City of Cape Town

Department of Economic and Human Development

Economic Growth Scenarios Update

October, 2007

First Draft

Abstract

In 2006, the City of Cape Town's Economic and Human Development Department commissioned a study to explore potential economic growth scenarios from 2005 to 2030. Demand for an updated product is informed by two factors. First, it is important that the model continue to be used as a decision-making tool. Given its ability to demonstrate the effect of changes in economy-affecting variables, decision makers at various levels throughout the City may find it useful. Second, impending climate change - and the imperative for Cape Town to continue to work on positioning itself as a "green" destination to attract investment - has driven the work to update the model. The mandate provided by the Economic and Human Development Strategy (EHDS) stipulates that economic growth is the vehicle through which unemployment should be addressed and poverty consequently reduced. It is therefore important that the City understands what will drive economic growth and what will constrain it between now and 2030. Furthermore, environmental sustainability is one of the pillars upon which the strategy is built, and indeed global evidence is increasing in its consensus that future economic growth will indeed depend on economically positive ecological preservation.

Markets

JSE All Share

Key Indicators

Tue Oct 16 2007 15:03:00

All Share	31008.840	0.50%
Gold	760.65	0.28%
Platinum	1410.00	0.74%
Brent Crude Oil	83.45	0.85%
R153	8.865	0.62%
Rand - $	6.8675	0.26%
Rand - Sterling	13.9819	0.25%
Rand - Euro	9.7383	0.17%

Business Day, October 16, 2007

Introduction

In 2006, the City of Cape Town's Economic and Human Development Department commissioned a study to explore potential economic growth scenarios from 2005 to 2030. That work is attached as Annexure A. The purpose of this paper is to provide an informed update to the most probable scenario conveyed in that work, with particular emphasis on the effects of a change in oil price, exchange rates and interest rates.

Demand for an updated product is informed by two factors. First, it is important that the model continue to be used as a decision-making tool. Given its ability to demonstrate the effect of changes in economy-affecting variables, decision makers at various levels throughout the City may find it useful. Second, impending climate change - and the imperative for Cape Town to continue to work on positioning itself as a "green" destination to attract investment - has driven the work to update the model. In particular, the effects of electricity-supply insecurity, natural resource depletion, skills shortages and inadequate public transport combine to undermine economic growth efforts.

The mandate provided by the Economic and Human Development Strategy (EHDS) stipulates that economic growth is the vehicle through which unemployment should be addressed and poverty consequently reduced. It is therefore important that the City understands both what will drive and constrain economic growth between now and 2030. Furthermore, environmental sustainability is one of the pillars upon which the strategy is built, and indeed global evidence is increasing in its consensus that future economic growth will indeed depend on economically positive ecological preservation.

This updated report on the Growth Scenarios Model is not intended as a replacement by any means, but certainly as a complement to work previously undertaken. It begins with an analysis of the current Cape Town economy within South Africa's macroeconomic outlook. Thereafter, it documents the specific updates to the Model, each substantiated with underlying assumptions explained.

The Cape Town Economy

Cape Town's 2006 Gross Geographic Product (GGP) is estimated at R123 billion. As such, it constitutes 78% of the Western Cape Economy, and 11.58% of South Africa's Gross Domestic Product (GDP). Between 1995 and 2006, the fastest growing sector per annum was Communications (16.39%). Second was Finance and Insurance (10.82%), followed by Construction (8.02%), then Wholesale and Retail Trade (7.03%). This is congruent with global trends of economies 'graduating' from a primary base towards a tertiary economy, dominated by services that demand medium to high skills levels. Even Construction, which one would intuitively expect to be labour-absorptive at the semi and unskilled end of the market, has been shedding jobs in that skills category. Table 1 below indicates Cape Town's current performance in this regard.

Unemployment (20.7%) is a partial function of skills shortage. This means that economic growth in skill intensive (as opposed to labour absorptive) sectors does not aid the objective of reducing unemployment.

