Is the Nationalisation of the South African Mining Industry a Good Idea?

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Abstract

The proposal to nationalise the South African mining industry has provoked heated and often uninformed debate. Using cost and benefit analysis this article provides a theoretical as well as numerical assessment of nationalising the mining industry. Through the use of the market capitalization of South African mining companies it illustrates that the proposal to nationalise the mines would have an enormous negative impact not only on the industry but on the economy at large. Benefits would be small. Reasons why nationalisation has generally failed globally are also examined.

1. INTRODUCTION

Nationalisation may be defined as "the acquisition of privately owned enterprises by a government, with or without compensation" (Routledge, 2002). State ownership, or the existence of state-owned enterprises, is not the same thing as nationalisation. Historically the state has owned and operated enterprises in all economies whether they are mainly "capitalist", "socialist", or "mixed" economies.

There are a number of reasons for state involvement in commercial enterprises. These include the existence of "natural monopolies", where private ownership might lead to excessive pricing. For strategic or reasons of reasons of self-sufficiency, states have sometimes started new industries which are not economic to private investors. Sometimes the scale of an investment may be too great for individual investors, so the state has used its resources to fund the necessary investment, either on its own, or in partnership with private investors.

In contrast, nationalisation involves the acquisition of an existing asset and the transfer of its ownership into state hands. There may be a number of reasons for doing this. These include economic, financial, social, strategic and nationalistic reasons. These must offset the costs of nationalisation (financial, economic, political and reputational) if the act of nationalisation is to prove beneficial for society as a whole.

2. LITERATURE REVIEW

Theoretical considerations

While the decision by a state to invest in a new commercial venture can be judged like any investment by a private investor, calculating the costs and benefits of nationalisation is more complicated. An investment in a new venture requires comparing the capital cost of the investment against the present value of all future costs and returns. If the present value of the returns exceeds the costs, the venture will have been financially successful. But the decision to invest will have been a good one only if the net returns exceed the returns on alternative projects which the state forgoes in order to fund the commercial project.

Nationalisation (with or without compensation) requires a similar calculation. But to this must now be added a comparison of how the asset would have performed if it had remained in private rather than state hands. If, for example, state management of an asset is poorer than if it had it remained in private hands, the present value of nationalisation is reduced. If state ownership prolongs the life of a mine beyond what may have been the case in private ownership the present value may be enhanced.

If nationalisation occurs without compensation the present value to government would seem automatically to increase. But this is true only if the failure to pay compensation exceeds

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other costs that may arise, such as from poor state management of nationalised enterprises. In addition, future private investment (local and foreign) in other sectors of the economy may be reduced by nationalisation without compensation, as investors seek to protect their assets from future state acquisition. This will have costs in terms of reduced economic growth and reduced future tax earnings by the state.

History

A survey of the literature indicates many references that dealt with the topic of privatisation, but most references on nationalisation were written, or at least studied, mainly the 1960s and 1970s. This lack of recent literature reflects a global trend away from the extensive state ownership of the 1950s and 1960s towards increased private sector provision of previously publicly-provided goods in the 1980s and 1990s; as well as the sale of many previously state-owned firms to private owners (privatisation) in the 1980s and 1990s (Chang, *et. al.*, 2009*).* This trend was accelerated by the collapse of the Former Soviet Union and the fall of the Berlin Wall in 1990. The change in Central Europe and the Former Soviet Union to market oriented economies was accompanied by extensive sales of state enterprises to private ownership, reinforcing the global move away from public ownership.

This conclusion regarding the change focus on public and private ownership of enterprises is supported by Chang *et. al.* (2009: 3). From an examination of historical nationalisations around the world, Chang *et. al.* (2009: 3) conclude that "nationalizations and privatizations are repeated, cyclical phenomena, which often come in waves common to several countries". When commodity prices have historically been high, numbers of countries have nationalised domestic producers. When prices later fell there were often periods of privatisation of these assets and then renewed nationalisation when prices again rose.

Korbin (1984: 335) analysed expropriations in 79 developing countries over the period 1960-79 and found that "expropriations grew in the 1960s, peaked in the early 1970s and declined afterwards." Minor (1994: 182) extended Korbin's study to the period up to and including 1993 and found that "in the late 1980s and early 1990s, as many as 95 countries around the world experienced extensive privatization processes". Chua (1995: 241) reported the opposite trend in the last few years. However fewer countries were used in the data collection in this study and most of the nationalisations that occurred in recent years occurred in Latin America. Chua (1995: 241) states that "for them (Latin America), the current wave of nationalisation is only the latest chapter of a repeating cycle, as they had previously experienced the nationalisations of the 1970s and the privatisations of the 1990s".

