

A REVIEW OF MINING TAXATION IN SELECTED SADC COUNTRIES AND CHILE

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Although most SADC countries have or were in the process of liberalizing their legislation and fiscal regimes some member states seemed to levy exorbitant tax rates. SADC member states need to note that in designing the optimum tax regime for their respective countries a balance will have to be struck between all the role-players including the investor, government and the community. It is imperative that the tax regimes are designed to provide stability over time and are transparent, easy to administer and internationally competitive. Mining investors view taxation systems as a cost of doing business in a particular country. The effects of taxes can influence company decisions. It is therefore of paramount importance for the SADC governments to design tax regimes which will allow the mining sector to get a return on investment which is commensurate with the capital outlay and risk. It is equally important that the mining business should play a key role to the socio-economic development of the host country in terms of job markets, secondary industries, hospitals, schools, skills development and education. The taxation level in SADC countries should be both comparable and competitive with other countries with similar geological potential and this is currently not the case. Chile offered investors the best fiscal regime when compared to the twelve selected SADC countries.

Keywords: mining taxation, fiscal regimes, mining legislation, mineral policies.

1 INTRODUCTION

In many SADC countries mineral sector investments have not reached their full potential partly due to fiscal systems, which are in need of updating in order to lure investment into the region. SADC member states have been faced with increased competition for the investment dollar from Canada, Australia, USA and Chile. There is a great need for the region to devise mineral sector tax policies that reflect a balance between the governments' interest and the competitiveness of the global industry. It is also imperative for SADC member states' policy-makers to be adequately educated to make informed decisions on the types and levels of taxation to be applied to mineral projects. Governments apply various tax systems to capture rents from mining investments. By understanding the strengths and weaknesses of respective SADC countries' fiscal policies, government officials would be in a better position to make the necessary amendments. A comprehensive analysis using a mine model and comparative tables was employed to provide a detailed analysis of the effect of overall mineral tax

systems on gold mines in the selected countries. The financial model created served several purposes including outlining the tax competitiveness of the SADC countries, displaying the impact of the tax system on the cash flow, providing much needed guidance to both the policy-makers and the investors on the levels of taxation.

2 MINING IN CHILE

This paper provides an analysis of the taxes in SADC countries in comparison to Chile. The choice of Chile was based on the country's success in attracting exploration investment over the last decade. Latin American countries and Chile in particular have led the way for foreign mining investment over the past several years as illustrated in Table 1 [1], [2], [3]. The reason for this accomplishment is the good mineral potential, a stable government, a sound fiscal regime, a favourable foreign investment climate, a well-developed legal system and good infrastructure. Chile presents an abundance of opportunities for mineral investors and many companies are taking advantage of the suitable environment.

Table 1 Global Exploration Expenditure (US\$ Million)

Country/Region/Continent	1997	1998	2000	2001	2002	Growth Rate (1997-2002)
Latin America	1170	814	661.9	575.8	447.9	-62%
Australia	673	495	404.8	349.4	304.4	-54%
Africa	667	494	293.1	276.9	256.9	-61%
Canada	436	308	348.0	332.9	317.1	-27%
S. E. Asia	440	266	199.2	133.0	84.9	-80%
US	365	243	234.5	158.2	125.2	-66%
Other regions	283	209	196.7	175.0	197.1	-30%
TOTAL	4034	2830	2338.2	2001.2	1733.5	-57%

Source: Supplement to Mining Journal, 1999; Mining Journal 2001; Mining Journal 2002

The Chilean government has made a concerted effort to offer the investment environment that multinational companies are looking for. The mineral development and investment policies in the country guarantee the growth of the mining industry. Chile

introduced improvements in its investment climate as illustrated in the country's foreign investment law and policies, including [4]:

