

Title

Investment Incentives – Are they effective or should South Africa try something else?

Abstract

South Africa is one of many emerging markets who are seeking to attract the huge amount of FDI. As will be shown below, theory predicts that if investment costs are decreased for firms, investment should increase accordingly. The variety of authors that are consulted below, however, conclude that investment is more readily responsive to economic conditions and changes therein than to specific pecuniary incentives. This paper is in agreement with this conclusion and further suggests that the South African government should rather spend its revenue on improving the quality of labour and globally competitive infrastructure.

Word Count: 4437

Contents

Introduction	2
The Strategic Investment Programme	2
Types of Investment Incentives	2
Tax Holidays	2
Corporate Income Tax Rate	3
Industrial Development Zones/Areas	4
Depreciation Rates	4
Investment Decisions by Firms	5
Post Incentive Tax Rate	5
Inflation	6
Macro-economic Stability	7
Labour Quality and Regulation	8
Current South African Incentives	9
Income Tax Deductions	10
Preferential Corporate Income Tax for Small Business Corporations	10
Research and Development	10
Employee Housing Allowance	10
Urban Development Allowances	10
Infrastructural Development	11
Accelerated Depreciation	11
Actual Investment in South Africa	11
Conclusion	12
References	13
Appendix A	15
Appendix B	16

Introduction

Investment is noted as being the most volatile of the macro-economic variables. In spite of this, micro-economics suggests that investment decisions of firms should be quite predictable – if the cost of capital is lowered, investment should increase. This is the basis upon which investment incentives are offered by governments, in the hope that private investment will be stimulated. The following paper shall examine whether or not this predictable relationship is seen empirically, and what alternative suggestions, if any, are offered.

The Strategic Investment Programme

The Strategic Investment Programme (SIP) was an initiative by the government to encourage investment in what it considered to be crucial areas in the economy, as part of its macro-economic strategy. The incentive's objective was to encourage investment in projects which used large, strategic industrial assets (Deloitte, 2005:30). The Programme ceased to operate as from the 30th September 2005.

The Programme was available to projects in the manufacturing, computer and research & development industries which invested in assets with a value greater than R50m (Richards Bay IDZ, Date Unknown:6). The incentive was an additional industrial investment allowance in the form of income tax deductions equal to the lesser of 50% of the asset's cost in the year in which it was purchased or R300m, which could be carried forward indefinitely (Richards Bay IDZ, Date Unknown:6). A project was not allowed to receive the incentive of the SIP along with any other incentive concurrently.

Types of Investment Incentives

Internationally, investment incentives are very common and assume various forms with different objectives. The discussion to follow shall briefly examine which incentives are offered in various countries, as well as South Africa, and some of the results which these incentives produced.

Tax Holidays

A tax holiday is simply a period of time whereby a company is exempt from income tax liability (Mintz: 1990:81). The intention of such an incentive is usually to attract long-life capital investment and assist in a country's long-term development by allowing companies a number of tax-free years in order to achieve (or assist in the achievement of) economies of scale.

At face value, this seems like a generous offer, but it has been seen that tax holidays have had quite negligible effects relative to the effects of tariffs and quotas (Sutcliffe, 1971:290). This is explained with the following formula for the user-cost of capital:

$$C_u = \frac{(\sigma + r_f)(1 - A)}{(1 - u)}$$

where σ is the declining-balance depreciation rate; r_f is the cost of finance to the firm; A is the average present value of the depreciation allowances; and u is the corporate tax rate (Mintz, 1990:91). During that tax holiday, u would be zero, making the user cost of capital equal to the holding cost of capital¹. What then becomes important to the firm is the corporate tax rate after the holiday and whether or not the allowed accelerated depreciation (if any) can be deferred until after the holiday. If the depreciation can not be deferred and the corporate tax rate is too high for the company, then the holiday will not be much of an incentive. Currently, South Africa does not offer tax holidays.

Corporate Income Tax Rate

South Africa's corporate income tax rate for the financial year 2008/09 has been reduced from 29% to 28%. This is in the hopes that the reduction in the tax burden of companies will encourage new investment by lowering its capital cost (Manuel, 2008:20).