The political and ideological reasons for nationalisation were fundamental in the policies that led to collectivist economies in communist countries, as well as playing a major part in nationalisation programmes in the Western countries after the Second World War. These nationalisation programmes were according to Toninelli (2000: 5) "based on the belief that enlarging public properties and activities could open the way to a fundamental change in the distribution of power within society, thus engendering a new socioeconomic equilibrium based on the diminished power of private capital and increased power of labour, the ideological and political belief was that the nationalisation process would be an instrument for achieving "genuine" industrial democracy". Toninelli (2000: 5) notes that this belief "was shared mainly by the progressive – Labour Socialist, and Social Democratic – parties. It was not by chance that the main waves of nationalisation occurred in France, Austria, Britain and the Netherlands when these parties were in control".

Sometimes nationalisation took place purely for political reasons; this was seen in Austria after the Second World War to ensure that old German properties were secured in Allied hands. Britain's nationalisation wave in the 1940's was linked to the post-war reconstruction programme. Nationalisation in Britain and Europe after the Second World War also often occurred because the industries targeted would often not have survived without being nationalised. In understanding the particular motives for nationalisation, it thus needs to be identified whether nationalisation occurred simply to keep a struggling industry alive, or whether it was a measure believed to increase productivity and economic sustainability.

Based on historical experience, Chang *et al* (2009) arrive at the following generalised conclusions about why and where nationalisation occurs:

i. "Nationalisation-privatisation cycles tend to occur more often in the natural resources and utilities sectors" (Chang *et al*, 2009: 6). Economy-wide nationalisations are rare. Nationalisation tends to be focussed globally on certain sectors, especially utilities and natural resources. The oil industry is especially prone to cycles of nationalisation and privatisation.

ii. "Nationalisation of natural resource industries tends to occur when the price of the corresponding commodity is high" (Chang *et al,* 2009:6). High real commodity prices are a more accurate predictor of nationalisation risk than political or economic crises.

iii. "Contracts for the exploitation of natural resources between governments and private companies are such that commodity price windfalls are mostly appropriated by private firms." (Chang *et al,* 2009:6). This, they argue, "may explain why nationalisations tend to occur during commodity price booms" (Chang *et al,* 2009:6).

iv. "Nationalisation is more likely when inequality is endemic or worsens in the country, and especially when the rents from natural resource or utility companies are perceived as benefitting only a minority" (Chang *et al,* 2009:7). Nationalisation in Latin America and Southeast Asia was directed against foreigners as well as residents perceived to be unfairly privileged. "The private ownership and management of utility and natural resource companies was deemed to have worsened the inequality already present in these societies. Accordingly, differences across ethnic lines were a key factor to induce the ownership shifts in Southeast Asia, while an anti-elitist movement played a significant role in Latin America" (Chang *et al,* 2009:7).

v. "Nationalisation is more likely in countries with low human capital, undiversified productive structure, and faulty public institutions." (Chang *et al,* 2009:7). "When public institutions are faulty, governments are more likely to violate contracts and break the rule of law, as reputational costs, domestic disapproval, and external sanctions are minimal in those circumstances. Moreover, when human capital is generally low and the economy is poorly diversified, income and consumption tend to be more volatile under a privatised system. In addition, if the production structure is heavily concentrated in a few industries, such as those related to natural resources, the outside options for workers who are not well remunerated in those industries are quite limited. All this may engender the political pressure to nationalise key industries in an effort, albeit misguided, to remedy the instability and disparity of the privatised regime." (Chang *et al,* 2009:7-8).

vi. "Privatised firms are more productive than nationalised firms due to their incentive-driven investment and labor policies; yet, when they are nationalised, the practices that lead to higher productivity are not kept." (Chang *et al,* 2009:8). The fact that nationalised mines are "doomed to fail" explains why historically there has been a pattern of nationalisation being later followed by privatisation of the same entities.

South Africa:

The Freedom Charter, adopted by the Congress of the People in Kliptown in 1956 and at which the ANC played a prominent role, stated that "the people shall share in the Country's Wealth" (Freedom Charter, 1955). This was further elaborated as "the mineral wealth beneath the soil, the banks, and monopoly industry shall be transferred to the ownership of the people as a whole" – such a goal clearly envisaged nationalisation. This fitted into the social democratic mainstream in the 1940s and 1950s when the United Kingdom, West European labour and socialist parties sought to expand the economic role of government.

