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Macroeconomic Management in a Mineral-Rich Economy

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At the end of the Cotonou Partnership Agreement, its members agreed to put in place a WTO-compatible regime, forming a free trade area. WTO-compatibility implies that 90 per cent of the bilateral trade between the European Union (EU) and the Africa-Caribbean-Pacific countries would have to be duty free and quota free within a reasonable (unspecified) amount of time. The East African Community (EAC) negotiating group is in the process of finalizing its Economic Partnership Agreement (EPA) with the EU. The EU accounts for around 15 per cent of Rwanda's imports, and the share of the EU in tariff revenue is 14 per cent.

INTRODUCTION

All countries face the challenge of designing and implementing macroeconomic policies that are appropriate to individual economies. Macroeconomic policymaking is never "easy", in the sense that there is only one, obvious answer to how a particular policy should be designed and implemented. There are always choices to be made, and those choices have to be arrived at in an environment of uncertainty, reflecting a lack of complete information about how an economy (or the world) operates, and inadequate or incomplete data. And choices are always constrained, not just by the lack of information, but by politics, social structures, institutions, geography, and history.

Experience suggests these choices more difficult in mineral economies. In principle, a mineral resource should provide a bounty or a windfall that raises growth rates and living standards. But the experience of many mineral economies shows that, especially in Africa, minerals have been associated with a lack of growth, macroeconomic instability, and often civil conflict.

This presentation will consider some of the macroeconomic challenges and choices that face mineral economies, and explain how they can go well or badly. It will draw on the experience of Botswana, which has been one of the more successful economies in Africa, to

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a large extent because of the way in which mineral wealth has been used and invested, and will make some suggestions as to how some of the challenges facing mineral economies could be resolved in the case of South Sudan.

Our focus will be on ways of minimising the adverse impact of exogenous shocks and achieving sustained, high and equitable growth rates of living standards. This entails coordinated sets of policy instruments: fiscal policy, monetary policy and exchange rate policy.The Distinctive Characteristics and Challenges of Mineral Economies

THE DISTINCTIVE CHARACTERISTICS AND CHALLENGES OF MINERAL ECONOMIES

What are the distinctive characteristics of mineral economies? Most obviously, the production and sale of mineral products account for a high proportion of gross domestic product (GDP) and exports. Although there is no precise definition of a mineral economy, minerals would account for the majority of exports and would be the largest single sector of GDP.

Mineral economies also typically have large government sectors. Mining (including oil production) is usually subject to a dedicated taxation regime, which is designed to appropriate mineral rents to the government and can result in high marginal tax rates. The combination of high tax rates, large size and often (but not always) high profitability means that mineral taxes can generate very high levels of government revenues. Often minerals will be the largest single source and account for the majority of government revenues. Hence government is typically the main channel through which the mining sector impacts on the rest of the economy, and with high revenues, government spending can be very high relative to GDP.

Mining is often very capital intensive and creates relatively few jobs directly, hence it may be the case that mining sectors account for a much smaller proportion of employment than their share of GDP. A large government workforce sometimes compensates for this.

Mining economies are also typically undiversified. Not only can minerals account for the majority of exports, but this is often just a single mineral[1]. With large mining and government sectors, the structure of GDP is also relatively undiversified.

A further characteristic is that mineral economies are typically very open in terms of international trade. With a large mining sector, and minerals mostly exported, exports are high relative to GDP. Furthermore, mining economies are often heavily dependent on imports (due to the lack of diversification of production and Dutch Disease problems). Mineral economies are therefore highly integrated into the global economy and trading system, and as a result are subject to trade-related shocks. Furthermore, global markets for minerals are amongst the most volatile of any international commodity markets – for instance, the price of oil or copper varies much more than the price of cars.

The result is that mineral economies are highly exposed to external shocks and volatility, which feeds through to the domestic economy through the balance of payments and the government budget.

There are also a number of issues related to longer-term structural change. Minerals are a finite, non-renewable resource, and hence will eventually be depleted. While known reserves may be expanded as a result of exploration and discoveries, or changes in technology or prices may make previously uneconomic reserves viable, economic planning needs to be based on what is known, or at least highly probable. In some cases countries have such high levels of reserves that mineral resources can be effectively treated as renewable or non-depleting, if the reserves will last substantially longer than normal economic planning horizons (say, more than fifty years – as in the case of Saudi Arabia's oil reserves). But in many cases, known mineral reserves will be depleted in a shorter time than this, and hence the post-mineral future has to be planned for.

