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Impact of the Current Global Financial Crisis and Recession on the SADC Mining Sector

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Contents

Abbreviations and Acronyms

AfDB	African Development Bank
AIG	American International Group
BCL	Bamangwato Concessions Limited
BHP	Broken Hill Proprietary
CDO	Collateralized debt obligation
CDS	Credit default swap
CIA	Central Intelligence Agency
ECA	Economic Commission for Africa
FDI	Foreign direct investment
GDP	Gross domestic product
GFMS	GFMS Metals Consulting
IFIs	International financial institutions
MDGs	Millennium Development Goals
NDP	National development plan
ODA	Official development assistance
OECD	Organization for Economic Cooperation and Development
SADC	Southern African Development Community

Summary

African ministers responsible for mineral resources development have expressed concern about the prevalence of poverty on the continent, despite the abundance of mineral wealth in their respective countries. With the assistance of the Economic Commission for Africa (ECA), they have formulated the African Mining Vision 2050, which aims to create conditions for transparent, equitable and optimal exploitation of mineral resources on the continent. Southern African Development Community (SADC) ministers in charge of mineral resources are involved in this initiative.

The minerals sector plays a critical role in the growth and development of the economies of most SADC Member States. In fact, the minerals sector accounts for 60 per cent of the subregion's foreign exchange earnings, and contributes an average of 10 per cent to the subregional GDP. Historically, the minerals sector has been the major contributor to infrastructure development in the subregion.

While dependency on mining is ongoing in most SADC countries, circumstances have significantly changed since July 2008. The global financial downturn and the subsequent economic crisis have resulted in reduced demand for the subregion's mineral output. This decline in demand for most of the commodities has also translated into low prices for mineral commodities produced in the subregion. This has led to a contraction in finance and the suspension or cancellation of several mineral development projects, due to difficulties in raising capital. Mines that are still operational are facing serious liquidity problems.

The contraction in global demand for metals and minerals has also dramatically reduced revenues and affected the capacity of Governments to meet their economic and social obligations. Furthermore, closure of mines or their placement on care and maintenance has led to rapidly rising redundancies in the mineral industry and heightened unemployment. Overall, about 346,681 jobs have been lost in the subregion with many mines placed under care and maintenance. Major job losses have been experienced in the Democratic Republic of the Congo, South Africa and Zambia.

There are other impacts also. Due to the decline in mineral prices, the foreign exchange earnings of most SADC countries have dropped considerably, leading to deterioration in exchange rates. Low mineral prices have also affected the profitability of mining companies.

Currently, the subregion's mining industry is a high-cost producer which has not been overly cost conscious, riding, as it has, on the back of the commodity boom. But, input costs have risen sharply in the recent past. With threats of closure, the need for restructuring the industry in line with current realities has arisen. Governments as well as local entrepreneurs and other local institutional investors are being called on to increase their participation in the industry. Economic diversification is another strategy being proposed with increased value addition to stave off some of the effects of the economic recession.

In view of the above-mentioned issues, this paper recommends a number of actions that should be undertaken to address the negative impact of the current global financial crisis and recession on the SADC mining sector. The recommended actions, as summarized below, were

reviewed at a meeting of experts, senior SADC Government officials and the private sector, in May 2009.

a. Central banks should implement prudent monetary policy to avoid the collapse of their financial systems;

b. Retrenchment should be a last resort, preferably in the form of voluntary separation and in a context of dialogue and goodwill between Government, labour unions and employers; flexible wage structures should also be explored in view of a long-term solution;

c. Governments should adopt a flexible tax system that relieves mining companies of heavy tax burdens during periods of financial stress;

d. Increased local and State participation in the mining industry is needed; Government shares could be increased through deferred royalty payments, and citizens should be empowered to participate in the industry;

e. Need for economic diversification and development of the manufacturing sector; diversification could be intra-sectoral, aimed at producing additional minerals, and inter-sectoral, i.e. into other sectors of the economy, such as agriculture and the manufacture of value-added mineral products;

f. Transaction costs can be reduced through a review of regulatory frameworks and other obstacles to business start-ups so as to enhance local content in the mining industry; infrastructure support should also be reviewed, e.g. with a view to upgrading generation and transmission capacities;

g. Governments should explore ways of providing incentives, especially to young explorers, to enable the continuation of exploration activities so as to ensure that SADC countries are in a position to benefit from the next upswing in mineral commodity prices.

I. Introduction

1. African ministers responsible for mineral-resource development met in Addis Ababa, Ethiopia, in October 2008. The meeting brought together mining ministers and experts in order to discuss key issues relating to mineral resources, and to propose a strategic vision and action plan for Africa, with a view to promoting economic growth, reducing poverty and achieving sustainable development. The meeting noted the sharp contrast in Africa's abundant mineral wealth and the high prevalence of poverty on the continent. A vision was needed to address this situation. Consequently, the Economic Commission for Africa (ECA) set about formulating the African Mining Vision 2050. The Vision aims to create conditions for transparent, equitable and optimal exploitation of mineral resources on the continent, and to provide a common African voice on how to use the continent's mineral resources for growth and development, building on the experience that commodity booms provide a window of opportunity.

2. The Vision document is fairly detailed. It identifies the reasons why the majority of African States have not been able to take advantage of their resource endowment opportunities to create critical linkages to underpin economic diversification, growth and development. One reason is the failure to capture and channel resource rents into reinvestment, the focus being rather on short-term consumption, and often clandestine foreign exchange outflows. This stems from weak governance, due particularly to the lack of effective institutions. African States with weak governance generally fail to impose resource tax regimes that ensure an equitable share of mineral rents, in particular windfall taxes, due either to lack of State capacity or subversion of that capacity to produce overly investor-friendly outcomes (African Union, 2009). The second reason concerns the collateral effect of a resource boom, which negatively affects other sectors of the economy, such as agriculture. The tendency has been to overvalue currencies, which impacts negatively on agricultural exports (Dutch disease), compounded by failure to invest in, maintain and support infrastructure in other economic sectors.