However Nelson Mandela felt that at the time this nationalisation clause could be explained in the context of Black exclusion from the mainstream economy, and he argued that rather than large scale state ownership "the breaking up and democratisation of these monopolies would open up fresh fields for the development of a prosperous, non-European bourgeois class" (Hirsh, 2005: 32). In 1992 Nelson Mandela acknowledged there were ambiguities in the Freedom Charter, and Hirsh (2005: 33) states that "there is no doubt that these ambiguities were intentional". Hirsh (2005: 34) concludes that "the Freedom Charter was intended to be inclusive; attempting to represent so many diffuse, though related, interests with a crystal clear document would have been futile".

During the 1960's and 1970's ANC economic policy became more deliberately socialist. One reason behind this according to Hirsh (2005: 35) was "the radicalising influence of anti-colonial African socialist movements" which favoured increased state interventionist policies. These polices became known as "African Socialism" and according to Hirsh (2005: 35) " the main characteristics were nationalisation of large companies, usually with compensation, a variety of land reform strategies, the expansion of the state and apparatus itself for the economic advancement of individuals".

The Apartheid Government after 1948 followed the trend in many Western countries of retaining most infrastructure in public hands (railways, ports, electricity). A number of state owned enterprises were established, designed to promote self-sufficiency in an increasingly politically hostile world, such as ISCOR (iron and steel in 1947), SASOL (oil from coal in 1950) and Mossgas (oil from gas in 1987).

In 1979 Sasol was privatised and in 1989 Iscor was privatised. This reflected the then global move towards privatisation as well as the increasing need of the Apartheid state for funding. But for some, privatisation was seen as a means for ensuring that strategic assets would not be controlled by a future democratic government. According to Green (2008: 357) while Nelson Mandela was in prison, he was convinced that nationalisation was the correct policy for South Africa, believing "it was a reaction and counter measure to the National Party (NP) government's attempt to hastily privatise existing publicly owned companies to prevent them from falling into the hands of a future ANC government".

Mandela remained true to his beliefs for a while after his release in March 1990 and opposed the process of privatisation outright. His argument according to Hirsh (2005: 41) was that "it would only seem reasonable that so important a question as the disposal of public property be held over until a truly representative government is in place." In a 1990 policy document "ANC and COSATU Recommendations on Post-Apartheid Economic Policy" the issue of monopolistic private conglomerates was raised and "dismemberment of these stuttering powerhouses was the proposed solution" (Hirsh, 2005: 47). According to Hirsh (2005: 47) "nationalisation was noted as a possible strategy, though the document emphasised the need for a "viable" state sector". This, too, was a strategy to prevent privatisation by the then current government.

In 1991 the ANC's Department of Economic Policy circulated a rewritten version of the "Forward to a Democratic Economy" document and later distributed a workshop package on economic policy. Nationalisation was a key topic discussed in the regional workshops and the document now warned that "nationalisation might be an option, (but) it could drain the financial and managerial resources of the new government, and therefore might not be manageable" (Hirsh, 2005: 51).

At the ANC's policy conference in May 1992 the nationalisation debate was ended by Nelson Mandela as follows: "the state should respond to the needs of the national economy in a flexible way… the balance of evidence will guide the decision for or against various economic

policy measures" Hirsh (2005: 52). Moreover, "the democratic state would consider either both increasing the public sector in strategic areas or reducing the public sector in certain areas that will enhance efficiency, advance affirmative action, and empower the historically disadvantaged" Hirsh (2005: 52). In this way, Hirsh (2005: 52) notes, "not only was nationalisation removed from the ideological sphere into the role of pragmatism, so was privatisation". Green (2008: 351) notes that Mandela at the World Economic Forum in 1991 stated that "nationalisation has always been one of our options, it is now less prominent in our economic documents."

The ANC's 1994 election manifesto, the RDP (ANC, 1994:80) spoke of "restructuring the public sector". This would involve reducing the public sector in certain areas to enhance efficiency but the role of the public sector would also be increased in strategic areas "through, for example, nationalisation, purchasing a shareholding in companies, establishing new public corporations or joint ventures with the private sector" (ANC, 1994: 80). However, the White Paper on the RDP (RSA, 1994) published in September, made no mention of nationalisation. GEAR (RSA, 1996) spoke only of speeding up the "restructuring of state assets" – political code at that time for privatisation.

In practice there has been no example of nationalisation in South Africa since democracy in 1994 and there were several examples of privatisation (South African Airways, the Airports Company and Telkom). Both SAA and the Airports Company later returned to state ownership when their new foreign owners withdrew from South Africa and the state bought back their shareholding. But Telkom remains mainly privately owned and control of Vodacom was unbundled out of Telkom and sold to the UK-based Vodafone.