Table 1: GGP Growth and Associated Employment Growth by Skill Category 1995-2006

1995 – 2006			Skills Demand Average				Skills Demand % Growth p/a		
Rank	**Sector**	**Average GGP Growth p/a 1995-2006**	Highly Skilled	Skilled	Semi and Unskilled	Total	Highly Skilled % growth	Skilled % growth	Semi and Unskilled % growth
1	Communication	16.39%	1196	6629	**2821**	10646	0.68%	-3.62%	**-3.49%**
2	Finance and insurance	10.82%	15787	35874	**1414**	53075	1.79%	-0.35%	**3.74%**
3	Construction	8.02%	2882	8923	**47824**	59628	-2.89%	-2.86%	**-3.94%**
4	Wholesale & retail trade	7.03%	18080	74627	**20190**	112896	3.30%	3.81%	**1.48%**
5	Transport	5.69%	1779	13753	**4165**	19698	-2.75%	-3.56%	**-3.83%**
23	Mining	-5.80%	400	379	**2019**	2797	0.21%	0.23%	**-2.32%**
	Total Average	**4.79%**							

Source: Quantec Data (2007); Own Calculations

The above table illustrates that – in general – despite rapid economic growth in these top 5 sectors, labour absorption has been declining. This is not simply jobless growth, this is "job-shedding" growth – there are fewer absolute jobs in those sectors (strikingly in the semi and unskilled category) than there were ten

years ago. In total for the city, there were 839 000 people employed in 2004, but 847 000 in 1995. This raises serious questions about the efficacy of economic growth as a vehicle through which to create jobs and alleviate poverty.

Furthermore, the poor (mostly semi or unskilled) face higher inflationary pressures than the average citizen, given their higher proportion of expenditure on food and transport (whose price rises have been well above recent inflation.) That transport costs themselves are a primary inhibitor to job-search for the unemployed further exacerbates this picture of poverty.

However, despite the apparent inability of GGP growth to reduce unemployment and alleviate poverty, it is also understood that these ends cannot be achieved without growth. The disclaimer remains, then, that the state has a responsibility to ensure pro-poor economic growth.

South Africa's Macroeconomic Outlook

Gross Domestic Product (GDP), Interest Rates, Inflation and Exchange Rates

GDP is measured as the final value of all goods and services produced within a country in one year. Year on year GDP growth is the most common global indicator of a country's economic health, and South Africa's growth currently stands at 4.5% for the last quarter (down on the +/-5% it has consistently been achieving over the past 3 years). GDP consists of Investment, Consumption, Government Expenditure and Net Exports. The biggest driver of GDP growth in recent years has been Consumption. Unfortunately, much of this has been credit-driven, raising concerns about the vulnerability of the economy to bad debt (as recently witnessed by the Sub prime crisis in the United States) and increasing the economy's exposure to inflation (pushing up prices through artificial/credit demand). However, it is also encouraging to note that the Investment component has started to rise on the back of increased spending on infrastructure (partly in the build up to the 2010 World Cup.) Direct investment and net exports are the healthiest components of GDP as they contribute positively to job creation and are more sustainable (less risky) than credit spending.

At the time of writing, the Reserve Bank raised the Repo rate by half a percentage point for the seventh time in a row, thus placing the cumulative figure at a 3.5% rise since June 2006. The commercial lending rate now stands at 14%. The Bank's mandate is to keep inflation within a target range of 3-6%. Interest rates are the primary inflation fighting tool that it has at its disposal. Given a consistent breach of that target in recent times (with inflation forecast to peak at 6.8% in the first quarter of next year), the Bank has sought to retain its credibility by raising interest rates and endorsing the National Credit Act. The combination of these two tools has had a visible effect on reducing consumer spending, although the Bank has deemed it hitherto inadequate (inviting critique that it has not been sufficiently patient in waiting for the time-lag effect to kick in). The curtailing of new vehicle and property sales in the last quarter is evidence of reduced spending, but it does bode poorly for economic growth.

The Bank's tough stance on inflation may be misplaced, however. Raising interest rates increases the cost of borrowing capital. This is likely to disincentivise fixed investment (the type that creates jobs), but incentivise portfolio investment (the type that crosses the globe without loyalty chasing the highest returns.) The latter usually follows currency. In other words, high interest rates raise the attractiveness of investing in a country's currency. When demand for a currency grows, its value appreciates. This explains the current strength in the Rand (at the time of writing, R6.76 to the US Dollar). It is also the exchange rate that has the strongest influence on net exports. A strong Rand determines less expensive imports, but also damages exports. Given the importance of net exports to growing the economy, this is cause for concern. At the same time, a strong Rand mitigates the harshest inflationary elements such as the price of imported oil, temporarily protecting the poor (given that their proportional expenditure on fuel-related costs such as food and transport is far above average.) This paradox dictates that there is a trade off between long term economic growth and temporary measures to curb inflation that is driven predominantly by exogenous factors that are not locally manageable.