This poses additional challenges, related to the vulnerability to a post-mineral income shock. In a mining economy, a significant proportion of national income may be derived not from the productivity or capital or labour, but from mineral rents and the consumption of an asset – essentially unearned income. When minerals are depleted, the country has to find new sources of income and exports – it has to diversify the economy, if it is not to face a potentially large, negative income shock. And these new sources of growth have to be based on competitiveness and productivity, rather than windfall gains.

Hence most mineral economies face a diversification challenge. This is difficult, for many reasons. In particular, the well-known "Dutch Disease" process can cause problems of real exchange rate overvaluation, which inhibits the development of non-mining tradeables sectors.

A related challenge is that of sustainable public finances. Just the economy needs to find new sources of growth and exports for the post-minerals era, the government needs to find new sources of revenues. And because mining is often taxed at a high rate, even if diversification is successful, it is likely that government revenues will fall as a proportion of GDP, and hence government in the post-minerals era will need to be smaller than when mineral revenues are significant.

Even during the minerals era, a key challenge is ensuring that mineral revenues are used productively. Mineral resources represent an asset, and while that asset is depleted, long-term economic sustainability requires that the proceeds of that asset depletion are invested in alternative assets that can generate future incomes. This may include financial assets, physical assets such as economic and social infrastructure, and investment in human capital. The exact mixture of financial, physical and human capital will vary from country to country, depending on existing asset stocks and development needs,

[1] Examples in Africa include Nigeria (oil); Botswana (diamonds); South Sudan (oil); Zambia (copper); and Guinea (bauxite).

but the general principle that a significant proportion of mineral revenues should be reinvested in one form or another is important.

Windfall gains from mineral revenues, especially when they increase rapidly in an environment of severe development needs and high expectations, can be difficult to handle. Governments will be tempted to spend rapidly, but all economies have limits as to how quickly they can grow before they come up against absorptive capacity constraints. Trying to spend at a rate faster than the economy can absorb will result in inflation, rapid import growth, and overpriced and/or ineffective public spending. It can also result in too much recurrent spending and not enough development (investment) spending. Hence discipline is needed in public spending, ensuring that it is directed towards relieving capacity constraints, investing in high-return projects, and saving rather than spending some of the proceeds of mineral revenues.

These specific characteristics of mineral economies therefore pose a range of distinct challenges for macroeconomic policymakers, specifically:

- Dealing with volatility and vulnerability to exogenous shocks
- Promoting economic diversification
- Reinvesting mineral revenues
- Ensuring sustainable public finances
- Spending restraint in an environment of ample resources

APPROPRIATE MACROECONOMIC POLICIES FOR MINERAL ECONOMIES

Public Finance Policies

The importance of fiscal revenues in a mineral economy, combined with the need to reinvest at least part of those revenues, the dangers of running up against absorptive capacity constraints and the need to take a long-term perspective in the light of resource depletion, imposes particular demands on public finance management.

Conventional wisdom or "best practice" public finance management now proposes having rules-based systems, preferably backed up by law. One of the first requirements is to have rules regarding the allocation of mineral revenues, which would typically be divided into three tranches, as follows:

1. Allocations to the budget (to fund annual spending needs).
2. Allocations to a stabilisation reserve (to stabilise revenues in the event of fluctuations, so that spending does not have to be cut in the event of short-term declines in revenues – and so that spending does not increase in the event of short-term increases in revenues).
3. Allocations to a "fund for future generations" (FFG, to provide an annuity income for future generations who do not have the benefit of mineral resources).

While these principles are fine, resolving the details is tricky. For instance, what proportion of mineral revenues should be allocated to each tranche? How should the FFG be managed – should it be invested solely in financial assets offshore, or should some be invested domestically? How should offshore financial assets be managed?

A second set of desirable rules relates to the selection of public sector development projects. Even with ample revenues from mineral resources, choices still have to be made – not all projects can be implemented immediately, and some projects that may be demanded should not be implemented at all, if they do not offer the prospect of positive returns to the economy.

It is therefore important to have a robust system for project evaluation and selection, on the basis of cost-benefit analysis that involves identifying and quantifying the projected costs and anticipated benefits. Besides concentrating the minds of ministries and agencies that are promoting projects, it also facilitates the prioritisation of projects, ensuring that high-return or high-impact projects are financed and implemented first. This may be done through an initial screening that sifts out projects that are clearly non-viable or very low priority, and then a more detailed analysis of those that pass through this initial screening.

