Technical Study Group, Lusaka, July.
- PTA. 1991. Action Plan and Modalities of Implementation of the PTA Monetary Harmonization Programme Report of the Task Force, Lusaka, September.
- PTA. 1992. Report of the Seventeenth Meeting of the Council of Ministers, Lusaka, January.
- SADCC. 1988. SADCC Regional Economic Survey, Gaborone.
- SADC. 1992. Treaty of the Southern African Development Community.
- SATUCC. 1991. "Major Constraints of Inter-State Trade in the SADCC Region," Occasional Paper No. 3, Lilongwe.
- World Bank. 1992. World Development Report 1992. New York: Oxford University Press.
- World Bank. 1989. Sub-Saharan Africa From Crisis to Sustainable Growth. Washington D.C.: World Bank.
- World Bank and UNDP. 1992. African Development Indicators. Washington, D.C.: World Bank.

AFRICAN ECONOMIC RESEARCH CONSORTIUM



P.O. BOX 62882 NAIROBI, KENYA

TELEPHONE (254-2) 228057 225234 215898 212359 332438 225087

TELEX 22480

FAX (254-2) 219308

The principal objective of the African Economic Research Consortium (AERC), established in August 1988, is to strengthen local capacity for conducting independent, rigorous inquiry into problems pertinent to the management of economies in Sub-Saharan Africa.

In response to special needs of the region, AERC has adopted a flexible approach to improve the technical skills of local researchers, allow for regional determination of research priorities, strengthen national institutions concerned with economic policy research, and facilitate closer ties between researchers and policy makers.

Since its establishment, AERC has been supported by private foundations, bilateral aid agencies and international organizations.

SPECIAL PAPERS contain the findings of commissioned studies in furtherance of AERC's programmes for research, training and capacity building.

RESEARCH PAPERS contain the edited and externally reviewed results of research financed by the AERC.

It is AERC's policy that authors of Special and Research Papers are free to use material contained therein in other publications. Views expressed in the Special and Research Papers are those of the authors alone and should not be attributed to the AERC's sponsoring Members, Advisory Committee, or Secretariat.

Further information concerning the AERC and additional copies of Special and Research Papers can be obtained by writing to: African Economic Research Consortium, P.O. Box 62882, Nairobi, Kenya.

This work is licensed under a Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 Licence.

To view a copy of the licence please see: http://creativecommons.org/licenses/by-nc-nd/3.0/