- 1) Reducing the role of government in the mining industry often by privatization of state-controlled mining enterprises;
- 2) The right to repatriate capital investment together with any, and all, related net profits originated from the investment in Chile;
- 3) The right to remit capital abroad after a period of one year from the date of its entry;
- 4) Application of the most favourable exchange rate to capital and profit remittances and access to foreign currency;
- 5) Devising innovative financing techniques, such as an option to do debt-equity swaps;
- 6) Reducing and simplifying the taxation of the mineral industry; tax stability for up-to 10 years at the rate of 42% as the effective total income tax charge. In the event that an investment exceeds US\$50 million, the tax stability may be extended to 20 years;
- 7) Stability on customs duty tariffs and on sales and services tax systems;
- 8) Offering less stringent environmental requirements than North American countries;
- 9) Gradually improving infrastructure;
- 10) Adopting new technologies;
- 11) Stability of the country;
- 12) Managing and controlling the inflation rates.
- 13) Incorporating new standards for rationalization of costs.

The result of these efforts on the part of the government were that investment capital continued to flow into Chile for the past decade, stimulated by a conducive investment environment. In Chile, mining concessions have the status of property rights, which are protected by the constitution. Furthermore, the mining code provides for the transfer and mortgageability of mining title. Below are the salient points of Chile's fiscal regime that have contributed to the country's high ranking:

- a. Foreign investors have the option of entering into a Foreign Investment Contract with the government, which provides for a fixed and all inclusive, overall income tax rate of 42% for of ten years;
 - b. There is no requirement for free government equity;
 - c. The international investors' rights are contained in a contract between the firm and the state;
- effect of the varying corporate tax rates and mineral royalties on mineral investment in the SADC region. Each of the above measures served a unique purpose. In order to be in a position to compare the tax regimes of the different SADC countries, it was necessary to analyse their fiscal system and income taxes. Royalties gave a good basis for that. Comparisons of individual taxes were misleading and would not provide sufficient insight on the effect of the overall taxation system. To this end the main

- d. When profits are re-invested in the country the tax rate is set at 15%;
- e. When profits are withdrawn, distributed or remitted abroad the corporate tax is fixed at 35%;
- f. Tax losses may be carried forward indefinitely;
- g. Various capital goods imported by international investors are exempt from VAT provided the items are listed with the Ministry of Economy;
- h. When an operating mine is purchased, the purchasing costs are allowed as a deduction for the purpose of calculating taxable income;
- i. If warranted by production conditions, a shorter period of depreciation can be granted in certain cases;
- j. Newly-acquired or imported assets are entitled to an accelerated depreciation method using the straight line method but reduces the period to one third of the normal useful life;
- k. There are no local, provincial taxes and royalty charges imposed;

3 DETAILED COMPARATIVE STUDY

3.1 Methodology and Limitations

The exercise included creating a financial model of a typical gold mine and then calculating a number of quantifiable economic measures based on the hypothetical mine. The comparative analysis provided was used for comparing the SADC countries to Chile in terms of Cumulative Cash Flow, Net Present Value, After Tax Cash Flow and Effective Tax Rates. Information on the tax regimes of twelve of the SADC countries with active mining industry and Chile was collected. This data was extracted from the SADC Mining Forum of 1994 and 2000 [5] and PriceWaterhouseCoopers [6] income tax publications [5]. Where discrepancies between the respective sources occurred, the latest information was used. The tax model does not claim to account for each tax type. The major taxes included in the cash flow projections involved income taxes and royalties. Minor taxes, such as Surface Taxes, Mining Permit Fees, Sales Taxes, Import Duties, Stamp Duties, Local Taxes, Withholding Taxes and Additional Taxes were not included in the cash flow because they are comparatively small. The level of details gave a good feel of the combined taxation systems of income tax and royalties were applied to the hypothetical gold model. The profitability of the hypothetical mine in the various SADC countries were calculated for comparison.