It is also important to ensure that projects are implemented as anticipated. This means that project planning capacity is important, in order to avoid cost overruns and implementation delays. Projects should be subject to post-implementation evaluation in order to determine whether the anticipated benefits have been realised (and thus whether the original assessment of returns and prioritisation was correct).

High quality public finance management is important not just in its own right, but also to help avoid Dutch Disease complications. Too much public spending in too short a period of time will push up prices generally, and the prices of non-tradeables in particular, which will make it more difficult for the non-mining private sector to grow and diversify.

MONETARY AND EXCHANGE RATE POLICIES

Mineral economies typically take a different approach to monetary and exchange rate policies. The received wisdom is that countries should aspire to a floating, market determined exchange rate, complemented by an active monetary policy based on the targeting of monetary aggregates or inflation. The advantage of this approach is that it provides a mechanism for the economy to adjust to external shocks. However, does not provide external discipline, and can be undermined by excessive monetary expansion. Even if this does not occur, there are quite demanding data requirements in terms of macroeconomic variables, an assumption of stability in major macroeconomic relationships (such as money multipliers), and institutional capacity. This makes it perhaps inappropriate for post-conflict economies where data are poor, where institutional capacity is weak, and repaid structural change means that macroeconomic relationships are unstable.

Even without these problems, a fully market determined exchange rate may not be appropriate for a mineral economy. Exchange rate changes are likely to exacerbate the volatility that mineral economies are inherently prone to, and in addition may be prone to appreciation (due to a balance of payments surpluses, if mineral export earnings are large) that can exacerbate Dutch Disease/real appreciation problems.

Hence a pegged or heavily managed exchange rate may be more appropriate for a mineral economy. A pegged exchange rate is likely to provide a stabilising influence in the face of external volatility, and can also be used to inhibit Dutch-Disease induced real appreciation and loss of competitiveness. Ideally, the exchange rate should be pegged at an undervalued level – undervalued in relation to balance of payments equilibrium – which will also facilitate balance of payments surpluses and hence the building up of foreign exchange reserves that provide an important financial buffer to deal with unanticipated shocks. Interestingly, most mineral producing countries in Africa have chosen a fixed or heavily managed exchange rate regime.

DIVERSIFICATION POLICIES

Finally, mineral economies should not lose sight of the need to diversify. Diversification is a long-term challenge as it involves structural change, and the provision of incentives that in some ways go against the underlying economic processes in a mineral economy. Maintaining a competitive real exchange rate provides important macroeconomic support for diversification, but other policies relating to the business climate, regulatory framework, market efficiency and the costs of doing business are important. As in other areas of economic policies, it may take some time to find the right combination, so constant evaluation and adjustment is necessary. Other economic policies must be complementary to diversification, and most importantly, those policies should not contain an anti-export bias.

BOTSWANA'S EXPERIENCE

Public Finance

Although many mineral-rich countries have been plagued by poor economic performance and civil conflict, Botswana has been one of the few exceptions – at least in Africa. Not only has it avoided the usual pitfalls, but it has managed to use its mineral resources to support rapid economic growth. Indeed, over the 25-year period from 1975 to 1990, Botswana was one of the fastest growing, if not the fastest growing, economy in the world. In the process it has been transformed from one of the poorest economies in the world at the time of independence in 1966 to an upper-middle income country with a GDP per capita of around $8000. Hence there may be something to learn from the way in which Botswana has handled macroeconomic policy management in the context of substantial mineral wealth. There are also some similarities with South Sudan.

At independence in 1966, the Botswana economy was based around cattle rearing and the export of beef. There were approximately three times as many cattle as people, and the population was almost entirely rural. The country is landlocked, with long transport routes to the nearest ports. During colonial rule there had been virtually no investment in infrastructure, and in 1966 there were only 10km of tarred roads, and very few people had been educated past primary school level.

At that time, there was little in the way of known mineral deposits – some copper and coal, but nothing that had been exploited to any great extent. A year after independence, diamonds were discovered, and in 1973 the first diamond mine opened. Over the next 20 years Botswana grew to become the largest diamond producer in the world, on the basis of very large and very low cost diamond deposits, which were extremely profitable to mine.