Both intuition and empirical evidence hold that investment will only be encouraged on the basis of how important the income tax rate is to companies. Regarding foreign direct investment, a study done on Central American development showed that the corporate tax rate did not play a substantial role in the investment decisions of the companies studied. The companies that were examined revealed that they thought that income tax exemptions had negligible results and should be discarded in favour of more efficient incentives (Joel, 1971:236). The study continued to state that "income tax is, empirically, overrated as a means of attraction" and that accelerated depreciation or investment allowances would be a less costly and more effective means of encouraging investment (Joel, 1971:237).

Another interesting conclusion of the above study was that import duty exemptions (particularly on raw materials and intermediate products) were found to be more important to businesses than income tax deductions as duty exemptions have an immediate effect, are not dependent upon profits and reduce the initial required investment amount (Joel, 1971:240). The

¹ The holding cost of capital being the numerator of the above equation

importance of import duty relief would thus be greater in net-importing countries like South Africa that rely on the import of raw materials and intermediate goods.

Industrial Development Zones/Areas

An industrial development zone is a specific physical area which the government identifies as being strategic and in which they wish to increase investment. This would usually be because it is an underdeveloped area within the country in which the government wishes to increase GDP and/or employment. Investment is increased through the offering of incentives to companies that invest in that area and which meet certain criteria. These incentives are simply a mixture of the incentives mentioned throughout this essay.

South Africa makes use of a number of Industrial Development Zones (IDZ's) which seem to show some level of success. A useful feature of IDZ's is that the incentives can be nationally offered, or specific to an area. In his book, Sutcliffe agrees that IDZ's are a most effective way of encouraging investment, particularly small- and medium-sized business investment (Sutcliffe, 1971:292). Being a major focus of South Africa's attempt to reduce unemployment and poverty (Manuel, 2008:8), small- and medium-sized business encouragement through IDZ's should remain a tool of South Africa's investment incentives.

Depreciation Rates

A depreciation incentive allows companies to depreciate stipulated assets for tax purposes at a rate higher than the asset's depreciation of economic life. The benefit of this is that companies can then write off a larger amount to tax, lowering their tax burden for the year.

The Richard's Bay IDZ offers accelerated straight-line depreciation rates of 40% for the first year and 20% for the subsequent three years for new and unused manufacturing equipment brought into use after 2002 (Richard's Bay IDZ, Date Unknown:1). The effect of such a type of incentive is that it reduces the cash-flow risks of new investment by providing some relief in the fledgling years of the investment project (Levy and Sarnat, 1975:435).

Although this is obviously important to investors, accelerated depreciation is not without its faults. For instance, the accelerated depreciation benefit for an asset causes the taxable income generated by the asset to be lower than its economic income in early years (that is, whilst the depreciation rate is allowed), but greater thereafter (Mintz, 1990:84). The company thus pays less tax up front, but more tax later on. Thus, if the investment project has not been

correctly projected, the company's investment may begin to offer negative returns and perhaps compromise the viability of the business². Depending on the foreseeable risk of this happening due to changes in the economic or regulatory environment within the economy, companies may seek investments that can be paid off fairly quickly in order to accommodate this. Levy and Sarnat implicitly concur by noting that incentives can tend to unintentionally favour short-term investment, thus causing a misallocation of resources away from the long-term development of the economy (1975:443).

Investment Decisions by Firms

A recurring theme in analysis of the above-mentioned incentives by the cited authors is that the actual incentive has a more secondary effect on firms' investment decisions than is theoretically assumed. As will be expanded upon below, firms are more interested in the country/economy's prospects than strictly pecuniary benefits.

Post Incentive Tax Rate

Although the presence of tax-based investment incentives³ will obviously have a positive impact on corporate investment decisions, what is of more importance is what the tax rate will become once the incentive expires. As was noted above, companies that do not consider the post-incentive tax rate could end up in financial distress. If this were to occur, the government could in fact be saddled with an industry which is dependent upon the incentive⁴. Companies would thus recalculate their user cost of capital (from the equation above) and determine if the return on their investment could, at least, cover the cost thereof with the expected tax rate in place.