For the purpose of this study it was assumed that the investor was a foreign-based company enjoying no special treatment. The selected countries used depreciation to reduce the corporate tax liability. The acquisition cost of equipment could be depreciated

taking into account the different equipment types and their varying life spans. However in this study one class of equipment and one method of calculation were assumed. In Botswana there is a two-tier system for company tax. Companies pay at the rate of 35% of their taxable income broken down as follows: company tax 25% of taxable income and additional company tax 10% of taxable income, linked to withholding tax. Cash flow projections reflecting a tax rate of 25% and 35% are submitted. Chile imposes a tax rate of 15% when profits are re-invested and 35% when they are withdrawn, distributed or remitted abroad. Consequently two mine models were developed for Chile to reflect the 15% and 35% tax rates. Chile (A) in the tables below reflects the computations using the 15% tax rate and Chile (B) the 35% tax rate. In the case of Malawi it was assumed that the gold was processed in the country, which would imply a royalty charge of 5% as opposed to 10% for unprocessed minerals. In Mozambique the income tax rate is set at 40% with a fifty per cent reduction to 20% for a period of ten years after start of production. Tanzania makes a distinction between non-resident companies, which are charged a tax rate of 35% and resident companies a tax rate of 30%. Cash flow calculations for both scenarios have been provided for comparison.

3.2 Gold mine models

The key parameters for the model used are shown in table 2. The data in the table was based on Prof Otto's 1997 gold mine model assumptions. Many factors had to be taken into consideration when selecting the parameters and values to define the model. This was because the selection of many key project attributes could influence the taxation system analysis. In order to ensure reasonableness of the gold model, Prof Otto sought feedback and comment i.

from a number of major private sector gold producers prior to settling on the final project parameters [7]. It was primarily for this reason that the author adopted the model parameters.

Parameters of the gold model:

- a. The gold model assumed that \$200,000,000 would be spent on development, equipment and working capital.
- b. These investments were expected to generate an output of 150,000 ounces of gold in the first year of production and thereafter an average annual production of 250,000 ounces of gold. The mineral reserves would be depleted over a 10-year period of time.
- c. The year one selling price was taken as \$400.00 per ounce of gold and it was assumed that this amount would escalate at 3.0% per year.
- d. Operating costs required for producing a refined gold or saleable product were estimated to be \$220.00 per ounce. This amount was assumed to escalate at 3.0% per year.
- e. A ratio based on 60% debt to 40% equity was assumed. The amount to be borrowed was based on 60% of the capital costs incurred during the 2-year mine development period. It was assumed that the borrowed amount was in the form of a loan repayable in ten equal instalments starting at year one of production.
- f. All remaining tax benefits from any write-offs at the end of the project were neglected.
- g. All projects were done in US\$ and no adjustments had been provided for operating efficiencies in the various countries.
- h. All cash flow represented escalated, or nominal dollars, which had been escalated at the forecast inflation rate of 3.0% over the project life.

Table 2 Mine Model Assumptions - Gold Mine

Total Reserve	2,000,000 tr.oz. au
Average annual metal sold	250,000 tr oz au
Development period	2 years
Mine Life	10 years
Debt to equity	60:40
Loan life	10 years
Loan interest rate	10%
Base capital cost	US\$200,000,000
Base annual operating cost	US\$220tr oz au
Sales price	US\$400tr oz au
Type of analysis	Escalated (nominal)
Escalation of costs	3% per year
Escalation of gold prices	3% per year

4 ASSESSMENT OF MINERAL TAX REGIME IN SADC COUNTRIES

The gold mine model spreadsheets can be found in the author's PhD. Thesis [8] and comparative summary tables are displayed below. A standard

format for the spreadsheets was adopted for ease of comparison and presentation [8]. In order to compare the performance of the selected countries the economic measures previously described were used. Tables 3 to 5 depict the various economic measures for the selected countries.