The way in which the diamond industry has been handled offers useful lessons for other mineral-rich countries, and can be summarised as follows:

Joint ventures: the government created a joint venture with a major international diamond mining company (De Beers) to exploit the diamond deposits – unlike the fashion of the time and the trend elsewhere in Africa, it did not nationalise the mines.

Revenue sharing agreements: the government astutely negotiated very favourable revenue-sharing agreements, which it used its leverage to improve over the years, and which ultimately yielded around 81% of diamond industry profits as revenue for the government – through royalties, taxes and dividends. Over time, these revenues accounted for more than 50% of all government revenues.

Public finance management: a lot of attention was paid to public finance management, in order to ensure that appropriate use was made of this very high level of mineral revenues to transform the economy and the country. A number of principles were adopted, as follows:

1. Revenues from minerals – the sale of an asset – should be invested in the accumulation of other assets (economic infrastructure, human capital, social development and financial assets)
2. A counterpart to this is that a sustainable balance should be maintained between development (investment) spending and recurrent spending. The latter should not become too large, and should be financed from non-mineral revenue sources.
3. Development projects must be subject to a cost-benefit analysis to identify projected returns. This should ensure that public spending is not wasted on low-return projects, and also enables prioritisation of public sector investment spending.
4. Provision should be made for the future recurrent budget implications of development projects – a school requires not just money for construction, but also for teachers' salaries into the future.

5 The scaling up of public spending, particularly investment spending, should respect absorptive capacity limits and constraints. If not, the result is inflation, inefficient spending, waste of resources and a loss of competitiveness through real exchange rate appreciation.

6 If revenues increase rapidly, part of this should be saved rather than spent on low-return projects.

7 Budget surpluses should be targeted, which enables the building up of financial balances that provide a (i) a stabilisation buffer and (ii) a "future generations" fund.

8 Revenue sources should be diversified over time. Although mineral revenues have always been the largest single source, other revenue sources have contributed on average around 50% of revenues, and now contribute nearly two-thirds of the total.

These objectives were generally achieved. Recurrent spending was entirely financed by non-mineral revenues, and mineral revenues were largely invested in physical assets (46%), education spending (43%) and health spending (14%).

Category	P billion	Fraction mineral revenue
Recurrent revenues, excl grants & property sales	334	
Recurrent spending, excl. health & education	281.1	
Mineral revenues	319.4	100%
Education spending	138.3	43%
Health spending	44.5	14%
Other development (investment) spending	147.1	46%
Total investment (physical and human capital)	329.9	103%

Table 1: Trends in public sector asset accumulation - Total Revenues and Spending, 1983/4 – 2010/11 (Real, 2010 prices)

Financial surpluses were also accumulated, with budget surpluses in most years. There was virtually no government borrowing, at least until the global financial crisis in 2008. At their peak, government's net financial assets reached almost 100% of GDP and more than 2.5 years of public spending.

This proved extremely important during the global financial crisis, when diamond exports virtually ceased for almost six months and government revenues dropped sharply. The fact that government was in a strong financial position meant that previously budgeted spending could continue, and government could run a significant budget deficit financed by drawdown of reserves and – for the first time – borrowing. This enabled a countercyclical fiscal policy to be implemented that offset the impact of the global crisis and recession.

The way in which government's financial assets have been managed also provides useful lessons. Savings have been held at the central bank, the Bank of Botswana, where they have a counterpart in the form of the Banks' foreign exchange reserves. Government's long-term savings – a combination of a stabilisation fund and a fund for future generations (FFG) have not therefore been held in a separate legal entity or sovereign wealth fund, but are included on the central bank's balance sheet. However, a part of the Bank's foreign exchange reserves has been carved out to be managed as a long-term savings fund (termed the Pula Fund). For this fund, which is invested entirely offshore, returns are important, and a significant proportion is invested in global equity markets (the remainder is in bond markets). So the fund is not used to finance domestic investments, as these are financed through the budget before allocations to the long-term investment fund are made.