In 2010 the ANC Youth League (ANCYL, 2010) published a policy document calling for the nationalisation of the South African mining industry. This document was discussed at the ANC's National General Council Policy Review Conference in Durban in September 2010 and the proposal was submitted to a task team to be investigated and discussed at the Party's Policy Conference at the end of 2012 (Mail and Guardian, 2011).

3. MINING AND NATIONALISATION

Chang *et. al.* (2009) show that by its nature, the mining industry is especially prone to nationalisation. There are a number of reasons for this. Firstly, mining involves the exploitation of a country's natural patrimony. These resources are non-renewable and will eventually be depleted. Their exploitation is therefore always an emotional topic if citizens benefit unequally from their depletion both currently and inter-generationally. If the exploiters of the minerals are foreigners, emotions run even higher.

Nationalism becomes the excuse for expropriation when the true target is the value to be extracted from acquisition. It is also easier to nationalise without compensation when the targets are foreigners with little local political influence (Chang *et al,* 2009:7). International investment treaties may have changed this dynamic, as will be discussed for South Africa below.

Secondly, mines represent a concentrated form of economic "rent". While collectively other enterprises may have far greater total profits, their dispersion makes acquiring control of such profits much more difficult. But control of a mine gives control of a concentrated source of value which the acquirers hope to use for social, economic, political or even personal advantage.

Thirdly, mines are by nature location bound. They cannot change the nature of their business if threatened with nationalisation. A local manufacturing or services business can sometimes transform the nature of their business if threatened with expropriation. Foreign manufacturing or service enterprises can leave the country. But once constructed, a mine cannot change or leave. Mines are therefore an easy target.

Fourthly, commodity prices are cyclical. While this may reduce the suitability of mines for state ownership, at times when commodity prices are high and mine profitability is high they become exceptionally attractive targets for cash-strapped governments.

Does the nature of the mining industry make it unsuitable for state ownership?

With few exceptions, nationalisation of the mines has not been very successful. This accounts for the many examples of previously nationalized mines which were later privatised (Chang *et al,* 2009:7). There are some examples of successful state ownership of mines. Debswana in

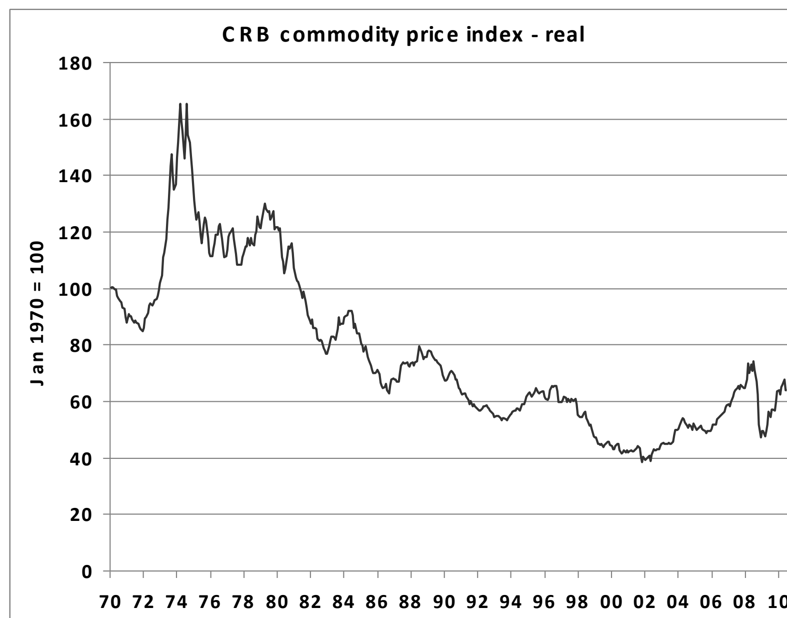
Botswana is one, though it's an example of public-private partnership, not nationalisation. Codelco in Chile is another.

The quality of management in the public sector is often poorer than in the private sector. This is because of the private sector's willingness to pay more than the state can usually match to attract many of a country's brightest and most ambitious individuals. State ownership may also encourage appointments made for political connections rather than knowledge of the industry. But even when the skills of the state are identical to those of the private sector there are reasons to believe that privately owned mines will perform better over the time.

Some of these reasons are political. If mining is a large employer in a country, the state as owner will be reluctant to resist trade union wage demands if they believe this could cost them support in the next elections. Private employers do not face the same constraint. Likewise, when times are tough government may be unwilling to retrench workers and rising costs at state owned mines may trigger a downward spiral of falling profits, underinvestment, rising costs and falling production.