Table 3 Comparison of Major Tax Systems used in SADC Countries and Chile

Country	Royalty (%)	% of Tax	Income Tax (%)	% of Tax
Angola	5	46	400	53
Botswana	5	58	25	41
Botswana(b)	5	50	35	50
DRC	20	100	50	0
Lesotho	0	0	37	100
Malawi	5	50	35	50
Mozambique	5	58	20-40	41
Namibia	5	46	40	53
South Africa	3	35	28.57-37	64
Swaziland	2.5	28	37.5	71
Tanzania	3	38	30	61
Tanzania (b)	3	34	35	65
Zambia	3	34	35	65
Zimbabwe	0	0	37.5	0
Chile (a)	0	0	15	100
Chile (b)	0	0	35	100

Note:

- The range of royalties for the selected SADC countries is 0% to 20%
- The range of Income Tax for the selected SADC countries is 20% to 50%
- The average Income Tax for the selected SADC countries is 41%
- Botswana has a two-tier system for company tax. Companies pay at the rate of 25% and an additional company tax 10% of taxable income.
- Mozambique's income tax rate is set at 40% with a fifty per cent reduction to 20% for a period of ten years after start of production.
- Tanzania makes a distinction between non-resident companies charged an income tax of 35% and resident companies charged a tax rate of 30%.
- Chile imposes a tax rate of 15% when profits are reinvested and 35% when they are withdrawn.

Table 4 Comparison of Internal Rate of Return's and Payback Period for SADC Countries and Chile

Country	After Tax IRR (%)	Payback Period
Angola	14.12	5.90
Botswana	16.16	5.68
Botswana(b)	14.72	5.83
DRC	00.00	Indefinite
Lesotho	17.99	5.17
Malawi	14.72	5.83
Mozambique	16.02	5.77
Namibia	14.12	5.90
South Africa	16.60	5.45
Swaziland	18.65	5.02
Tanzania	17.04	5.40
Tanzania (b)	15.64	5.48
Zambia	15.64	5.48
Zimbabwe	11.26	5.18
Chile (a)	20.64	4.80
Chile (b)	18.24	5.14

Note:

- The average IRR for SADC Countries is 15.66
- The range of IRR's in SADC Countries is 0 to 18.65
- The average Payback Period for SADC Countries is 5.54

Table 5 Comparison of Cumulative Cash flows, After Tax Net Present Values and effective Tax rates for SADC Countries and Chile

Country	Cumulative Cash Flow	*Cumulative Cash Flow Measure against Chile (b)	NPV After Tax Cash Flow	*NPV After Tax Cash Flow Measure against Chile (b)	Effective Tax rate	* Effective Tax Rate Measure against Chile(b)
Angola	96,605,827	Worse	13,732,386	Worse	79.85	Worse
Botswana	120,757,280	Worse	23,720,066	Worse	65.46	Worse
Botswana(b)	104,656,310	Worse	17,061,613	Worse	74.96	Worse
DRC	-9,926,920	Worse	-43,014,534	Worse	163.10	Worse
Lesotho	137,332,808	Worse	33,478,808	Worse	50.88	Worse
Malawi	104,656,310	Worse	17,061,613	Worse	74.96	Worse
Mozambique	120,607,379	Worse	23,137,856	Worse	66.05	Worse
Namibia	96,605,827	Worse	13,732,386	Worse	79.85	Worse
South Africa	120,798,075	Worse	25,135,316	Worse	63.12	Worse
Swaziland	146,926,405	Better	38,100,108	Better	44.10	Better
Tanzania	128,660,879	Worse	28,250,492	Worse	58.55	Worse
Tanzania (b)	119,470,819	Worse	24,378,339	Worse	64.23	Worse
Zambia	119,470,819	Worse	24,378,339	Worse	64.23	Worse
Zimbabwe	136,332,865	Worse	33,056,059	Worse	47.14	Better
Chile (a)	185,290,280		54,099,617		20.62	
Chile (b)	141,692,579		35,342,926		48.14	

Note:

- The Measure against Chile simply denotes how best or how worse the SADC countries are doing in comparison to Chile based on a tax rate of 35% (Category B tax rate for Chile).
- In the case of Zimbabwe care has to be taken in the interpretation of Table 4 as it does not take cognisance of imported goods. It has been shown that fiscal forex policy in Zimbabwe had a detrimental effect on the gold and platinum mining.
- Table gives the impression that Zimbabwe is better off than South Africa and Botswana. This analysis is based on cash flow projections computed using income tax and royalties only. When other factors such as import of goods, unrealistic exchange rates, inflation rates and unavailability of foreign exchange are taken into consideration Zimbabwe is much worse off than most SADC countries.