3. The third reason is the failure to create or induce downstream value addition for crude resources and to impose minimum levels of beneficiation of extracted minerals. This has led to indirect job exportation, as the final processing and manufacturing of finished goods must take place elsewhere. The fourth reason concerns upstream value addition due to the lack of local business capacities to take advantage of the opportunities created by the resource extraction sector in terms of supplying various services. Instead, resource extraction companies resort to centralized purchasing practices which lead to further capital outflows.

4. The recent commodity price boom, which lasted from 2004 to 2008, provided the impetus for the Vision. However, formulation of the Vision was completed at a time when commodity prices had started collapsing. Nonetheless, the Vision provides a framework within which mineral-rich African countries can operate. While it acknowledges that most African countries have failed to integrate their mineral sectors into their local economies since obtaining independence, it is nonetheless optimistic and forward looking. This paper argues that most of Africa's problems, and in particular those of the Southern African Development Community (SADC) countries, reside in weak governance. Individual Member States are unable to take on corporations, especially in an environment where there is very little or no coordination of policies across countries in the subregion. This paper therefore supports the

concept of a common voice with regard to the use of mineral resources and the harmonization of mining policies to foster growth and development in the subregion.

5. It is organized as follows: Section II outlines the importance of the mineral sector in the SADC region. Indeed, the mineral sector plays a critical role in the economies of SADC Member States, contributing to foreign exchange earnings, Government revenues and employment. The global financial and economic crisis resulted in a downturn in mineral commodity prices following a five-year price bubble. Section III gives reasons for the bursting of the price bubble and the effects of the financial and economic crisis on the economies of the region. Section IV deals with the impact of the crisis on the mining sector of the SADC countries, while Section V provides possible policy responses and recommendations to deal with the impacts of the crisis. Section VI concludes the paper.

II. The Mining Sector in SADC States

6. The mining sector plays a critical role in the growth and development of the economies of SADC Member States. In aggregate, the mining sector accounts for 60 per cent of the subregion's foreign exchange earnings, and contributes an average of 10 per cent to the subregional GDP. It also directly employs about 5 per cent of the total wage earners. Historically, the mining sector has been the major contributor to infrastructure development in the subregion. Zambia, for example, has a copperbelt complex of towns and cities, a result of the development of its mining sector, since the late 1920s. Botswana, on the other hand, was severely underdeveloped and dependent on agriculture, until mineral exploitation took off.

7. Over the past 40 years, Botswana has had one of the fastest-growing economies in Africa. From one of the poorest countries in the world at independence, Botswana has managed to transform itself into upper middle-income country through sound macroeconomic policies, good governance and prudent development of its diamond resources. Growth of the country's economy is expected to remain buoyant at over 5 per cent in 2008-2009 (AfDB/OECD, 2008). As at 2008, mining contributed over one third of GDP and about 70-80 per cent of export earnings (CIA World Factbook, 2008). The exchange rate has been deteriorating, albeit slowly, from an average P4.9499 to US$1 in 2003 to P6.2035 in 2007 (CIA World Factbook, 2008). Botswana's main exports are diamonds, copper and nickel. The collapse of the prices of those commodities at the international level has negatively affected the economy. It should be noted that the diamond mines in Botswana are owned by both the Government and De Beers; in the case of Debswana it is a 50/50 partnership. The Government also has a substantial stake in Bamangwato Concessions Ltd. (BCL), which operates the Selebi Pikwe copper-nickel mine.

8. South Africa has abundant mineral resources, and unlike other African countries, the State owns a substantial proportion of investment in mining. The country possesses nearly 90 per cent of global platinum deposits, 80 per cent of manganese, 73 per cent of chrome, 45 per cent of vanadium and 41 per cent of gold. South Africa is currently the leading producer of platinum worldwide, in addition to producing enormous quantities of gold, diamonds, ferrochrome and coal for the world market. It supplies 80 per cent of the world's platinum, is the world's fourth-largest producer of diamonds, and the second-largest producer of gold after China. In 2007, London-based GFMS Metals Consulting (GFMS) estimated that China produced 276 metric tons of gold, while South Africa produced 254 metric tons (Chamber of Mines of South Africa, 2007). Although mining contributed about 14 per cent

to GDP in the 1970s and the 1980s, that rate dropped significantly to 5.8 per cent in 2007. Nonetheless, the mining industry is still crucial to the South African economy. Precious metals contribute close to 65 per cent of mineral export earnings and 21 per cent of the country's total exports. The mining industry is also the largest employer, with close to 450,000 direct employees and another 400,000 employed in companies providing services to the industry.

9. One of the most important aspects of South African mining is the fact that the country has a high level of mining expertise as well as comprehensive research and development facilities. The country has world-standard secondary processing facilities for ferroalloys, stainless steel and aluminium, in addition to gold, titanium and platinum. It is also a world leader in new technologies, such as the ground-breaking process that converts low-grade superfine iron ore into high-quality iron inputs. This kind of beneficiation of raw materials before export has the potential to be a major growth area. It is also noteworthy that two of the biggest mining companies, BHP Billiton and Anglo American Plc, partly or wholly originate in South Africa. Anglo American owns major subsidiaries, such as Anglo Platinum, Anglo Coal, Impala Platinum and Kumba Iron Ore. De Beers, a diamond miner, is also a South African company, though partly owned by Anglo American. South Africa has therefore benefited from the participation of companies with strong roots in the economy, and this has been crucial to the development of the mining sector.