Companies would also have to consider their expectations of the future state of the country in terms of its projected tax rate and tax base. Regarding the latter, if a company expects a country's tax base to decrease, then it could expect an increase in the tax rate and would have to evaluate its investment decision accordingly.

² Although it is trite knowledge that companies have to satisfy their lenders that they will be able to repay their debt and that the project has long-term viability, it is not unreasonable to allow for human error and assume that there are in fact companies which are left in a financial distress once the incentive's benefits expire. Such exploration of this topic, however, is beyond the scope of this paper.

³ This would include tax holidays, a reduction in tax rate and accelerated depreciation for projects

⁴ Such a situation forms the argument against the 'infant industry' proponent of trade protection (Appleyard and Field, 2001:287)

Theoretically, the cost of capital and tax rates should have a large impact on the amount of investment, but empirically the link is quite weak (Goolsbee, 1998:121). Econometric analysis shows that investment is quite inelastic to changes in the user cost of capital⁵, but that the prices of capital goods following the introduction of investment incentives increase quite noticeably⁶. It would seem that this occurs due to supplier's expectations of an increase in demand for their goods, causing them to increase their prices. If these increases are high enough, they could offset the positive effect which the incentives have had on investment.

The inability of tax incentives to adequately increase investment is confirmed by Norregaard and Khan who found that incentives in China, Brazil, India and Mexico were not successful in attracting more foreign direct investment, but merely added to the administrative costs of the country as well as creating inefficiencies therein (2007:18). The study continued to state that it found "that cross-country differences in taxation appear to be a minor factor affecting the location choices of multi-national enterprises" (Nooregaard and Khan, 2007:19). This conclusion is substantiated by the observation by Lewis that South Africa attracted foreign direct investment to the value of only 1% of GDP, while Argentina, Brazil, Mexico, Malaysia and others attracted between 2.5% and 5% of GDP (2002:4).

Inflation

Given the global inflationary pressures from food and oil prices, it seems pertinent to discuss the effect that the rate of inflation has on investment decisions.

Assuming that companies wish to maximise returns for investors, an increase in the return to equity should thus provide an incentive for an increase in capital investment (Maloney et al, 1982:652). The increase in the return on equity would come from the following: an increase in inflation would reduce the real cost of capital through the reduction of the real interest rate and principal amount, increasing the real return; if actual inflation exceeds expectations, short-run profits would be higher; and owners of capital assets would gain from the market value appreciation of their goods, at least in line with inflation (Maloney et al, 1982:652).

A problem that inflation brings to companies, however, is its effect on the tax burden of companies. This is said because tax is nominally progressive, whereas inventory costs and depreciation amounts are not (Maloney et al, 1982:653). Thus, if inflation increases a

⁵ Goolsbee found elasticities to be between 0 and 0.4 (1998:121)

⁶ Goolsbee actually concludes that the prices of capital goods increase almost immediately with the introduction of investment incentives and that the wages of capital goods workers also rise. Thus, following his conclusion, investment incentives could in fact place inflationary pressures on an economy

company's revenue, its tax burden would also increase, as well as its inventory costs. The suggestion is thus that inventories should be valued at replacement cost so as to avoid excessive tax burdens (Maloney, 1982:653).

This suggestion is echoed by Mintz who states that inflation-indexed depreciation rates would allow companies to increase the reported price of the asset which they are depreciating and avoid the understatement of depreciation that occurs in an inflationary environment (1990:84). This becomes especially important when incentives such as accelerated depreciation and tax holidays are offered as inflation erodes the value which these benefits could offer.

Macro-economic Stability

Although investment incentives are mostly offered to foreign and local companies alike, it is suggested that foreign direct investment (FDI) may in fact be the preferred target of the incentives (Levy and Sarnat, 1975:431). Looking at South Africa's savings rate⁷, it can be said that this is likely to be the case. This being said, it seems likely that foreign firms would place great importance on the risk profile of the prospective country in which they want to invest. It is this consideration that supersedes the actual pecuniary incentive.