Asgisa has set an economic growth rate target of 6-8% in its national macroeconomic strategy. Higher interest rates have a significant impact on the ability of the economy to reach this target (in light of the above explanantion), and this now stands as an argument against the abuse of interest rate hikes to target inflation. It is more important, in the opinion of this work, to ensure long term sustainable economic

growth through reducing dependency on those goods and services that are driving inflation. For instance, reduced dependency on imported oil would produce the following benefits: It would reduce inflation, particularly because of oil's latent impact on transport and food costs, thus directly benefiting the poor. Further, it would create a strong stimulus for alternative (preferably renewable) sources of energy, thereby reducing environmentally damaging emissions and attracting investment that is looking for "green pastures."

The Original Model

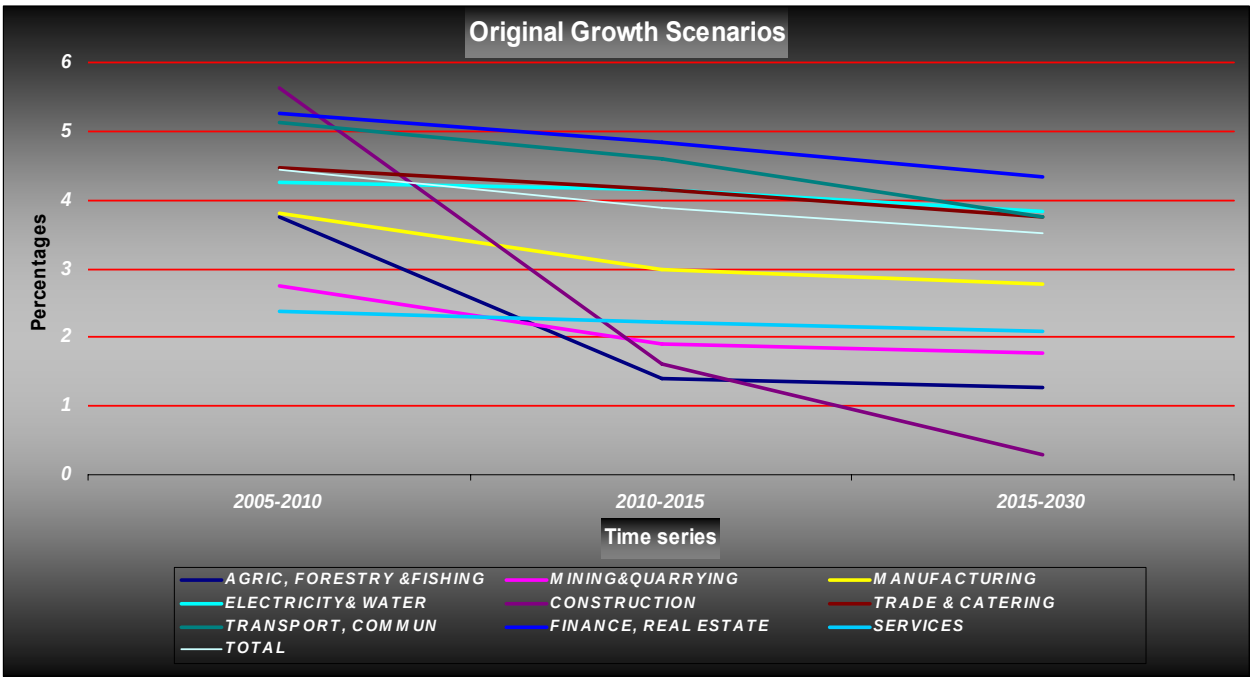
The following table indicates the projected economic growth for the SIC sectors and associated employment growth from 2005 to 2030.

Table 2: Original Economic Growth Scenarios Model

ASSUMPTIONS SCENARIO 2	annual real output growth %	employment elasticity %Δemploy/% Δoutput	annual employment growth %	output growth	employment elasticity	employment growth	output growth	employment elasticity	employment growth
	2005-2010	2005-2010	2005-2010	2010-2015	2010-2015	2010-2015	2015-2030	2015-2030	2015-2030
AGRIC, FORESTRY &FISHING	3.8	(0.5)	(1.9)	1.4	(0.6)	(0.8)	1.3	(0.7)	(0.9)
MINING&QUARRYING	2.7	0.7	1.9	1.9	0.6	1.1	1.8	0.4	0.8
MANUFACTURING	3.8	(0.9)	(3.4)	3.0	(1.1)	(3.2)	2.8	(1.3)	(3.6)
ELECTRICITY& WATER	4.2	(1.0)	(4.2)	4.1	(1.2)	(5.0)	3.8	(1.4)	(5.5)
CONSTRUCTION	5.6	(0.0)	(0.2)	1.6	(0.0)	(0.1)	0.3	(0.1)	(0.0)
TRADE & CATERING	4.5	0.4	1.8	4.2	0.3	1.3	3.7	0.3	1.0
TRANSPORT, COMMUN	5.1	0.9	4.6	4.6	0.7	3.3	3.7	0.6	2.2
FINANCE, REAL ESTATE	5.3	0.7	3.7	4.8	0.6	2.7	4.3	0.4	1.9
SERVICES	2.4	0.8	1.9	2.2	0.6	1.4	2.1	0.5	1.1
TOTAL	4.4	0.31	1.4	3.9	0.29	1.1	3.5	0.26	0.9