The corporate income tax rate was regarded as the most important fiscal instrument. Corporate taxes are normally consistent with the objectives of the host country. The bulk of other tax expenditures are deductible for the purpose of calculating taxable income, therefore their impact is less pronounced than that of corporate taxes. The corporate tax is normally used as a direct comparison tool for determining the tax competitiveness of countries. It appears that the SADC governments, on the average, will need to adjust their corporate taxes downwards before they can compete with Chile (see table 3 above). SADC governments need to note that investors are willing to take risks only if the expected rewards can meet the perceived risks. From table 3 it is deduced that the income tax rates for the selected countries range from 15% in Chile (as a first category tax) to 50% in the DRC with an average SADC corporate tax of 41.23%. It is imperative to note that mining companies are risk averse. Investors are not only interested in bottom line figures but also place great emphasis on risk mitigation. An interesting observation is that Chile offers a lower corporate income tax than the average for the 12 selected SADC countries and even lower corporate tax rate when companies re-invest their profits. Mining companies in Chile have a choice of enjoying lower corporate tax rates if the profits are re-invested. Even when profits are withdrawn,

distributed or remitted abroad (35% tax rate), Chile still offered better returns to the investor than most SADC countries. It is therefore no surprise that the country has been a major destination for exploration and mining investment since the beginning of the nineties.

In all of the twelve selected SADC countries mineral rights are vested in the state. South Africa having recently adopted a bill to address the transfer of mineral rights held in private hands to the state. The respective governments expect to draw royalty payments for the minerals mined. Royalty comes second after corporate tax in terms of importance. The royalty charges are payments in lieu of the depletion of the mineral resource. However, this payment might be replaced by assigning to the government equity participation or be waived in the case of further beneficiation operations. When mineral rights are privately owned, host governments are not entitled to royalty on the minerals. In order to compensate for the foregoing, a severance tax may be levied on such production. Most royalty instruments do not, however, distinguish between private and state ownership. Royalties are more consistent with government objectives than with investor aspirations. The survey [8] revealed that most companies preferred revenue based on unit-based royalties because of the link to market prices.

Production-based royalties are insensitive to mineral prices. The use of costs as a base to determine mineral royalties means that each case must be negotiated on merit, involving extensive administrative costs. The issue of ownership of mineral rights emerges when determining royalty charges. Private mineral owners normally prefer the highest possible royalty payments. However, the state is bound to accept lower royalty in compliance with its policies of, say promoting downstream beneficiation of minerals or efforts towards environmental protection. For example, in Zimbabwe there is an allowance for a rebate of royalty in respect of all minerals beneficiated or used wholly in the country. Evidently resource owners prefer production royalties because there is constant and regular income as long as the mine is in production with no risk involved whatsoever. Table 3 illustrates a comparison of the major tax systems used in the selected countries. The royalty payments ensure a steady inflow of revenues to the respective governments irrespective of bottom line figures. Since royalty payments come directly from gross income they have a significant impact on the viability of a project. They are insensitive to both price changes and levels of profitability. SADC governments with high royalty levies face a possible distortion of an investment decision. Table 3 shows that the royalty rates vary from zero per cent for Lesotho, Zimbabwe and Chile to 20% for the DRC, with an average of 5% for the SADC member states. This range is very wide if one considers that royalties are levied on revenue earned instead of profits. Evidently a country, such as the DRC is far less competitive on this score. The DRC tax system is not adequately responsive to realized profits. The country needs to appreciate that high royalties impact negatively on payback periods, a major attraction to investors. The most favourable SADC countries, as far as royalty for gold production is concerned, are Lesotho, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. Royalty charges had a significant impact on the economic viability of the hypothetical gold project in the other SADC countries. It should also be noted that high royalty levies might discourage investment especially in economically marginal projects. It is therefore advisable for SADC countries to consider putting a ceiling of 3% on royalty charges in order to be more competitive.