10. The South African economy experienced robust growth between 2004 and 2008. During that period, South Africa reaped the benefits of macroeconomic stability and the global commodities price boom. The economy, however, began to slow down in the second half of 2008 due to the impact of the global financial crisis on commodity prices and demand (CIA World Factbook, April 2009).

11. Angola's high growth rate of 13.2 per cent in 2008 was driven by the oil sector, which enjoyed high international prices at the time, and this was low compared with the average rate of 15 per cent posted annually between 2004 and 2007. Oil production and supporting activities have contributed 85 per cent to GDP. Angola also produces diamonds, iron ore, phosphates, bauxite, uranium and gold. However, crude oil and diamonds are the most important exports from the mining sector.

12. Lesotho and Swaziland are not as dependent on mining as other SADC Member States. Swaziland has mining operations, but they have declined in recent years with only coal and quarry stone mines remaining active (CIA World Factbook, 2009). Lesotho has opened up two mines. Mozambique, on the other hand, has enjoyed a relatively high GDP growth rate of over 7 per cent. The opening of the Mozal aluminium smelter, the country's largest foreign investment project, has significantly increased the country's export earnings. In contrast to Mozambique, Namibia's economy is heavily dependent on mineral extraction and processing for export. While mining accounts for 8 per cent of GDP, it provides more than 50 per cent of foreign exchange earnings. Rich alluvial diamond deposits make Namibia a primary source of gem diamonds. Namibia is also the world's fifth-largest producer of uranium. Other export minerals produced in Namibia include copper, gold, zinc, lead, silver and tungsten.

13. Tanzania's economy is dominated by agriculture, which accounts for more than 40 per cent of GDP and 85 per cent of exports, and employs 80 per cent of the workforce. There has, however, been an increase in the output of minerals, led by gold. Since the 2000s, Tanzania has become one of the leading investment destinations in non-fuel minerals in Southern Africa, attracting a total of over US$2 billion in mining investment (UNCTAD World Investment Report 2008). This has led to the opening of

five gold mines in the last decade, and an increase in gold production from less than 100,000 ounces in 1999 to more than 1.4 million ounces in 2008. In 2000, mining contributed less than 1.5 per cent to GDP; this rapidly grew to 3.5 per cent in 2007. Over the three-year period from 2006 to 2008, GDP growth averaged 6.9 per cent (7.1 per cent in 2008), making Tanzania one of the fastest growing economies in the SADC region. In addition to gold, the country produces diamonds and iron. Zimbabwe's economy, in contrast, has not performed well. Its major mining exports are gold and ferroalloys (Wikipedia, 15 April 2009). However, gold production has declined from 27,114 kilograms in 1998 to 7,017 kilograms in 2008 (www.earthtimes.org, 27 February 2008).

14. While dependency on mining is ongoing in most SADC countries, circumstances have significantly changed since mid-2008. The global financial downturn and the subsequent economic crisis have resulted in declining demand for the region's mineral outputs. The decline has translated into low prices for mineral commodities produced in the region.

III. The Global Financial and Economic Crisis

15. None of the three major financial crises that the world has experienced since the 1990s has translated into a major global economic crisis. In 1994, the Mexican peso crisis started with the Mexican Government's announcement that the peso would be devalued by 15 per cent. As the peso fell, investors panicked and started selling their peso holdings. Capital also continued to flow out of Mexico, leading to a sharp drop in the Mexican stock exchange by 47.94 per cent in one single month. The effects of that crisis spread to Brazil and other neighbouring countries (Murinde, 2009). The major impacts of the Mexican crisis, however, were expressed in terms of capital outflows, a drop in stock market prices and depreciation in the foreign exchange rate.

16. In 1997, another financial crisis emerged, this time in East Asia. The world experienced the effects of the East Asian financial crisis, which was caused by large external deficits and property and stock market bubbles. Some analysts attributed this crisis to internal weaknesses in the financial sector, such as inadequate banking regulation and supervision. New banks and financial companies were allowed to operate without supervision or adequate capitalization (Radelet et al., 1998). In that situation, Japanese banks reacted by trying to meet their own capital requirements, thus reducing credit to Thailand. There was also large-scale foreign borrowing to fund plant expansion. This led to unsustainable debt-to-equity ratios for firms. The overall result was heavy indebtedness on the part of most East Asian countries, due to short-term and unhedged loans. Such loans exceeded 50 per cent of GDP in Thailand, Indonesia and the Philippines.

17. Foreign investors also assumed that in the event of repayment problems, they would be bailed out by the host Governments, which at the time had also liberalized their capital accounts. While this attracted foreign capital inflows, it also attracted substantial international "hot money," which was potentially destructive (Murinde, 2009). However, countries such as Hong Kong and Singapore, which had strong financial and adequate regulatory systems, escaped the contagion effects. Indeed, strong financial and adequate regulatory systems can help to mitigate the adverse contagion effects of a financial crisis (Murinde, 2009). Almost a year after the East Asian financial crisis, the Russian financial crisis broke out. This led to a depreciation in the Russian rouble and major capital outflows, which severely reduced Russia's foreign currency reserves.

18. The above-mentioned financial crises had limited contagion effects and did not translate into economic crises. However, the current economic crisis, which originated in the United States sub-prime mortgage market, has had serious contagion effects worldwide. Goodhart (2008) says the crisis was due in part to risk pricing, the new financial structure, poor credit rating agencies and insufficient liquidity. Mizen (2008), on the other hand, identifies the global savings glut and financial innovation in mortgage-backed securities as the precursors of the crisis. In general, the crisis can be attributed to financial globalization and its contagion effects. Whichever way the problem is looked at, it is important to recognize that the current economic crisis started as a financial crisis.