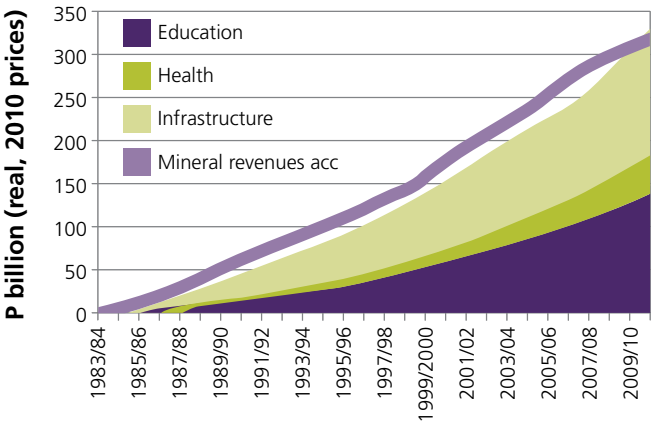

Figure 1: Accumulated mineral revenues and public investment

There are some weaknesses in this system. It is only partially rules-based, and allocations to financial savings are based on residuals rather than a predetermined portion of mineral revenues. To the extent that there are rules – or rather guidelines, which are weaker – they relate to the government budget as a whole rather than mineral revenues. In particular, there are no rules on drawdowns from the Pula Fund, so that it can be depleted rather quickly if public spending decisions have that result. This was apparent during the global crisis, when the drawdown of government savings to fund budget deficits surprised many people as to how quickly even substantial financial savings could be depleted. Attention is now focused on rebuilding this important financial buffer.

An important characteristic of this setup is that although there have been significant financial resources accumulated, the long-term investment fund is not large enough to provide an effective FFG – the annuity income that it would generate is small compared to current mineral revenues. The main purpose of the fund is to stabilise revenues and spending in the event of externally driven volatility. The main forms in which mineral revenues have been reinvested is in physical assets and human capital, rather than financial assets. This is perhaps appropriate in an environment where development needs are great, but it was perhaps more appropriate in the

early years of the minerals boom than it is now. In recent years there is concern that the quality of public sector project decision-making and management has deteriorated, with many examples of projects being implemented with dubious benefits, delays and cost-overruns. With hindsight, probably more should have been invested in financial assets and less in other assets.

Public finance spending decisions are made in the context of the National Development Planning framework. Each NDP last for five years, and besides presenting general macroeconomic and sectoral policy principles, it provides a framework for development spending over the plan period. Projects cannot be financed unless they are in the Plan. This ensures that (i) there is a discipline in the selection of public sector projects; (ii) off-budget spending is minimised; and (iii) spending commitments are consistent with the overall fiscal envelope for the Plan period.

A second point to note is that there has been heavy dependence on donor funds, especially in the early years after independence. From the beginning, the government required that all donor funds were channelled through the budget and used to finance projects of the government's choosing, not donor priorities. Donors generally respected this because of the quality of the government's development planning process and project management and implementation.

EXCHANGE RATE AND MONETARY POLICY

Botswana's exchange rate and monetary policy has been based on a pegged exchange rate. Although the form of the peg has changed over the years, the exchange rate has never been market determined. But in contrast to many other countries where pegged exchange rates have been maintained at overvalued levels, Botswana's exchange rate has been generally undervalued – defined in relation to balance of payments equilibrium. The result is that balance of payments surpluses have been accumulated, to create the very large foreign exchange reserves noted earlier. This has complemented the role of the government's budget surpluses in driving reserve accumulation.

In recent years, exchange rate policy has taken the form of a crawling peg linked to a basket of currencies, comprising the South African rand (ZAR) and the SDR (itself a basket comprising the US dollar, yen, euro and British pound). The choice of the basket reflects the polarised nature of Botswana's trade patterns, with exports mostly denominated in USD and imports in ZAR. The choice of basket weights – which is changed from time to time – determines how the inevitable (exogenous) volatility in the USD-ZAR exchange rate is distributed across different economic agents in Botswana. The rate of crawl – which has varied between zero and 5% since it was introduced in 2006 – is designed to compensate for the differences in expected inflation in Botswana and major trading partners, and hence to stabilise the REER.

The policy of maintaining a pegged, undervalued exchange rate has helped to mitigate some of the worst potential Dutch Disease effects – at least the REER has been fairly stable rather than appreciating. This has in turn helped to support (or at least not hinder) attempts to diversify the economy.