Source: Futurelead, 2006

Figure 1: Original Economic Growth Scenarios – Output



Source: Futurelead; Graph constructed by City of Cape Town

The above graph illustrates a predicted general decline across all sectors. These predictions are based on a number of informed assumptions (they can also be found in Annexure A.)

Reliability of Original Forecasts

The table below provides an indication of the original forecasts with the original baseline figures of those variables in 2005. The changes between those of 2005 and 2007 provide an 'acid test' for the accuracy of the original forecasts.

Table 3: Original Forecasts with Baseline Figures against Current (2007) Figures

VARIABLE	Proxy indicator	Base Figures			FORECASTS		
		2005	2007	% Change	2005-2010	2010-2015	2015-2030
domestic income	CT population growth (average annual) medium	3,020,910	3,042,504	0.71%	0.92%	0.47%	0.20%
growth in national output	real GDP growth	R 1,016,749,769,429	R 1,067,100,834,879	4.95%	4.6%	4.6%	4.3%
capital formation/ investment	change in prime rate	10.50%	14.00%	33.33%	-7%	0.0%	0.0%
government expenditure 1	real budgeted spending on salaries and wages 2006/7-2008/9 (municipal, province)	*	*		1.8%	1.8%	1.8%
government expenditure 2	real budgeted capital spending (municipal, province, national, agencies)	*	*		9.7%	7.3%	2.4%
global demand	real global output growth	$44.8 Trillion	$48,244,879Mn	7.6%	3.2%	3.2%	3.0%
exchange rate	% change in R:$	R 5.64	R 7.11	20.7%	8.7%	0.0%	0.0%
oil price	% change in price (2004 prices dollar/barrel)	$49.87	$64.15	28.6%	2.1%	2.1%	2.1%

*The main budget provides for total expenditure of R533,9 billion in 2007/08, increasing to R650,3 billion in 2009/10. Real non-interest expenditure grows strongly at a rate of 7,7 per cent over the MTEF period.

It is clear that some of the original forecasts need to be updated in light of the significant changes in variable values between 2005 and 2007. However, it is important to note that variables such as the interest rate are unlikely to change substantially further given that professional opinion is mounting against the Reserve Bank raising rates again. Also, the forecasts are disaggregated to represent a percentage change per annum whereas the percentage change between 2005 and 2007 is absolute.