19. The financial crisis has deeper roots. It can be traced back to 2000 when the Federal Reserve, the central bank of the United States of America, responded to the bursting of the Internet bubble by reducing interest rates on federal funds. This is the rate at which American banks lend surplus liquidity to each other. The rate was reduced from 6.5 per cent to 3.5 per cent within a few months, reaching 1 per cent by 2003. The low interest rate caused the banks to start advancing cheap loans, which led to the real estate bubble. Mortgage lenders relaxed lending conditions and invented new ways to stimulate financial activity. Investment banks on Wall Street also developed a variety of new techniques for passing on the risk to other investors, such as via pension and mutual funds. By 2005, the monetary value of existing housing had risen by 50 per cent and the construction sector had grown uncontrollably, becoming the major driver of American GDP. As the prices of houses increased, speculation also increased, which led to a rush for mortgage loans, commonly known as "ninja" loans, which were advanced to non-creditworthy customers with no income, no jobs and no assets. Banks got rid of risky mortgages by restructuring them into what they called "collateralized debt obligations" (CDOs), that is, assets secured by sets of assets usually consisting of bank loans, bonds and credit default swaps (CDSs).

20. According to Mama and Nanfosso (2009), "securitization turned into aggravated risk orchestrated by the transfer of ownership of mortgages of bankers who knew their customers to investors who did not know them." This led to the development of a CDS market. "Today, the nominal value of credit default swaps in the United States of America is estimated at almost US$43,000 billion, while the stock market capitalization in the country is US$18,500 billion and the value of treasury stocks and bonds is US$4,500 billion" (Mama and Nanfosso, 2009). From this it is clear to see how the financial economy or the paper economy has overridden and developed independently of the real economy. This simply means that financial obligations have been created in the economy without assets to back them.

21. It is prudent to infer that excessive speculation is the root cause of the toxic assets produced by the financial crisis, and the reason behind Lehman Brothers filing for bankruptcy. The collapse of Lehman Brothers had a huge effect on the American International Group (AIG), and led to the partial nationalization of AIG. The United States of America Treasury purchased 80 per cent of the shares of AIG. The whole process has undermined the trust needed for the financial system to operate effectively. As the banks became risk-averse, failing to lend to each other, they also started rationing credit to firms. This resulted in the credit crunch. Firms also responded by scaling back their activities and numbers of workers. Thus, the problems that arose in the financial sector were now being felt in the real economy, reducing consumption of various goods and also reducing savings in the economy.

22. There are basically three ways in which the effects of the financial meltdown and economic recession are likely to affect SADC economies: 1) through trade, as expressed by the fall in the demand

for commodities produced in SADC countries; 2) through foreign direct investment (FDI) flows, as exemplified by the unavailability of finance for investment; and 3) through official development assistance (ODA), represented by flows of aid and grants to SADC countries.

IV. Impact on SADC Countries

23. The financial meltdown, although originating in the United States of America sub-prime mortgage market, is now impacting almost all of the world's economies, including the operations of many sectors of SADC economies. The severity of the impact depends on the extent of the economy's integration into the global economic system, and the levels of diversification of each economy. Many developing countries are primary commodity producers, depending for most of their foreign exchange earnings on one or two export commodities. In some countries, over 50 per cent of Government revenues may be dependent on commodity exports. A substantial part of the labour force may be dependent on the export sector for jobs. In many SADC Member States, the mining sector plays a very important role in the development of their economies. The sector has not only provided foreign exchange and a substantial portion of Government revenue, but it has also provided resources for development. Consequently, the financial crisis and subsequent economic recession has had serious effects on many economies in the SADC region.

1. Commodity Prices

24. The reduction in consumer demand in the major economies of the world has affected the prices of mineral commodities. Indeed, the prices of copper, aluminium, lead, nickel, silver, tin and zinc have all plummeted. The annual average prices for these minerals have declined considerably between 2007 and 2009, as shown in table 1 below.

Table 1: Annual Averages - Commodity Price Data, 2007 to 2009

Metals and Minerals	Unit	2007	2008	March 2009
Aluminium	US$/mt	2,638	2,573	1,372
Copper	US$/mt	7,118	6,956	3,268
Lead	US¢/kg	258	209.1	111.7
Nickel	US$/mt	37,230	21,111	10,858
Silver	US¢/troy oz	1,341	1,500	1,242
Tin	US¢/kg	1,454	1,851	1,121
Zinc	US¢/kg	324.2	187.5	115.0

Source: World Bank Commodity Price Data, March 2009

25. The decline in prices has varied between minerals, with copper being the hardest hit, falling close to 53 per cent between 2008 and 2009, followed by nickel, whose price fell by 48.6 per cent over the same period. Aluminium and lead posted price declines of about 46 per cent, while tin and zinc fell by 39.4 per cent and 38.7 per cent, respectively. Silver had a modest fall of 17.2 per cent. The economic downturn has affected Government revenues from taxes levied on the various minerals. Economies that depend on the export of minerals, such as copper, aluminium, lead, nickel, diamonds and zinc, have been affected more deeply than those that export gold, iron and steel. Furthermore, economies that have a substantial domestic market for their goods are likely to be cushioned. One

impact is related to the structure of some economies in the region which are dependent on one or two minerals for their export earnings. Mono-economies are not diversified, by nature. Consequently, when prices collapse, they are impacted more severely than economies that have diversified mineral sectors. Therefore, the mineral production mix is important in this respect. Depending on the production mix, countries have been affected differently by the declines in mineral prices.

26. It is important to note that the prices of some metals and minerals rose over the same period. The price of gold, for example, rose from US$697 per troy ounce in 2007 to US$872 in 2008 and US$901 in January and February 2009. The price of iron ore rose from 84.7¢ per dry metric ton unit in 2007 to 140.6¢ in 2008, while that of steel rose considerably over the same period (World Bank Commodity Price Data, March 2009). This suggests that a diversified mining sector contributes to making an economy more resilient to price shocks. Therefore, a diversified mining sector is good for any country.