Nominal (effective) exchange rate

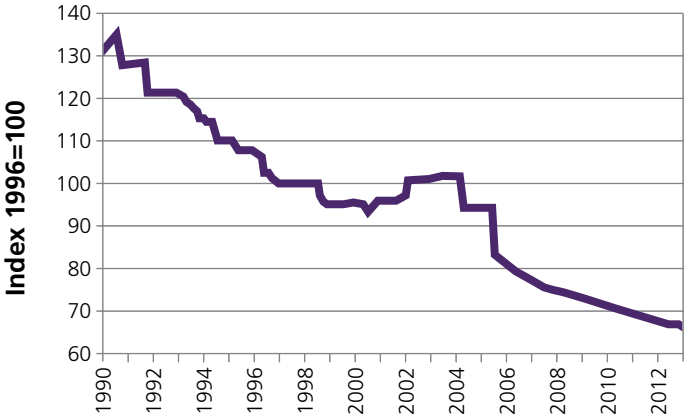

Figure 2: Long-term exchange rate trends

The pegged XR (including the crawl) also provides the main nominal anchor for prices and inflation. Nevertheless, there has been a persistent problem of domestic inflation being higher than imported inflation, which is thought to reflect the impact of high levels of government spending on demand for non-tradeables.

Real effective exchange rate

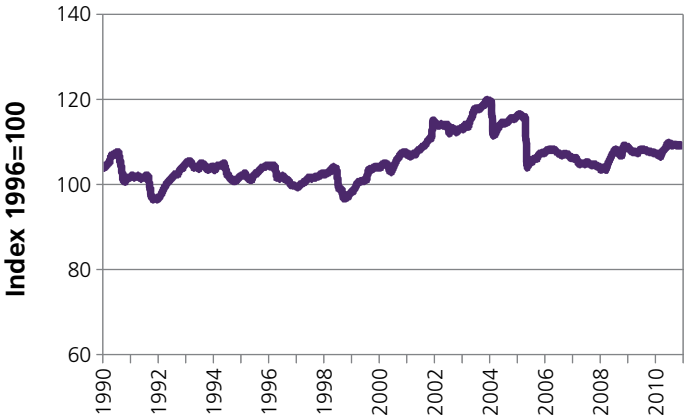

Figure 3: Real exchange rate (competitiveness)

MONETARY POLICY

Monetary policy has been somewhat eclectic, and has not followed the conventional policies of money supply or inflation targeting, but nor has it been entirely passive despite the managed exchange rate. Essentially monetary policy has used interest rates to try and contain inflation, while at the same time absorbing the excess liquidity that has built up in the financial system due to high levels of savings. The limits of this policy have been apparent, however, in the context of the pegged exchange rate, and trying to control inflation through high interest rates led to very high costs for the central bank.

DIVERSIFICATION POLICY

The pursuit of economic diversification has long played a central role in economic policymaking – more or less since the mineral boom began. Many different approaches have been used to promote diversification, including:

- exchange rate policy – maintaining a stable and competitive real exchange rate
- extensive provision of economic infrastructure by government (roads, airports, water, power, telecommunications etc.)
- an appropriate regulatory environment
- a stable macroeconomic environment
- a wide range institutions and incentives
- investment in education and training to provide the skills that the economy needs

Botswana has generally avoided direct government involvement in production of goods (other than beef). It has also avoided substantial subsidies to productive entities. The exceptions have been subsidies to state-owned utilities providers and financial institutions.

Interestingly, Botswana has never used trade policy to actively promote diversification. This is the result of the country's membership of the Southern African Customs Union (SACU), which applies a common external tariff with free trade within SACU. This has had the advantage of yielding substantial fiscal benefits from the distribution of the common tariff revenue pool, but has also prevented government from introducing tariffs to protect domestic industry, which are likely to have been counter-productive in such a small economy.

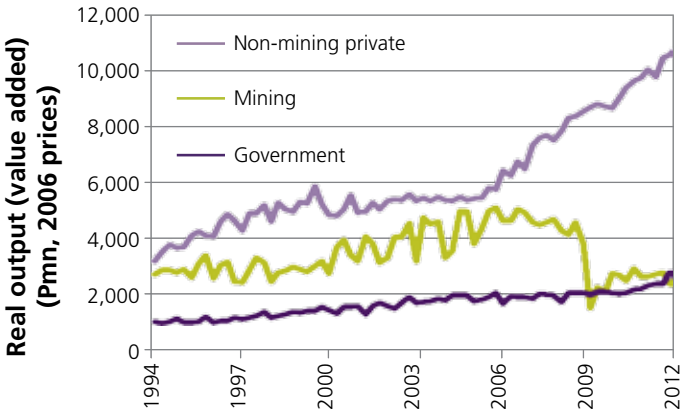

Figure 4: Diversification (Output of Economic Sectors)

There is a widespread perception in Botswana that diversification policy has been unsuccessful – but this is not really true. The economy has become more diversified in terms of the structure of GDP, which is no longer as dominated by mining as it was. The non-mining private sector has been more dynamic than the mining sector over the past decade, and overall GDP growth has been driven by non-mining sources and not by mining, in contrast to the 1980s and 1990s when growth was mining-led. Government revenue has also become more diversified, with the share of mineral revenues gradually declining.