The most important problem facing state owned mines arises from the fact that commodity prices are cyclical. This cyclicality is shown in Figure 1. Historically, cyclical upswings in commodity prices were relatively short-lived. Higher prices have swiftly attracted increased production (or brought about declining usage) and prices have usually fallen after perhaps18-24 months. In real terms prices in the downturn on each occasion fell below the previous low.

Figure 1: CRB Commodity Price Index (real US$)



Source: Thompson Datastream

As a result, Figure 1 also shows that commodity prices have fallen in real terms for decades. This required that mine production costs should also fall in real terms for mines to remain profitable. This was achieved when technology improved and through the increased economies of scale through, for example, the use of large open pit mining techniques. But older mines that have not enjoyed these technological advances have faced long periods when their profits have been severely squeezed (Chang *et. al.*, 2009).

The cyclicality of commodity prices creates problems for state-owned mines both when prices are low and when they are high. In almost all countries where the state owns mines, the mining industry is a significant contributor to domestic economic activity. If this was not the case the state would not bother to be a participant in the industry. When commodity prices fall state revenue from mining falls and the budget deficit widens. When commodity production is an important part of total domestic economic activity, activities in other sectors may also weaken, placing further pressure on state revenue. State spending on welfare grants may also rise, adding further pressure on the budget deficit.

But mining is a capital intensive business, requiring ongoing capital expenditure just to remain in business. At times of weak commodity prices mines turn to their shareholders to fund capital spending. This requires that they accept sharply lower dividends. If commodity prices are sufficiently low, shareholders may have to inject new capital into the mine for it to remain in business.

For state owned mines this requirement comes just when their owner is least able to afford it. As a result, state-owned mines may be required to forgo necessary capital spending either to sustain dividend payments demanded by the shareholder or simply because the shareholder is unable to provide the required injection of new capital. When the downturn in prices is quite long lasting this can mean the state owned enterprise becomes less cost efficient, profits fall further and a downward cycle of rising costs and inadequate investment develops. In contrast a private owned mine is able to cut its dividends and if necessary turn to its shareholders for new injections of capital. A privately owned mine is able also to be more ruthless in cutting costs when times are hard in order to sustain necessary capital spending.

High commodity prices can also be problematic when the state owns mines. When commodity prices are high and revenues are flowing into the exchequer from state owned mines it is difficult for governments to resist pressures to increase spending. This is especially true in developing countries where the pressures for additional spending are great. But once new spending is undertaken it is extremely difficult to cut it back when times are tough. Thus spending undertaken at times of high commodity prices may sow the seeds of the problems outlined above when commodity prices again fall.

4. COST OF NATIONALISING SOUTH AFRICA'S MINES

Section 25 of the South African Constitution (RSA, 1996) makes provision for property to be expropriated by the state, but provides also that the owners should receive as compensation "the market value of such property". Section 25.2 of the Constitution states that "property may be expropriated only in terms of law of general application, a) for a public purpose or in the interest; and b) subject to compensation, the amount of which and the time and manner of payment of which have either been agreed to by those affected or decided or approved by a court" (RSA, 1996). Section 25.3 states that "The amount of the compensation and the time and manner of payment must be just and equitable, reflecting an equitable balance between the public interest and the interests of those affected, having regard to all relevant circumstances, including a) the current use of the property b) the history of the acquisition and use of the property c) the market value of the property d) the extent of direct state investment and subsidy in the acquisition and beneficial capital improvement of the property; and e) the purpose of the expropriation" (RSA, 1996).

The market capitalisation of listed South African mining companies on 9 June 2011 (Table 1) was R1.9 trillion or 70% of GDP. This value excludes the value of non-listed mining assets in South Africa. But it also exaggerates the value of listed South African mining assets for 2 main reasons. Firstly, some of the listed companies own substantial non-South African assets. In the case of the two largest shares by market capitalisation (BHP Billiton and Anglo American) the proportion of foreign assets is a considerable part of their market capitalisation. Secondly, there is considerable double counting of asset value. Anglo American, for example, owns nearly 80% of Anglo Platinum and 66% of Kumba. ARM is the largest shareholder in Harmony. Making rough allowance for these factors reduces the total value of listed SA mining assets to perhaps R970 billion.

To buy 100% of these listed South African mines would therefore cost about R970 billion at current market prices. To pay for this, government would have to raise the necessary sum by issuing domestic and foreign bonds. Total government debt is currently R999 billion so the total amount of debt in issue would double. Buying a 60% stake would cost R582 billion and total debt would rise by 58%.