Table 4 illustrates the Internal Rates of Return (IRR) and the Payback Period (PBP) of the twelve SADC countries and Chile. The IRR varied considerably from country to country. The variance indicated the impact of the different fiscal systems on the cash flow. The After Tax Cash Flow IRRs ranged from 0% (no internal rate of return) for DRC to 18.65% for Swaziland. Chile consistently offered a better rate of return than the average for the 12 SADC countries. The survey of the chief executives of multinational

companies (Matshediso, 2002) revealed that mining investors preferred a fiscal system that yielded a high IRR. The average IRR is 15.66%. According to the survey (Matshediso, 2002), mining companies normally stipulate a minimum IRR that the project would need to meet. Companies use the IRR as a measure of profitability. Furthermore investors normally selected projects that offered an IRR that exceeded the opportunity cost of capital. The expected rate of return are the expectations investor's may require prior to embarking on a project. It is interesting to note that the model gold mine with a before tax IRR of 22.68% would not generate a 15% IRR in about half of the SADC countries. While it is acknowledged that the minimum rates of return required by investors vary, it is highly probable that most companies would consider an IRR of less than 15% as marginal. However, if the calculated internal rate of return equals or exceeds the company's minimum rate of return (15%) the investment criteria would be deemed as satisfactory. Therefore investors would probably view Angola, Botswana, DRC, Malawi, Namibia and Zimbabwe as not very attractive investment destinations based on their taxation regimes. However, for countries such as Botswana and Namibia there are other factors that can lure investors such as political stability. The successful mining countries in terms of exploration destination like Chile has rates of return of 17.20% and 20.64% respectively. It should however be noted that the IRR does not provide governments with a measure of their fiscal take nor does it directly measure taxation levels. It was however useful in indicating how the various methods of taxation could affect the IRR by looking at the difference between the before and after tax IRRs. Although it is possible for SADC governments to reasonably assess the rates of return expected by the international investor, it is quite difficult to assess the other important factors that come into play, such as prior claims of mining rights and expertise available. It should be noted that two projects yielding the same Net Present Values (NPV) might be perceived differently under different scenarios. For instance a Project A might have both high and low expected NPVs than Project B or the total value of below budget NPVs is higher in Project A than in Project B. The greater the chances of massive fluctuations in the returns the greater will be the risk premium. Table 4 indicates that the Payback Period (PBP) varied from 5.02 years for Swaziland to indefinite i.e. the cash inflow was less than the initial capital outlay, for DRC. Investors prefer taxation regimes that reduce perceived political and economic risks. It is important to bear in mind that in SADC countries, which are regarded as high-risk destinations, such as Angola, DRC and Zimbabwe, lenders and investors will expect short pay back periods to minimise risk exposure. The shorter the payback period the smaller the risk. Furthermore mining generally requires huge capital commitments

and long lead times before the cash flow becomes positive and therefore the desire to have shorter PBP would be justified. SADC governments should therefore seek to keep payback periods below five years. This PBP profit measure was crucial for this medium-sized project due to the short-term borrowed capital. The survey [8] confirmed that investors prefer a tax system that allows for an early payback period on invested capital. SADC countries, which rank low in the risk charts, will influence the value of NPV. Table 4 shows that the investor in the DRC would never be able to pay back the loan. This would be a major disincentive to investors. The survey of chief executives of multinational companies highlighted the position of investors on taxes that are not based on profits. According to the survey investors prefer taxes that are associated with the ability to pay. Table 4 provides a comparison of cumulative cash flow, after tax net present values and effective tax rates of the selected countries.