Four of the cited authors in this paper independently note that "incentives to attract private foreign capital are much less important than a degree of political stability" (Sutcliffe, 1971:290; Nooregaard and Khan, 2007:18; Joel, 1971:236; and Lewis, 2002:5). Factors that affect the investment decisions of firms in undertaking investment mentioned by these authors include: the size and growth potential of local markets; quantity and quality of labour; perceived riskiness of the local market/economy, including exchange rate risks; restrictions on repatriation of profits; and crime. Lewis goes further to explain that systematic uncertainty (which he measures through an index of political stability) increases the threshold return of capital which investors seek before they are willing to invest (2002:6). Political instability is difficult to quantitatively measure, but its effect on investment decisions can not be ignored. Continuing this train of thought, Lewis continues to assert that incentives rarely attract investment and that they may result in additional expenditure for the State and add to the misallocation of resources that may already exist (2002:7). If this is the case, then incentives would likely add to any existing degree of uncertainty within an economy and may cause a reduction in investment. Investors, Lewis concludes, are better drawn to invest where they can

⁷ The savings to GDP ratio was 14.1% for 2007 and comprises of a corporate savings rate of only 9.9%, a government savings rate of 2.9% and a household saving rate of 1.4% (South African Reserve Bank, 2008:12)

participate in a globally competitive environment, involving a good business framework, existing supply chain networks, adequate infrastructure and suitably skilled labour (2002:7).

An interesting observation and suggestion by Lewis is that privatisation may in fact improve FDI. He notes that during the period 1996 to 2000, FDI approached US\$1bn when 30% of Telkom and 20% of SAA were sold (2002:7). It is submitted that privatisation indicates a government's commitment to creating an investor-friendly environment, which is clearly a positive signal to investors.

South Africa's macro-economic stability currently seems to be quite ambiguous. On one hand, there is political uncertainty due to the upcoming national elections and the confusing signals which certain presidential candidates have been giving to investors regarding potential future policy changes as well as an uncertain inflationary environment caused by international food and oil price increases which have been partly aggravated by the interest rate increases by the Reserve Bank. On the other hand, however, fiscal policy seems to be staying on its prudent course⁸ despite political pressures to increase spending. Similarly, the Reserve Bank's commitment to its inflation target despite huge pressure to adjust it in light of the supply-sided inflation shocks also sends a positive signal to investors regarding the stability of the macro-economy and its overseers.

Labour Quality and Regulation

For a company to invest in a particular location, it must be sure that an adequate labour force in fact exists in that location. Furthermore, labour costs⁹ must be within reason so that the undertaken investment can remain profitable. These are both problems within South Africa that hinder a level of competitiveness that would further attract investment.

In a recent survey conducted by Heidrick & Struggles (an international recruitment agency), South Africa was placed last in terms of its ability to attract top management and technical skills to the country. The survey used measures such as the countries attractiveness to top candidates, quality of education, openness of the labour market and level of foreign direct investment. South Africa fared best in terms of its level of FDI in its ability to attract top talent. This result is not surprising as it is not the first time that South Africa has been placed last in a

⁸ This includes the stated commitment to continue to maintain the fiscal surplus in order to hedge against market changes by Minister Manuel (Manuel, 2008:16)

⁹ Costs here refers not only to wages and salaries, but also to non-pecuniary costs, like the time taken to hire/fire or even find suitable labourers

study of this nature – in 1999 the World Economic Forum’s Global Competitiveness Report placed South Africa last out of 59 countries in terms of its labour flexibility (Lewis, 2002:12). In this study, South Africa was last in most categories; notably its flexibility, labour relationships and the work ethic of the labour force. In his study, Lewis questioned CEO’s in South Africa as to what they considered to be obstacles to economic growth, to which 80% of the CEO’s replied that it was “hard” to find managerial/professional staff (2002:5). This finding by the CEO’s is confirmed by the World Bank, where South Africa’s “Difficulty of Hiring Index” is 56 out of 100, as compared to China’s of 11 or the United State’s of 0 (World Bank, 2008b:2; World Bank, 2008c:2; World Bank, 2008e:2).