2. Mine Operations

27. At the microeconomic level, the falling prices of metals and minerals have resulted in mine closures, and in some cases, mines have been placed under care and maintenance, a situation where only the most essential services are routinely undertaken, but production is interrupted. Essential services include mine dewatering to prevent flooding, maintenance of production equipment and security services, to prevent theft and vandalism. This has been the fate of Botswana's Orapa No. 2 and Damtshaa mines, Zambia's Luanshya Mines Plc, (copper and cobalt), Munali (nickel) and Chambeshi Metals (smelter). The BCL mine at Selebi Pikwe in Botswana was saved by the Botswana Government's decision to acquire a majority share in the operation, thereby saving jobs and a town that relies heavily on the mine.

28. In Namibia, four mines have been placed under care and maintenance: Otjihase, Tschudi, Matchless and Tsumeb, all owned by Weatherly International Plc through its local subsidiary Weatherly Mining Namibia. In Lesotho, three mines are still operating, while two others have been placed under care and maintenance. South Africa has closed 63 mines, mainly of diamond and manganese. There have been more mines placed under care and maintenance in the Democratic Republic of the Congo than in any other SADC Member State. This has implications for employment levels, as mines under care and maintenance only maintain a skeleton staff.

3. Profitability and Employment

29. The reduction in commodity prices has resulted in decreased profitability for mining companies, since they export nearly all their mineral production to global markets. This has been the case in Botswana, the Democratic Republic of the Congo and Zambia, where mining companies have experienced serious profitability setbacks. Platinum and diamond mining companies in South Africa have also felt the squeeze. Consequently, some mining companies have announced the suspension of new projects (Mulyashi, Luanshya Copper Mines, and Munali Nickel Mine in Zambia) until mineral prices rise. Some have indicated that they will have to lay off part of their workforce, and others have already done so. In Katanga province of the DRC, more than 200,000 jobs had been lost as at December 2008. In Kasai and other provinces, job losses exceeded 300,000 as at January 2009. These job losses have been attributed in part to the production cost of metals like cobalt and copper, which is now greater than the price that those commodities fetch on world markets. It should be noted that more

than 40 mineral-processing companies had shut down as at November 2008, mainly in southern Katanga province.

30. Zambian mining companies, which have already laid off over 10,000 miners, have indicated that they will lay off additional numbers of employees. These numbers do not include those employed by companies that supply services to the mining companies. Botswana has also lost more than 1,000 jobs. There have been smaller job losses in other SADC Member States: Tanzania estimates that 1,287 jobs have been lost, while Lesotho estimates that 275 jobs have been lost as a result of the global downturn in mineral commodity prices. Namibia estimates a loss of 620 jobs, while 187 jobs have been lost so far in Swaziland. In South Africa, 32,681 jobs were lost during the latter part of 2008 and in early 2009. The diamond sector lost more jobs than any other sub-sector, with the closure of 62 mines. This has been precipitated by a 50 per cent fall in diamond prices. It is estimated that over 346,681 jobs have been lost in the SADC mining sector. This, however, is a partial estimate since information from other SADC Member States was not available at the time that this paper was being prepared. Therefore, in general, the economic downturn has resulted in substantial job losses. Since the mining sector is a major employer in some countries, the decline in employment is posing serious social challenges to the region.

4. Growth Rates

31. Nearly all the SADC Member States have opened up their economies and are instituted some of the most open trade regimes. Trade accounts for over 50 per cent of the GDP of most of the countries in the region. In Angola, for example, oil production and its supporting activities provide about 85 per cent of GDP. In Botswana, about 36 per cent of the exports come from the mining industry, while in Namibia the figure is as high as 50 per cent. Consequently, declines in mineral commodity prices have an effect on the GDP growth of the countries in the region. The financial crisis has also affected global economic growth and resulted in a decline in the demand for commodities, such as aluminium, copper, cobalt, nickel, lead and zinc. Commodity prices have dropped to their lowest level since 2004. The price of copper, a commodity produced by Botswana, the Democratic Republic of Congo, Zambia and Namibia, has fallen sharply since July 2008. Copper prices have fallen from US$8,930 per metric ton in July 2008 to an average of US$3,900 per metric ton between January and March 2009. Diamond prices have also behaved in a similar way, affecting Botswana, Namibia and South Africa.

32. Since most SADC countries depend on the export of primary mineral commodities used in the production of consumer goods for the European and American markets, the low demand worldwide has had a negative impact on them. Most have had to revise their growth rates forecast for 2009. South Africa has revised its growth rate from 3.1 per cent to 0.2 per cent for 2009, Lesotho, from 5.1 per cent to 4.6 per cent and Zambia, to slightly above 4 per cent. It should be noted, however, that the revision of growth rates is a worldwide phenomenon.

5. Exploration and Prospecting

33. The future of mining depends very heavily on prospecting and exploration. Once prospecting and exploration cease, no new mines will be opened. With the financial crisis and the economic recession, and the resulting decline in mineral commodity prices, many young exploration companies are unable to finance their operations, and some have ceased to exist altogether. With a decreased net present value of mineral deposits, investors are not willing to risk their resources. Therefore, even if new deposits were discovered, they would not attract mining finance due to depressed mineral commodity prices. As a result, this mining sub-sector has been negatively affected by the crisis and Governments must find ways to support it in order to maintain the organic growth of the SADC mineral industry.