It is highly unlikely that government could raise this amount of money locally, despite South Africa's highly developed capital markets. The parastatal Eskom, for example, recently sought World Bank funding for its very much smaller capital expenditure programme because of difficulty in raising funds in the local market. But even assuming that government is able to

borrow the needed funds at an interest rate of, say, 8%, the cost of funding the debt incurred for a 60% stake will be R46.6 billion per annum, assuming no repayment of capital.

In return government would be entitled to 60% of after-tax earnings. It already receives 34% of total earnings (R17.9 billion per annum) in tax. 60% of after-tax earnings amounts to R20.9 billion per annum. So the cost of nationalisation is R46.6 billion per annum and the revenue received would be only R20.9 billion more than is currently already received in taxes.

So nationalising the mining industry in South Africa (60% ownership) would cost the South African government about R25.7 billion per annum. Either the fiscal deficit would rise by this amount (requiring further borrowing) or spending would have to be cut elsewhere. R25 billion is equal to about one-quarter of current spending on welfare payments or health spending and 15% of current spending on education. This is at current very high commodity prices. If commodity prices and the earnings of SA mining companies were to fall post-nationalisation, the cost would rise.

This calculation assumes no loss of efficiency after nationalisation. The calculation also assumes that government would not allow nationalised mines to retain any earnings – thereby creating the same problem that has undermined nationalisation efforts previously of leaving state-owned companies without the ability to fund investment. Normally private shareholders receive only half or even one-third of after tax profits as companies maintain dividend earnings ratios of 2:1 or even 3:1.

What about nationalisation without compensation? The South African Constitution could be changed (with a two-thirds majority) to allow nationalisation without compensation. But the impact on the above arithmetic would be surprisingly small. This is because a large proportion of the equity in listed South African mining companies is owned by foreigners[1] and South Africa has since 1994 signed 47 foreign investment treaties (UNCTAD, 2011, Peterson, 2006:4) guaranteeing the citizens of those countries full compensation in the event that their property should be expropriated.

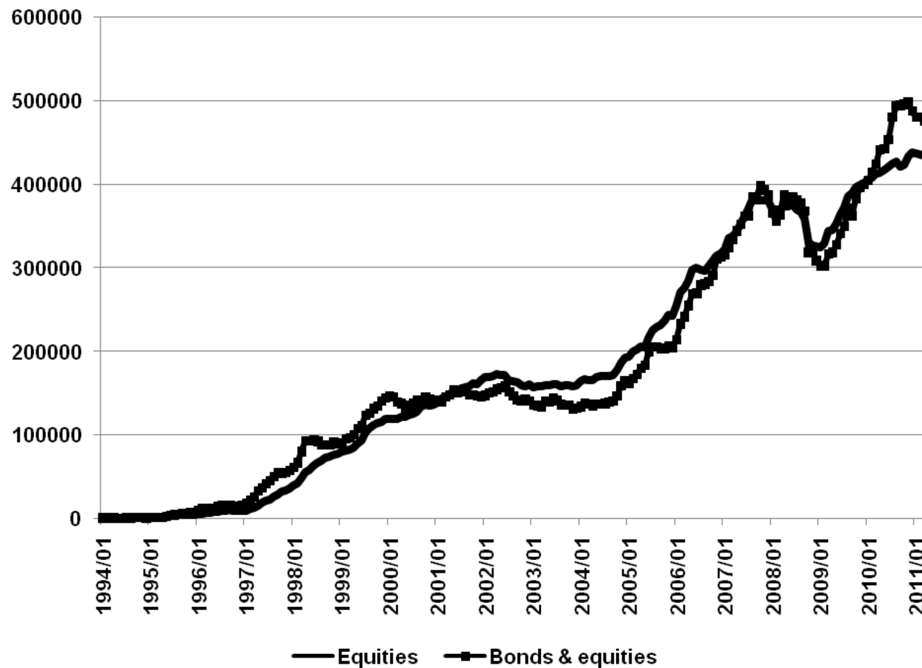
Those not being compensated under nationalisation without compensation would therefore be South African investors, mainly pension funds. Ironically the largest by far of these pension funds are the civil service pension funds. As the value of its members pensions are often guaranteed, government could well find itself having to compensate its pensioners for the lost value of their pension funds resulting from nationalisation without compensation.

Reneging on the foreign investment treaties would provoke retaliatory action from foreign governments. It would potentially also provoke massive outflows of the foreign portfolio investment that has flowed into the South African non-mining as well as mining equity market since 1994.