It is thus submitted that South Africa, in order to adequately attract further private investment, needs to focus intently on actively reforming its education system so as to produce individuals that are able to compete effectively in a global market. Despite South Africa’s plethora of well-intentioned policies for reformation, they all seem to be quite benign in terms of their ability to produce results, but discussion thereof falls outside the scope of this paper.

Another change that would have a positive impact on investment levels would be the relaxation of the labour rigidity in terms of companies’ ability to hire and fire and set or alter working hours. This is based on South Africa’s “Difficulty of Firing” rating by the World Bank, where South Africa scores 30 out of 100, whereas Brazil and the United States have a 0 rating¹⁰. In the same vein, is the high cost of firing to firms. Because the cost of labour is considered in investment decisions and cash flow projections, a decrease in the firing cost to firms¹¹ would ease cash flow risks and could encourage investment in that way. Assuming that labour unions would greatly object to the decreased protection of their members, the government could earmark some of the revenue that would otherwise have been used for tax-based (or other) incentives and subsidise some of the firing costs to companies in order to ease their financial burden and provide an innovate incentive. Such an incentive would show government’s commitment to producing a competitive workforce instead of trying to protect one that is sub-standard.

Current South African Incentives

In light of the above discussion regarding the efficacy of the available types of investment incentives, it is necessary to identify which are currently being pursued by South Africa. When

¹⁰ According to the same rating system, South Africa rates only mildly better than China, which scores 40 (World Bank, 2008b:2)

¹¹ Which, for South Africa, amounts to 24 weeks’ worth of wages, according to the World Bank

scrutinising the incentives below, it must be borne in mind that one of Government's goals is the long-term growth of the economy through encouraging investment and exports (Manuel, 2008:5). Thus, Government (and, by implication, the incentives) will be focused on encouraging specific areas/industries which it has identified as being strategic.¹² Due to the number of incentives on offer, as presented in Deloitte (2007:pp37-57), only the tax incentives shall be discussed in any depth below.

Income Tax Deductions

Preferential Corporate Income Tax for Small Business Corporations

The incentive is offered to small- and medium-sized businesses whose turnover for the assessment year is not in excess of R14m. Qualifying companies do not pay tax on the first R40k, pay only 10% on amounts between R40001 and R300k, and only 29% on amounts thereafter.

Research and Development

A deduction of 150% of current year operating and approved capital expenditure relating to scientific research and development is offered. It is submitted that this incentive is quite necessary for South Africa as incentives mostly focus on large capital expenditure projects. As Lewis notes, "South Africa has little experience with encouraging non-mineral export activities" (2002:6).

Employee Housing Allowance

Up to R6000 of construction costs per unit is deductible for employers who erect houses for their employees. As was noted above, inflation erodes nominal incentives by decreasing their real value to the firm. Thus, this incentive (if it is at all effective) should be replaced with an inflation-indexed one.

Urban Development Allowances

The deductions are offered to those who refurbish or construct buildings within a designated urban zone. New buildings/extensions' costs are deductible over a seventeen year period, with the first year's deduction being 20% of the cost and subsequent years' being 5%. For refurbishing new buildings, 20% of the cost is deductible each year for five years.

¹² Of course the ability of the incentives to adequately improve the economy's growth depends on whether or not Government has in fact correctly identified the strategic areas/industries

Infrastructural Development

These deductions are offered to companies involved in erecting pipelines for natural oil, transmission lines for telecommunications & electricity and railway lines. Companies may deduct 10% per annum of the cost of new pipelines and/or 5% per annum of the cost of other affected assets.

Accelerated Depreciation

There is only one depreciation-based incentive being offered, and it is made available on capital assets for farming, hotels or manufacturing. New and unused plant & equipment is allowed to depreciate at 40% for the first year and 20% for subsequent years, whilst used plant & equipment depreciates at 20% per annum. For hotels, their equipment is depreciated at 20% per annum, whilst external refurbishments can be depreciated at 5% and internal ones at 20%. Equipment used in farming and the production of renewable energy is depreciated at 50%, 30% and 20% for the first three years respectively. Special allowances on manufacturing buildings vary between 2% and 10% per annum

Actual Investment in South Africa

Theoretically, investment incentives which are offered should attract large amounts of investment. Empirically, however, the authors cited above have shown that the case for using incentives to encourage investment is, at best, weak. Before concluding, it is necessary to observe the investment trends in South Africa in order to determine whether or not incentives look to have been at all effective.