The effective tax rates reflect the amount due to host government from the investment. The general rule is that governments should be entitled to a lesser share of the mineral rent, normally set at a ratio 40:60. Table 5 illustrates that most SADC governments, especially Angola, Botswana, DRC, Malawi and Namibia, derive unreasonably high shares of the mineral rents. The said countries should consider sacrificing some of the rentals in favour of the mineral investor if their fiscal system is to be competitive. The average effective tax rate is 71.16%, which is very high and skewed in favour of SADC governments. It is advisable that all the countries with effective tax rates above 60% should re-visit the rental accruing to them with a view to reducing them if they wish to be competitive - this would involve more than 60% of the 12 SADC countries. The effective tax rate of Chile is consistently better than most of the selected SADC countries.

7 CONCLUSION

SADC member states need to note that in designing the optimum tax regime for their respective countries a balance will have to be struck between all the role-players including the investor, government and the community. It is imperative that the tax regimes are designed to provide stability over time and are transparent, easy to administer and internationally competitive. Mining investors view taxation systems as a cost of doing business in a particular country. The effects of taxes can influence company decisions. For instance in the case of a country such as the DRC with comparatively high royalty charges, this results in negative Net Present Values, no Internal Rate of Return and outrageous Effective Tax Rates, rendering the country unattractive to investors. It is therefore of paramount importance for the

SADC governments to design tax regimes which will allow the mining sector to get a return on investment which is commensurate with the capital outlay and risk. A country such as Chile, which has been successful in attracting exploration funds, does not impose a mineral royalty. SADC member states should note that investors view royalty charges negatively. The region should consider putting a cap on the royalty of say 3% in order to be competitive. However, there is no evidence that the lowest or most favourable tax regimes alone would necessarily render a country's investment environment as acceptable. The corporate tax and royalty levies should be viewed against the actual payments in order to draw appropriate conclusions. The survey of chief executives of multinational companies confirms that tax regimes that results in the highest NPVs are preferred in most circumstances. Evidently the timing of revenue collection has a major impact on the NPV - deferred revenue collection is the preferred scenario for investors. All taxes reduce the expected NPV of a project in varying degrees. This has the effect of making projects differ in their attractiveness. The Net Present Value (NPV) of the After Cash Flow varied from -US\$43 million for DRC to US\$54 million for Chile when profits are re-invested. This directly showed the increase in income for selected countries. Chile offered an investor greater wealth than any of the SADC countries when profits were utilised in the country. It is worth noting that investors regarded the time value of money as a major factor. Companies preferred to receive money earlier rather than later since it could be re-invested forthwith.

Some clear signs emerged from the survey of chief executives that investors are weary of tax regimes that change mid-stream of projects [8]. Experience has confirmed that stable policies are pivotal to creating and sustaining a successful mining development environment. It is therefore imperative for SADC member states to offer some stability with regard to their fiscal policies. Changes to fiscal policies should be approached and handled with caution. SADC governments would be advised to introduce tax stability up to 10 years at the rate of 40% as the effective total income tax charge. Provision should also be made extending the tax stability to 20 years should that investment exceed US\$50 million. Consideration should be given by member states to tax relief where funds have been set aside for site restoration and reclamation. It is imperative for member states to devise fiscal policies, which provide a fair share between a rate of return on investment and revenue accruing to government coffers. The preferred outcome of a carefully devised mineral tax system should stimulate exploration and result in a sustainable mining industry. The mineral tax system should encourage the creation of a large tax base without

turning off exploration and sustainable development of the minerals industry. It is important to note that determining whether a country's taxation regime is acceptable to the investor is a question for which there is no correct answer. There is no perfect mining sector tax system. SADC governments need to find a balance between their social and economic goals and their ability to compete for the investment dollar, bearing in mind that mining companies view taxes as a cost of doing business in the particular country. SADC member states must design appropriate tax regimes which take cognisance of the prevailing social and economic environment of the particular country with due consideration of its geological endowment and its competitiveness. However it is imperative to note that when assessing the attractiveness of the fiscal regimes of SADC countries this is merely a part of many criteria considered by investors.