6. Tax Revenues

34. Tax revenues have also decreased. In Zambia, for example, revenues from mining company taxes fell from US$44 million (K154.6 billion) in the second quarter of 2008 to US$41.6 million (K146 billion) and US$7.5 (K24 billion) in the third and fourth quarter of 2008, respectively. Revenues from mineral royalty taxes fell from US$24.4 million (K85.7 billion) in the second quarter of 2008 to US$16.9 million (K59.3 billion) in the fourth quarter. A similar pattern was observed for revenues from windfall taxes, which fell from US$33.7 million (K118.3 billion) in the third quarter of 2008 to US$2.2 million (K7.7 billion) in the fourth quarter. This loss of potential revenue from the mining sector, as a result of the crisis, reduces the Government’s fiscal space and its capacity to finance social sector expenditure programmes, such as education, health and infrastructure for poverty reduction. If this recession continues for a much longer period, it will affect the ability of SADC Member States to attain their development objectives and meet the Millennium Development Goals (MDGs).

7. Exchange Rates

35. Some countries have experienced rapid declines in foreign exchange earning capacities, distortion of exchange rates, and rapidly rising inflation levels. In the period immediately following July 2008, many currencies were depreciating against the United States dollar. This has been the case for South Africa, Botswana, Swaziland, Lesotho and Zambia. In contrast, Mozambique, Angola and Tanzania saw their currencies appreciate during the same period. The affected currencies had all the signs of developing Dutch disease, with appreciating foreign exchange rates affecting other exports. Table 2 shows the extent of the depreciation of some SADC currencies.

Table 2: Average exchange rates to the US$ in some SADC countries, 2006-2008

Country and Currency	2006	2007	2008	8 July 2009
Tanzania Shilling	1251.9	1255	1178.1	1017.72
Botswana Pula	5.8447	6.2035	-	6.75
South African Rand	6.7649	7.05	7.9579	8.21
Lesotho Maloti	6.85	7.25	7.75	10.21
Swaziland Emalangeni	6.85	7.25	7.75	10.21
Mozambique Meticais	25.400	26.264	24.125	23.134
Angola Kwanza	80.04	88	83.541	40.71
Zambia Kwacha	3601.5	3990.2	3512.9	4967

Source: CIA World Factbook 2009; eXchangeRate.com (9 July 2009).

8. Foreign Direct Investment

36. Foreign direct investment (FDI) has been a very important resource inflow for many SADC countries. There is considerable evidence that FDI boosts growth by complementing and facilitating domestic investment. FDI contributes to creating new job opportunities and facilitates growth through plant and equipment renewals, and generally contributes to improving existing technology, especially in old operations. The region therefore requires substantial FDI inflows. The experience of SADC Member States in attracting long-term capital flows has been mixed. In United States-dollar terms, the amount of FDI received by SADC is a small fraction of total flows to low- and middle-income economies. Between 1995 and 1999, the approximate SADC share of total FDI to developing countries varied between 2 per cent and 3 per cent.

37. However, for some countries in the region, annual inflows expressed as a percentage of GDP have, at times, significantly exceeded flows to other developing economies, e.g., Angola (1998-1999); Lesotho and Seychelles (1995-1999); and Mozambique (1999). This can often be explained by a limited number of large transactions, including investment in natural-resource exploitation and infrastructure development, and privatization transactions. Privatization has been an important source of FDI for some SADC countries, such as Mozambique, Tanzania and Zambia. South Africa dominates foreign investment in the SADC region: it receives a substantial fraction of new FDI flows into the region, and hosts the largest number of foreign subsidiaries across a broad range of economic sectors. South Africa's capacity to act as a magnet for FDI in the region, particularly in the context of growing regional economic integration, is an important feature of investment flows (Jenkins and Thomas, 2002).

38. However, FDI is also dependent on credit availability in developed countries. The credit crunch has reduced the amount of finance available for overseas lending and for markets that are traditionally considered risky. As banks in the developed world tighten their lending, and as stock markets tumble, the sources of credit for investment in emerging markets are affected. Furthermore, most foreign investors are disinvesting and buying foreign currency, thereby causing local currencies to depreciate. This is causing instability in the economies of most SADC Member States. The depreciation in most of the currencies in the region has the effect of raising the prices of imported goods. Since most SADC Member States import manufactured goods, prices for these will keep rising, fuelling inflation and

reducing citizens' standard of living. If left unchecked, this process will negate the development gains of the past five years, and will seriously hinder the attainment of the MDGs.

V. Policy Response

1. Monetary and Fiscal Policies

39. Although the financial and economic crisis originated in the United States of America, the global attention has been focussed on the policy response of Governments worldwide, and the major actors in the international financial system. This includes developing countries, which now contribute a large share to the global economy and trade flows, and international financial institutions (IFIs), which help oil the system and promote widely shared development (Lin, 2008).

40. The first priority for most SADC Member States should be to prevent the financial contagion from crippling domestic banking and non-banking financial sectors. Given the high level of inter-linkages among the world's financial firms and sectors, those effects started appearing in most countries, even before the impact was felt by the real economy. The Johannesburg, Lusaka and Botswana stock exchanges tumbled. Some currencies also depreciated substantially, as mentioned earlier, and sovereign interest-rate spreads rose with the "flight to safety" of foreign portfolio investment in world markets. Market capitalization of most stock exchanges fell substantially. At the micro level, some exporters in developing countries are already finding it hard to obtain the trade credits that are their lifeblood, which could cripple export sectors hit by the fall in foreign demand (Lin, 2008).