As can be seen in Appendix B below, both real and nominal gross fixed capital formation have been rising as a percentage of GDP since 2002. Much of the recent investment can be attributed to FDI. In 2007, R40.3bn of FDI flowed into the country (mainly due to the acquisition of a platinum mine by a foreigner) following an outflow of R3.6bn in 2006 (South African Reserve Bank, 2008:27). Such a flow of FDI could be ascribed to the commodities boom, as well as the increase in China's willingness as an international investor. The up and coming 2010 soccer world cup and the Eskom crisis have also had much to do with the increase in local gross fixed capital formation, especially from government and public corporations.

Thus, the removing of Government's Strategic Investment Programme seems to have had negligible effect on investment, placing doubt on the actual efficacy of the programme. Corporate tax rates have been steadily declining over the years, going from 30% in 2005 to 28% in the current year. It could be said that the decline in taxes has assisted in the steady

rise in investment over the past years, but it is submitted that the increasing tax base in conjunction with decreasing tax rates have created the expectation of decreasing or stable taxes and have shown the Government's commitment to improving the investment environment.

Conclusion

Economic theory postulates that investment should be directly and negatively related to the user cost of capital, implying that incentives which lower the cost of capital to firms should increase investment according to defined equations. Empirically, this is not quite the case. The authors cited above in this text seem quite adamant that incentives do not empirically draw extra investment, but that the investment/economic environment plays a much greater role in investment decisions than can be mathematically defined. They also show that for incentives to be at all effective, incentives should be inflation-indexed to avoid the erosion in value of the incentive to firms by increases in inflation. Given the current international inflationary environment, this would be advice well taken by policy makers.

It is submitted from the above that Government should not hastily reinstate its Strategic Investment Programme, but rather seek out ways to improve the ease of investment. A good starting point would be regarding the quality of available labour and the regulation thereof. As was suggested above, Government could perhaps explore the possibility of actively relaxing the labour costs of firms (pecuniary and other costs) by subsidising costs that could be discouraging to investors, such as firing costs and the like.

It is further submitted that the funds that would otherwise go to incentives be used to speed up the improvement in the technological infrastructure of the country in order to lower costs to firms, such as telecommunication costs which remain high by international standards.

It must be again suggested that Treasury and the Reserve Bank should stay on their present courses of improving long-term growth prospects through their respective policies in order to maintain a level of stability in terms of investors' expectations of the economic environment. To begin introducing drastic reforms, such as the restatement of the Reserve Bank mandate and the like, would be to further shake investor confidence in an environment in which investors have become very wary of emerging markets.