South Africa had a current account deficit of –R75 billion in 2010 (down from –R162 billion in 2008 and –R97 billion in 2009). This deficit was funded by foreign capital inflows, mainly in the form of foreign purchases of shares on the JSE (R75 billion in 2009 and R36 billion in 2010). Between January 1994 and April 2011, South Africa cumulatively attracted R440 billion of foreign equity purchases and R50 billion of foreign bond purchases (Figure 2).

[1] According to the asset management company Allan Gray (2010), more than half the shares of several of South Africa's largest mining companies - 75.8% of Anglogold Ashanti, 75.5% of Goldfields, 56.4% of Harmony and 50.4% of Impala Platinum - are held by foreign investors. BHP Billiton and Anglo American (and therefore Anglo Platinum and Kumba) are also mainly owned by foreign shareholders and are foreign companies.

Figure 2: Cumulative foreign purchases of SA equities & bonds (R millions)



The nationalisation of the South African mining industry would have significant consequences for the funding of the current account. Nationalisation of mining, even with full compensation, could raise concerns amongst foreign investors about the future of South African export earnings and this could weaken the foreign capital inflows on which the funding of current account deficits depends.

Nationalisation will also cause substantial outflows of foreign capital from the South African economy because a large proportion of the foreign shareholders of the mining companies listed on the JSE would wish to repatriate the payments received for nationalisation of the companies they own. Dividend outflows to foreign investors would diminish, but as companies typically have dividend yield of perhaps 2-4% this would be massively outweighed initially by the size of capital outflows.

Nationalisation without compensation of local investors would also significantly reduce future inflows as foreign investors could become concerned about the security of their own investments.

This will make it extremely difficult for South Africa to continue to run deficits on the current account of the balance of payments. With savings in South Africa only 15% of GDP, it will be very difficult to fund the higher levels of investment on which higher future economic growth depends.

Benefits of Nationalising the South African mining industry

A pillar of the South African government's industrial policy is the desire to add value to and export South African minerals (RSA, 2010). Nationalisation may provide the opportunity for more value to be added locally before exporting takes place (beneficiation). This would increase value added as well as providing greater employment opportunities for South Africans.

Nationalised mines could provide their products in the local market at below global prices. It is beyond the scope of this paper to calculate what the added value of such products might be. But is should be noted that the earnings of the mining companies will decrease as a result, raising the immediate costs of nationalisation calculated above.

Chang *et. al.*, 2009: 7) noted above that nationalisations have occurred historically when inequality in countries is high. But nationalisation with compensation will not change current wealth or racial inequalities in South Africa. Private owners of mining shares will be compensated and their wealth will not change. Paying for the mines may reduce the capacity of the state to make transfer payments to the poor. Nationalisation without compensation will also

make little difference. Some wealthy South Africans will have assets confiscated, but these will be transferred to state ownership and this will not benefit the asset ownership of the poor in any way.

5. CONCLUSION

The historical experience of nationalisation analysed by Chang *et. al.* (2010) makes it understandable why nationalisation may have popular support in South Africa. Inequality and the perceived ownership of the mines by foreigners and a racial minority have lead to nationalisation elsewhere historically. Current high commodity prices are also an inducement to nationalise. Nationalisation also has credibility in the historical economic policy of the ruling party, dating back to the 1956 Freedom Charter.

But understanding the basis of the calls for nationalisation does not change the severe economic damage which such a policy could do to South Africa's economic prospects. The SA Constitution provides under Section 25 that property rights may only be expropriated in terms of law of general application and are subject to market compensation (South Africa, 1996). The market capitalisation of the listed mining companies on the JSE shown in Table 1 suggests that the cost of purchasing all of South African mining companies (100% nationalisation) would be roughly R970 billion. Interest payments on the debt incurred to buy these assets would substantially outweigh earnings received and would result either in a much higher fiscal deficit or the crowding out of current non-interest expenditure.

If the Constitution was changed to avoid compensation, bilateral investment treaties that South Africa has with foreign countries would force government to compensate foreign investors, who own the majority of mining shares in South Africa.

Resultant capital outflows and the likely cessation of future inflows would make it difficult to fund future deficits on the current account of the balance of payments, capping future levels of investment and economic growth.