REFERENCES

1. Mining Journal "The Divide Widens". Supplement to *Mining Journal*, London, vol. 333, no 8554, 22 October, 1999. pp. 3
2. Mining Journal "Slump in Activity". Supplement to *Mining Journal*, London, vol. 332, no 8519, 19 February, 1999. pp. 1.
3. Mining Journal. "Exploration slump end in sight?" *Mining Journal*, London, vol. 339, no 8710, 8 November, 2002. pp. 320.
4. LATIN AMERICA – Trade and Investment Opportunities. 2001.
5. SADC Mining Forum 1994 and 2000. Lusaka, Zambia.
6. PriceWaterHouseCoopers Tax tables.
7. Otto, J.M. "Global Mining Taxation Comparative Study", Institute for Global Resources Policy Management. Colorado School of Mines, Golden, Colorado. USA. 1997
8. Matshediso, I.B. "Strategy for Mining Development in the SADC Region". PhD. Thesis. 2002.
9. SADC Review "Official SADC Trade, Industry and Investment Review". Published by Southern African Marketing Co. (Pty) Ltd. 2003.
10. www.cia.gov
11. LATIN AMERICA – Trade and Investment Opportunities. 2001.
12. Holloway J "First Catch your hare – Attracting mining investors to Africa". Supplement to *Mining Journal*, London. January 22, 1999.
13. . www.mines2000.com
14. www.mbendi.co.za
15. Mining Journal "Competition for Investment: Implications for Africa". *Mining Journal*, London, vol. 325, no 8316. 29 September 1995.
16. Chamber of Mines, South Africa. Website www.billion.co.za. 2000
17. Blerck, M. V. "Encouraging Minerals Investment. The role of tax and finance" *Journal SAIMM*. June 1994:
18. Bradley, P., Helliwell J and Livernois J. "Efficient taxation of resource income".
19. Cawood, F.T., "The Competitiveness of South Africa's Mineral royalty and Tax Policies: A comparison" – M.Sc. Research, 1996.
20. Cawood, F.T., "Determining the Optimal Rent for South African Mineral Resources" PhD. Thesis. 1999.
21. Chamber of Mines, South Africa. Website www.billion.co.za
22. Emerson, C., Conceptual issues in the Taxation of Mining Projects – Mining Taxation in the ESCAP Region, United Nations. 1989.
23. Kumar, R "Taxation for a cyclical industry". *Resources Policy*. June 1991.
24. Marius, V. B., "Encouraging mineral investment – the role of tax and finance" *London*, vol. 326, no 8362, 26 January 1996.
25. Moran, T. H., "Mining Companies, Economic Nationalism, and Third World Development in the 1990's. Mineral Wealth and Economic Development. *Resources for the Future*". Washington D.C. 1992.
26. Otto, J. M., "Mineral Sector taxation Methods: *A Global Review*". Prepared by, Assistant Director, Centre for Petroleum and mineral law and Policy, University of Dundee, Dundee, Scotland.
27. Otto J., Chand F., Foong C.T., *Guidelines for a National Mineral Policy* Ministry of Primary Industries, United Nations Department of Technical Cooperation for Development. 1990.

28. Otto, J.M., "International Competition for Mineral Investment: Implications for the Asia-Pacific Region". In: Peter Crowley (Ed). Asia Pacific Resource Development: Mining Policy Directions. Pacific Economic Cooperation Council, Minerals and Energy Forum. 1992.
29. Otto, J.M., "Criteria for Assessing Mineral Investment Conditions". Short Course Materials 13-17 Sept. 1993. Centre for Petroleum and Mineral Law and Policy. 1993.
30. Otto, J.M., "The International Competition for Mineral Investment – Implications for Africa". Institute of Mining and Metallurgy Namibian Section, Windhoek, June 1995.
31. Otto, J.M., "A national mineral policy as a regulatory tool". Special Issue: National Minerals Policies in a Changing World. 1997. Resource Policy Volume 23 Number (1/2) June 1997.