References

1. APPLEYARD, D.R., and FIELD, A.J., 2001. **International Economics** (4e). New York: McGraw-Hill
2. CLAESSENS, S and DIWAN, I, 1990. Investment Incentives: New Money, Debt Relief and the Critical Role of Conditionality in the Debt Crisis. **World Bank Economic Review, The**. Vol. 4, No. 1. Pp 21-41
3. DELOITTE, 2005. **Investing in South Africa** [online]. Available: www.deloitte.com/dtt/brief/0,1003,cid%2530159529,oo. [Accessed 28 March 2008]
4. DELOITTE, 2007. **Investing in South Africa** [online]. Available: www.deloitte.com/dtt/brief/0,1003,cid%2530159739,oo. [Accessed 28 March 2008]
5. GOOLSBEE, A, 1998. Investment Tax Incentives, Prices and the Supply of Capital Goods. **Quarterly Journal of Economics**. Vol. 113, No. 1. Pp 121-148
6. JOEL, C, 1971. Tax Incentives in Central American Development. **Economic Development and Cultural Change**. Vol. 19, No. 2. Pp 229-252
7. LEVY, H and SARNAT, M, 1975. Investment Incentives and the Allocation of Resources. **Economic Development and Cultural Change**. Vol. 23, No. 3. Pp 431-451
8. LEWIS, J.D., 2002. Promoting Growth and Employment in South Africa. **African Region Working Paper Series**. No. 32
9. LITNER, J, 1954. The Effects of Corporate Taxation on Real Investment. **American Economic Review**. Vol. 44, No. 2. Pp 520-534
10. MALONEY, M.T., PRINZINGER, J., ULBRICH, H, 1982. Capital Formation in an Inflationary Environment: An Empirical Assessment. **Southern Economic Journal**. Vol. 48, No. 3. Pp 651-661
11. MANUEL, T, 2008. **Budget Speech 2008**
12. MINTZ, J.M., 1990. Corporate Tax Holidays and Investment. **World Bank Economic Review, The**. Vol. 4, No. 1. Pp 81-102
13. NOOREGAARD, J and KHAN, T.S., 2007. Tax Policy: Recent Trends and Coming Challenges. **IMF Working Paper**. Paper No. WP/07/274
14. RICHARDS BAY IDZ, Date Unknown. **Incentives** [online]. Available: www.richardsbayidz.co.za/attractions/incentives. [Accessed 10 March 2008]
15. SOUTH AFRICAN RESERVE BANK, 2008. **Quarterly Bulletin: March 2008** [online]. Available: www.reservebank.co.za/quarterlybulletin. [Accessed 30 April 2008]

16. SUTCLIFFE, R.B., 1971. **Industry and Underdevelopment**. Philippines: Addison-Wesley
17. WORLD BANK, 2008a. **Doing Business in Brazil** [online]. Available: www.doingbusiness.org/exploreconomies/brazil. [Accessed 30 April 2008]
18. WORLD BANK, 2008b. **Doing Business in China** [online]. Available: www.doingbusiness.org/exploreconomies/china. [Accessed 30 April 2008]
19. WORLD BANK, 2008c. **Doing Business in South Africa** [online]. Available: www.doingbusiness.org/exploreconomies/south_africa. [Accessed 30 April 2008]
20. WORLD BANK, 2008d. **Doing Business in the United Kingdom** [online]. Available: www.doingbusiness.org/exploreconomies/united_kingdom. [Accessed 30 April 2008]
21. WORLD BANK, 2008e. **Doing Business in the United States** [online]. Available: www.doingbusiness.org/exploreconomies/united_states. [Accessed 30 April 2008]

Appendix A

SEARCH FOR TALENT

Anywhere but here

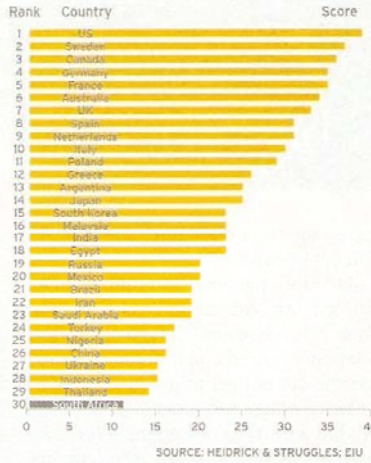
South Africa is least likely to attract people with top-end management and technical skills, says a survey of skills in 30 countries.

The survey of talent, by international recruiting firm Heidrick & Struggles and the Economist Intelligence Unit in 2007, found talent was most attracted to the US, Sweden and Canada and least likely to migrate to Indonesia, Thailand and SA. The proclivity of a country to attract talent was calculated according to a range of economic variables including GDP growth, employment growth and the level of technical skills. Projecting these to 2012, Heidrick & Struggles predict that of the 30 countries in the survey, SA is likely to remain the least attractive destination for top-end skills.

The attractiveness of a country to talent is one of seven factors that the survey used to compile a global talent index. Others include the quality of education, the general environment to nurture talent, the openness of the labour market to foreign nationals and foreign direct investment flows. The talent index shows which countries are most successful at producing top-end skills and where talent will thrive in the next five years.