Table 1: Market capitalisation and earnings of listed mining sector of JSE – 9 June 2011

	MARKET CAP (R'm)	P/E RATIO	Earnings (R millions)	Adjusted Earnings (R millions)	Adjusted Market Cap (Rm)
Exxarro	56,999.90	10.64	5357.1	5357.1	56,999.90
HWANGE	415.50	28.78	14.4	14.4	415.50
KEATON	540.40	80.77	6.7	6.7	540.40
OPTIMUM	7,551.10	26.74	282.4	282.4	7,551.10
RESGEN	-	0		0.0	-
SACHM	208.10	-82.14	-2.5	-2.5	208.10
WESCOAL	138.40	9.54	14.5	14.5	138.40
BRC	54.50	-4.47	-12.2	-12.2	54.50
ROCKWELL	130.20	4.94	26.4	26.4	130.20
TAWANA	257.00	-9.35	-27.5	-27.5	257.00
THABEX	8.40	-15.84	-0.5	-0.5	8.40
TRNSHEX	344.70	-7.29	-47.3	-47.3	344.70
ANGLO	436,789.60	10.41	41958.7	20979.3	218,394.80
ARM	41,334.60	14.62	2827.3	2827.3	41,334.60
ASSORE	31,357.10	10.55	2972.2	2972.2	31,357.10
BHPBILL	549,550.40	10.97	50095.8	10019.2	109,910.08
COAL	4,700.60	-9.8	-479.7	-479.7	4,700.60
FIRESTONE	401.40	-14.09	-28.5	-28.5	401.40
GOLIATH	144.40	0		0.0	144.40
INFRASORS	92.80	4	23.2	23.2	92.80
MERAFE	2,947.20	10.82	272.4	272.4	2,947.20
MIRANDA	159.30	-7.36	-21.6	-21.6	159.30
PETMIN	1,661.50	15.15	109.7	109.7	1,661.50
SALLIES	101.40	-1.54	-65.8	-65.8	101.40
SALLIES CD	43.30	0		0.0	43.30
SENTULA	1,613.00	-68.75	-23.5	-23.5	1,613.00
SEPHAKU	631.50	-11.96	-52.8	-52.8	631.50
URONE	20,600.50	-33.22	-620.1	-620.1	20,600.50
ANGGOLD	110,632.80	82.85	1335.3	667.7	55,316.40
CENRAND	120.40	-0.1	-1204.0	-1204.0	120.40
DRDGOLD	1,239.30	7.22	171.6	171.6	1,239.30
GB GOLD	5,899.60	-23.77	-248.2	-248.2	5,899.60
GFIELDS	71,178.70	-44.89	-1585.6	-1585.6	71,178.70
GOLDONE	2,911.00	26.77	108.7	108.7	2,911.00

HARMONY	37,629.50	48.34	778.4	661.7	31,985.08
JCI	604.90	-3.08	-196.4	-196.4	604.90
PAN-AF	1,670.40	8.15	205.0	205.0	1,670.40
PZGOLD	46.80	-0.07	-668.6	-668.6	46.80
RANGOLD	188.50	0.24	785.4	785.4	188.50
SIMMERS	769.10	-0.84	-915.6	-915.6	769.10
WITS GOLD	1,465.80	-84.81	-17.3	-17.3	1,465.80
ANGLOPLAT	168,499.50	33.06	5096.8	1019.4	33,699.90
ANOORAQ	1,107.80	-4.72	-234.7	-234.7	1,107.80
AQUARIUS	17,486.60	15.35	1139.2	1139.2	17,486.60
BAUBA	188.10	-3.79	-49.6	-49.6	188.10
EASTPLATS	6,003.10	90.51	66.3	66.3	6,003.10
IMPLATS	116,551.20	20.08	5804.3	5804.3	116,551.20
JUBILEE	820.90	-13.7	-59.9	-59.9	820.90
LONMIN	34,776.20	25.99	1338.1	1338.1	34,776.20
NORTHAM	16,940.00	31.89	531.2	265.6	8,470.00
PLATFIELD	63.20	-2.08	-30.4	-15.2	31.60
PLATMIN	4,552.00	-5.34	-852.4	-852.4	4,552.00
RBPLAT	11,124.90	0		0.0	11,124.90
VILLAGE	516.10	-47.22	-10.9	-10.9	516.10
WESIZWE	3,255.70	-20.45	-159.2	-159.2	3,255.70
KUMBA	149,432.00	10.39	14382.3	4890.0	50,806.88
METOREX	7,270.90	19.71	368.9	125.4	7,270.90
PALAMIN	6,450.20	10.87	593.4	201.8	6,450.20
ZCI	528.90	-3.37	-156.9	-53.4	528.90
TOTAL	**1,938,700.90**		**128,893.83**	**52,701.80**	**977,778.64**

Source: Business Day, 1o June 2011.

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