41. It is therefore important that SADC countries take quick, decisive and systematic measures to ensure that credit crunches and bank collapses are avoided locally. More generally, SADC Member States have two main macroeconomic tools for responding to shocks: monetary and fiscal policy. One great risk is that if the credit crisis is not effectively resolved, the global economy could enter a period of deflation. In such an environment, standard monetary policy will not be effective. However, credit-financed industrial upgrading is a possibility in nearly all SADC Member States, and that would provide more room for monetary policy to work. Not all countries, though, will be able to effectively use expansionary monetary policy. Some may find themselves forced to tighten monetary policy and increase interest rates to prevent excessive currency depreciation or capital outflows. Some Governments may be able to provide some monetary stimulus by lowering interest rates and encouraging investment in sectors where industrial upgrading is most likely to have payoffs (Lin, 2008).

42. On the fiscal policy side, Governments of developing countries have a variety of tools that they could use to cushion the shock. Governments with available fiscal space can respond by injecting well-designed fiscal stimuluses into their economies, so as to generate domestic demand that can offset the expected decline in foreign demand. Developing countries have pressing needs that can be met through public investment, such as the building of infrastructure, especially after a period when private-sector growth has sometimes outstripped the ability of the public sector to provide the infrastructure needed to sustain that growth.

43. A second area for investment is social protection and human development so as to ensure that a temporary shock is not converted into severe permanent declines in the welfare of poorer households. Many programmes have been evaluated and seem to be worth investing in. Governments should prioritize protection and expansion of programmes that can most effectively buffer the impact of crises on the poorest households (Ravallion, 2008). Types of programmes to consider include conditional cash-transfer programmes to keep disadvantaged children in school, and public-works employment (or workfare) programmes. Such programmes would be appropriate responses for countries with healthy reserves, current-account surpluses or small deficits and solid fiscal policies. In countries with less fiscal room for manoeuvre, programmes like these should be a priority for donor support.

2. Mining-Specific Policies

44. SADC countries need to formulate both short- and long-term policy responses to the global economic downturn. Even though the crisis is not of the subregion's making, the subregion is part of the world community of States. Indeed, the downturn has affected global economic growth, and the demand for commodities, in general. Since mineral exports effectively link the region to the world economy, the effects of the global recession are being felt through the mining sector first. As stated earlier, the selling price of some minerals is well below their production cost. Thus, the first step would be for the mining sector to try to reduce production costs.

45. One way to reduce costs would be to introduce flexible wage structures, whereby mining companies pay lower wages during hard times, and higher wages in boom times. This would help reduce costs until such time as mineral commodity prices pick up. The problem with this proposal is that the mines would have different wage structures, implying that there is no industry standard. However, this is an issue for unions and mining companies to discuss. It is a controversial proposition, but there should be open dialogue between mine management and labour unions. Mining companies also need to reconsider the salaries and wages of expatriate staff. Currently, the wage differential between expatriate and local staff having the same or similar qualifications is too wide. This leads labour unions to demand higher wages for their members.

46. Governments could also consider modifying the tax regimes applicable to the mining sector to take into account the importance of the sector in terms of its contribution to GDP, export earnings and employment. There should be some flexibility in the way mining companies are taxed. Governments could consider reducing corporation taxes and raising capital allowances during periods of recession, and doing the opposite, raising corporation taxes and reducing capital allowances during boom periods.

47. With regard to windfall taxes, it is important that such taxes be levied even though their administration remains controversial. One advantage of the windfall tax is that it is self- adjusting. One major problem, however, is that the tax is normally levied on revenue. As such, it is argued that it does not take into consideration production costs and the different cost structures of different mines, and some claim that it impacts negatively on the operations of marginal and high-cost mines. Therefore, the level at which this tax is imposed is subject to negotiation. The windfall tax situation differs from country to country, depending on the ownership structures of the mining companies. However, Governments could collect royalties, as such tax is applied to the extraction of non-renewable natural

resources. In cases where Government is a substantial shareholder in the mining industry or company, this measure may not be necessary.

48. It is important that Governments consider the ownership structures of mining companies and introduce a level of participation for local or indigenous entrepreneurship. Local entrepreneurship must be strengthened if the countries in the subregion wish to retain a substantial share of the benefits from investment in their mining sectors. In instances where local entrepreneurs are not readily available, Governments need to find ways to ensure a more meaningful participation in the mining sector. SADC Member States should draw lessons from global experience: in the United States and the United Kingdom, for example, Government acquired equity in specific companies in order to save jobs. The current state of affairs in the SADC mining sector is a clear indicator of Member States' vulnerability, since they are heavily dependent on foreign investment with little or no participation by either their own Government or local communities. It is therefore advisable to encourage local investment in the mining industry. Pension and insurance funds can be used to fulfil this role, while public listings on stock exchanges constitute another avenue.

49. Another cost centre to consider is that of electricity to the mining companies. In some cases, in particular at smelters, electricity can represent as much as 70 per cent of the production cost. Electricity rates are mainly composed of Government duties levied at the various stages of generation, transmission, distribution and consumption. Governments could consider reducing electricity rates to the industry, so as to help reduce the production costs for minerals that are of strategic value to the economy.

50. Mining companies could consider ways to reduce supply chain costs. Usually, resource extraction companies practise centralized purchasing, which is costly in the long run. Local companies could supply the same goods for cheaper, and that would also reduce capital outflows. Governments should therefore specify a local content minimum in resource contracts or licences. However, in some cases where local content minimums are specified in the licences and contracts, the SADC country concerned does not have the manufacturing base to exploit the legislative provision. Therefore, local manufacturing bases need to be developed in many SADC countries. South Africa, which has a fairly large manufacturing base, could contribute to developing this capacity in other SADC countries. The companies established must, however, have both local equity and entrepreneurial participation.