The overall conclusion is not unex-

COUNTRIES' ABILITY TO ATTRACT SKILLS



pected: “talent follows where money leads” and are most likely to be found in developed, wealthy economies. However, the inclusion of some of the smaller countries in the top rankings shows that it is not just the wealth of a country or the size of its talent pool that matters, but how it is nurtured.

In 2012 the hottest areas for talent will be the US, the UK, Canada, Netherlands, Sweden and China. In the overall talent index SA rated 24 out of 30. Its ranking was pulled down by the poor scores it achieved for the proclivity to attract talent, the quality of education and the general environment for nurturing talent.

Quality of education was measured by the duration of compulsory education, spending and enrolment as well as by the quality of business schools and universities. SA's universities and business schools fared particularly badly in the education ranking, which was measured by the number of business schools rated in the world's top 100; the number of universities rated in the top 500; and expenditure on higher education.

The general environment for nurturing talent included a broad range of factors such as the share of population aged 25-84 with higher education; the number of graduates in various fields; the number of researchers and technicians per 1m of the population; labour laws and their restrictiveness; and wage regulation.

SA fared reasonably well with fairly strong foreign direct investment which is considered a good attractor of talent because it is often accompanied by imports of technological and managerial best practice. This counted in SA's favour, as did the likelihood of companies hiring foreign nationals and the openness of SA's trade.

Carol Paton

Source: **Financial Mail**, 7 March, 2008. Vol. 195, no. 9, p23. Editor: Barney Mthombothi

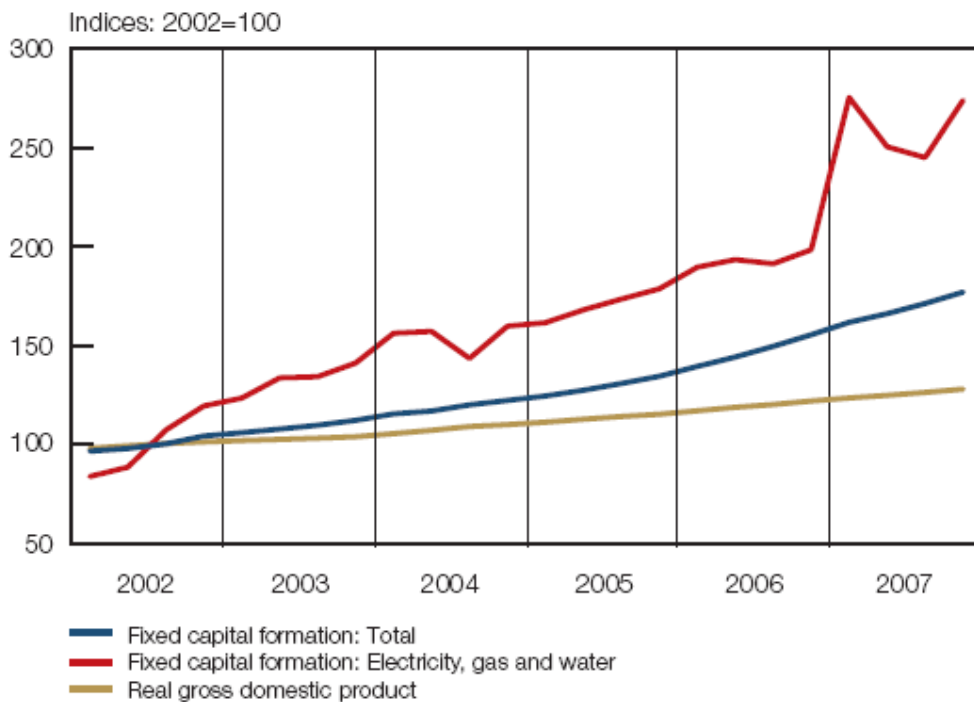
Appendix B

Ratio of Gross Fixed Capital Formation to GDP at current prices, seasonally adjusted. In percentage from March 1960 to September 2007



Source: **The DTI**, 2008 [online]. Available:
www.thedti.gov.za/condb/resbank/rb6282LK.jpg

Real gross fixed capital formation



Source: **South African Reserve Bank**, 2008. Quarterly Bulletin, p11.