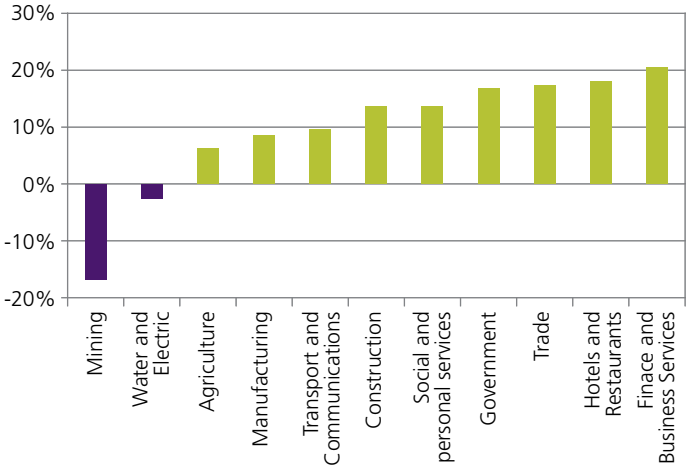

Figure 5: Sectoral Contributions to GDP Growth, 2001-11

What has remained challenging is job creation – although non-mining economic growth has been good, unemployment remains high at around 20%. There has been some success in reducing poverty levels, but inequality remains very high. However, the impact of poverty has been cushioned by the provision of universal free primary education and free healthcare by the government.

IMPLICATIONS FOR SOUTH SUDAN

What are the implications of this general discussion of the challenges of mineral economies, and how Botswana has responded to these challenges, for South Sudan. Some brief conclusions are as follows.

Exchange rate and monetary policy

Choosing an appropriate exchange rate policy is one of the most contentious and challenging macroeconomic policy decisions currently facing South Sudan. The original intention was to allow the exchange rate to adjust through an auction-based allocation system for foreign exchange, to find an equilibrium level, and then to peg the rate at that level. This was not implemented because of downward pressure on the value of pound at the early auctions, which raised fears of currency weakness and an upsurge in inflation (due to more expensive imports), and the official peg at SSP3=USD1 was retained. Soon after the oil shutdown took place, which severely restricted the availability of foreign exchange. There was inadequate supply to meet demand at the official exchange rate and, in view of this rationing, the inevitable happened, i.e. the emergence of a parallel market with an exchange rate that was sharply depreciated from the official rate.

This situation introduces a number of distortions – notably it encourages rent seeking by people who have access to foreign exchange at the official rate (which can then be immediately sold at a profit). It generally increases uncertainty and risks, which discourages investment, especially long-term investment. The current situation is unsustainable, and hence economic agents know that there will be a change at some point, but until the nature of the change in exchange rate policy is known, uncertainty will prevail.

Fortunately the resumption of oil exports should lead to a renewed flow of foreign currency within a few months, which will enable a reconsideration of exchange rate policy in a more stable environment. In the short-term, the main objective should be to close progressively the gap between the official and parallel market rates. But this still raises questions as to what the longer-term policy should be.

In the light of the experience of mineral economies, South Sudan should not necessarily go down the route of a fully market-determined, floating exchange rate. There are good reasons for managing or pegging the exchange rate. This will help to reduce the impact of external volatility; mitigate the pressures for real exchange rate appreciation; and facilitate the accumulation of foreign exchange reserves.

But even once this decision is taken in principle, many challenges remain. These include choosing the target level for the exchange rate, which should undervalue the currency (relative to where market forces or balance of payments equilibrium should take it). There is also the need to accommodate adjustment in the exchange rate over time – even a pegged exchange rate does not need to be rigidly fixed. And there is the question of which mechanism should be used to manage the exchange rate. Any managed or pegged rate requires the strong intervention of the central bank, but should this be by controlling the quantity of foreign exchange supplied to the market (e.g. through an auction system) or the price (though a formal peg).

Whatever system is chosen, management of the exchange rate should be closely integrated with public finance management.