3. Economic Diversification

51. Strategies for diversifying the economies of SADC Member States have been in the works since the early days of their independence. Many SADC Member States inherited industrial structures that are highly dependent on the extraction of one or two minerals. National development plans in most SADC Member States acknowledge that they need to diversify in order to effect structural changes in their economies. Botswana, for example, considers economic diversification from diamond mining as an urgent imperative (National Development Plan 9), just as Zambia does with regard to copper mining (First National Development Plan, 1966). The national development plans provide for two main types of diversification: diversification within the mining sector, to include mining of different mineral varieties so as to spread risk; and diversification away from mining into manufacturing and agricultural production for the domestic and export markets. Such diversification would add value to the economies concerned.

52. Failure to create or induce downstream value addition to crude resources (copper, iron, steel, aluminium) is one reason why many SADC Member States are exposed to the vagaries of economic recessions. Once again it is up to Governments to impose a minimum level of beneficiation on mineral extraction. Failure to establish downstream value-addition industries leads to an indirect export of jobs, since the final processing and manufacturing of finished goods take place elsewhere.

53. Upstream value addition should also be enhanced. In general, there is a lack of local business capacity to take advantage of opportunities created by resource extraction companies, in terms of supply of input goods and services. With the exception of South Africa, many SADC countries have failed to create this capacity among the local business communities. SADC countries should take advantage of South Africa's capacities in mining and industry to boost their economies. Indeed, this is an attractive regional integration issue that the SADC Secretariat should explore further.

54. Diversified economies are better able to absorb shocks. Diversification is therefore a sound and rational strategy as it enables economic risk to be spread. For many decades, policymakers in the region have called for an export diversification policy towards non-traditional products, albeit with limited success. Export diversification would enlarge the range of products exported and reduce the severity of external shocks. It should be noted, however, that although diversification is necessary, it is not a panacea for resolving economic crises, since in a recession, demand for nearly all products falls. Diversification helps to reduce and spread economic risk.

4. Recommendations

55. Based on the discussions, this paper recommends that the following actions be taken to address the negative impact of the global financial crisis and recession on the SADC mining sector. The recommendations were reviewed by a meeting of experts, senior SADC Government officials and the private sector in May 2009.

1. In order to protect the economies of the subregion from financial contagion effects, central banks need to implement prudent monetary policies to avoid the collapse of their financial systems.

2. Retrenchment should be the last resort after all alternatives have been exhausted, and it would be preferable that this is done through voluntary separation. Voluntary separation is a reasonable cost-containment strategy. Where retrenchment is unavoidable, dialogue between Government, labour unions and employers will build goodwill and trust, and preclude conflict. In the longer term, there is need to explore flexible wage structures that can meet the challenges faced by the industry.

3. In order to save jobs and maintain the viability of some mines, Governments should adopt a flexible tax system that relieves mining companies of heavy tax burdens during periods of financial stress. Suspension of front-loaded taxes, such as royalties, could be an option. The negotiation of tax matters also requires healthy dialogue and trust between mining companies and Governments.

4. Mining is a strategic industry for the SADC subregion and its citizens cannot continue to be marginalized. The current crisis could be used as an opportunity to increase the participation of both the State and citizens in mining assets. This must, however, be done on negotiated commercial terms. Deferred royalty payments could be used to increase Government shares, while nationals will need to be empowered to that effect. Namibia and Botswana are good models of State participation.

5. The crisis presents opportunities to encourage manufacturing and diversification. Diversification could take two forms: intra-sector diversification aimed at producing additional minerals; and inter-sector diversification aimed at developing other sectors of the economy, such as agriculture and the manufacture of value-added mineral products.

6. The crisis is also an opportunity to reduce transaction costs by reviewing regulatory frameworks and other obstacles to business start-ups so as to provide for local content in the industry. The crisis should also be used as an opportunity to upgrade infrastructure support for the industry. For example, reduced electricity consumption relieves pressure on available capacity; Governments could invest in upgrading generation and transmission capacities.

7. During the current recession, one sub-sector that has been negatively affected is exploration. Little exploration is currently taking place. Consequently, SADC countries may not be in a position to benefit from the next upswing in mineral commodity prices. Governments should explore the possibility of providing incentives, especially to young explorers, to enable exploration work to continue.

VI. Conclusion

56. This paper discussed the current global financial crisis and recession and how it has impacted the SADC mining sector, in particular, and SADC economies, in general. Economic growth declines in a recession, jeopardizing Governments' ability to meet many basic needs and provide jobs. This paper sought to provide possible solutions to help SADC Member States cope with the economic crisis. The first priority would be for central banks to effectively manage the financial systems so as to avoid financial contagion effects. Secondly, SADC Member States need to clearly identify their investment needs. It is imperative to define the types of investments and investors needed to promote the development of the economies in the subregion, and to participate in long-term diversification programmes for the SADC subregion. The Mining Vision and Action Plan adopted by the African Union should be used as a guide for building a development-oriented minerals sector in the SADC subregion, which promotes growth, reduces poverty and achieves the sustainable development objectives.

57. Linkages must be created in order to underpin economic diversification, growth and development. Adequate tax structures need to be developed to ensure that resource rents are captured during boom times, and the mining sector is supported during periods of recession. Flexibility is needed in changing circumstances. It is important to understand that in a pure market economy, Governments can buy shares in private companies, as the Governments of the United Kingdom and the United States of America have done in the case of Northern Rock and AIG. Government intervention

in those companies was circumstantial, and deemed necessary to preserve jobs and arrest economic decline. SADC Governments can emulate this so long as they are able to reduce their share during boom times.

58. This paper focused on discussing development issues during a recession and how the recession has affected the mining sector in the SADC subregion. The question is how can Governments react, in the face of the recession, to protect their citizens from declines in their standard of living? The paper has made some recommendations. However, while there are common approaches, such as diversification and the harmonization of codes and standards to regulate the mining sector, which can be implemented collectively, it is up to each State to adopt the strategy or strategies that best suit its particular circumstances.

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