Public Finance

With the resumption of oil exports and revenues imminent, resolving public finance management issues is now critical. Although it has been agreed in principle that mineral revenues will be allocated across three tranches – to the budget; to a stabilisation reserve and a long-term investment fund – a Fund for Future Generations – the details of how much revenue is allocated to each tranche is now critical. This is related to the broad balance between recurrent spending, development spending (public sector investment projects) and the accumulation of financial assets. It is probably advisable to finance public sector investment projects through the budget and leave the FFG to be invested only in financial resources offshore. All of this should be rules-based, both for payments and drawdowns.

It is important to pay attention to the quality of public sector spending decisions and project selection; projects need to be screened and appraised, to enable identification of anticipated costs and returns, and hence prioritisation. Once projects are selected and funded, project management and implementation become crucial so as to avoid cost overruns and delays. After implementation, projects need to be evaluated - did the project achieve what was intended? Off-budget spending should be avoided, and once adequate public finance management systems have been established, donor funds should be channelled through the budget and used to finance the government's own priorities.

Finally, the temptation to spend as much money as possible in as short a time in possible – there is a need to balance infrastructure development with the capacity of the economy to absorb expenditure, in order to prevent inflation, wastage and an intensification of Dutch Disease pressures.

Diversification

The third key area of importance is economic diversification. This is a long-term project and cannot be achieved overnight. It is also very difficult. Many mineral economies do not achieve diversification. And diversification is not simply and economic planning decision, but requires the creation of an economic environment and set of incentives to which firms will respond by investing appropriately.

Diversification does not just mean developing economic activities outside of the oil sector. The challenge is to develop competitive activities producing goods and services that can substitute for imports or be exported – the latter being the ultimate objective, as when the oil runs out, the economy will become dependent upon non-oil exports.

Successful diversification requires attention to be paid to both macroeconomic and microeconomic policies. The former should concentrate on a stable and predictable environment, which supports competitiveness (particularly by avoiding overvaluation or appreciation of the real exchange rate). At the micro level, it is important to pay attention to the quality of the business environment – costs of production, regulation, etc. Government should as far as possible avoid getting involved directly in production of goods and services. Rather, it should provide infrastructure to address bottlenecks (e.g. a reliable power supply, roads to facilitate trade and the distribution of agricultural produce, and internet bandwidth). It will also be necessary to deal with land tenure issues, and develop a system of business-friendly land titling that encourages investment and supports collateralised lending.

Government should also avoid trying to choose the activities that may be part of diversification, at least at a detailed level. However, agriculture would appear to offer considerable potential, as would diversification of the minerals sector beyond oil.

Government should also facilitate the development of the financial sector – promoting a range of financial institutions and markets, including banks, non-bank financial institutions and capital markets; addressing access to finance; ensuring adequate regulation and supervision, and only intervening directly where there are gaps in financial markets that the private sector cannot fill – such as long-term finance and SMME finance.

CONCLUDING COMMENTS

What does all of this mean for South Sudan? Clearly the development challenges are immense, and there is much to be done in a short period of time. I have made some suggestions as to how some of the key macroeconomic policy decisions should be handled, based in part on the experience of Botswana, which has on balance handled these challenges well. But there are two overriding messages regarding the macroeconomic policy framework, rather than the details of individual policies. First, it is important to take a long-term development perspective, and not to be derailed by short-term objectives and pressures. Policy decisions should be consistent with that long-term perspective. Second, policies are not independent, and for policies to work they need to be complementary to each other, to form a coherent whole. Policies that provide contradictory or conflicting signals or incentives and which therefore push against each other are unlikely to succeed. Managing volatility; ensuring sustainable and efficient use of public financial resources; exchange rate and monetary policy; and pursuing diversification are not separate policies, but need to work together. If these general principles are followed I am confident that South Sudan has a bright economic future.

ABOUT THE AUTHOR

Keith Jefferis is macroeconomist and financial sector specialist, and is Managing Director of Econsult Botswana (Pty) Ltd, and is a former Deputy Governor of the Bank of Botswana. His current activities include work on a range of macroeconomic, financial and other development issues in Botswana and elsewhere in sub-Saharan Africa. He has recently consulted for the World Bank, the African Development Bank, USAID, SADC, UNDP and a number of banks and other private sector firms on a range of economic and financial development issues. He is accredited to the IMF Technical Assistance Experts Register.

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The IGC offers independent advice on economic growth to governments of developing countries. Based at the London School of Economics and Political Science and in partnership with Oxford University, the IGC is initiated and funded by the UK Department for International Development (DFID).

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