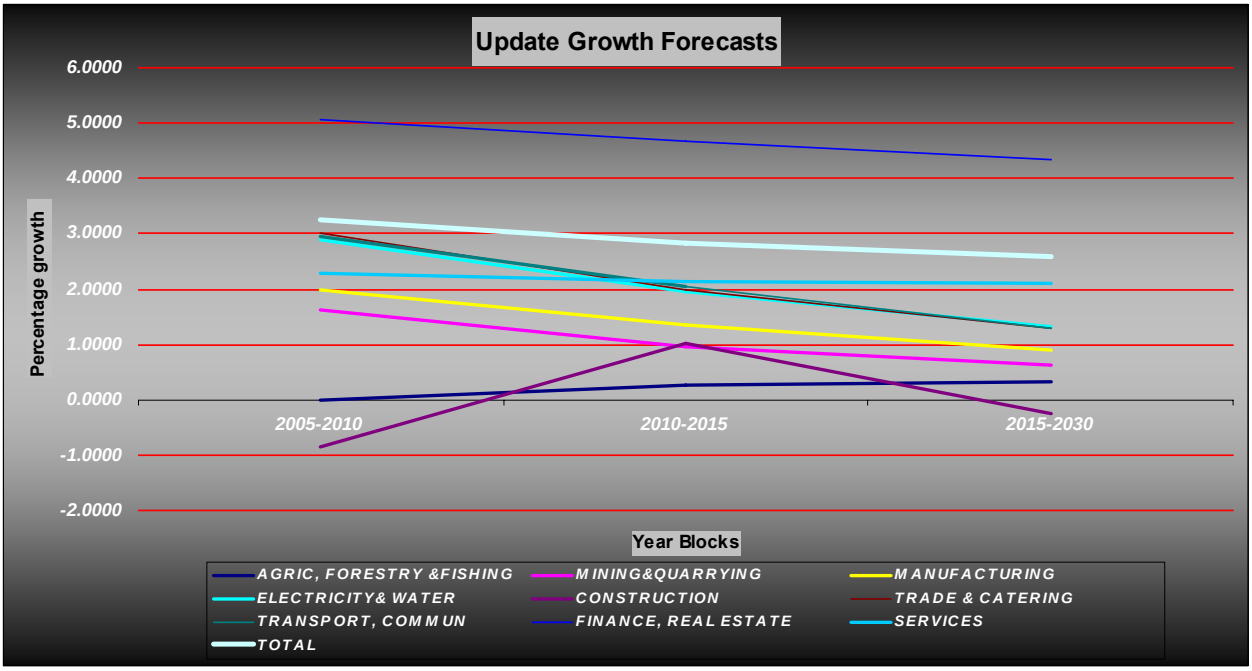
In light of the above findings, the following variables have been changed and tested accordingly:

Table 4: Updated Forecasts with Tested Variable Changes

VARIABLE	Proxy Indicator	FORECASTS		
		2005-2010	2010-2015	2015-2030
Domestic Income	CT population growth (average annual) medium	0.92%	0.47%	0.20%
Growth in national output	Real GDP growth	4.60%	4.60%	4.31%
Capital formation/ investment	Change in prime rate	7.00%	3.00%	2.00%
Government expenditure 1	Real budgeted spending on salaries and wages 2006/7-2008/9 (municipal, province)	1.80%	1.80%	1.80%
Government expenditure 2	Real budgeted capital spending (municipal, province, national, agencies)	9.70%	7.28%	2.43%
Global demand	Real global output growth	3.20%	3.20%	3.00%
Exchange rate	% Change in R:$	4.00%	0.00%	0.00%
Oil price	% Change in price (2004 prices dollar/barrel)	18.50%	8.00%	3.00%

Domestic income and growth in national output remain unchanged, along with government expenditure forecasts and global demand. These figures were seen to be accurate. The changes have occurred in Capital formation, Exchange rates and the Oil price; assumptions underpinning these alterations appear below:

Figure 2: Updated Economic Growth Scenarios – Output



Source: Futurelead and City of Cape Town (2007)

Assumptions

First, interest rates have been hiked by the Reserve Bank seven consecutive times over the last seven quarters, resulting in a cumulative percentage increase of approximately 33% between 2005 and 2007. Disaggregated over time, it is reasonable to forecast a +7% change per annum between 2005 and 2010 (contrary to the original prediction of -7%.) It is also likely that the Bank will continue to raise the rate by marginal amounts until inflation comes back into the target range of between 3 and 6%.

Second, it is presumed that the exchange rate will remain relatively steady over the period despite the depreciation between 2005 and 2007. This is largely due to expected portfolio investments that will bolster the currency on the back of higher interest rates. Ordinarily, though, one would expect to see the Rand deteriorate[1] due to inflationary pressures and an increasingly wider current account deficit. In the short term, the stabilised Rand will mitigate against high import costs, which will prevent oil price related inflation and also reduces the cost of imported goods and services necessary for the government's expansive infrastructure drive.

Third, the world oil price is not likely to stabilise either. Our estimate of an 18.5% increase per annum is 'middle-of-the-road' in the face of legitimate peak oil theories, which assert that a global supply crunch will drive prices ever higher. Furthermore, "Analysts said mounting tensions between Turkey and northern Iraq had helped inject nervousness into an already stretched market. The Middle East pumps a third of the world's oil and supply disruptions there can hugely impact the oil price" (Business Day, October 16 2007). This is of serious concern for Cape Town's poor as a high proportion of their income is spent on products whose price is directly influenced by the oil price (such as food and transport), despite a temporarily stronger currency. Geopolitics has remained relatively steady for the last nine months, therefore speculation on the increase in oil price has moved conservatively, but anticipation of unrest in oil producing

[1] Please note that depreciation in the Rand is expressed as a percentage increase in the value of the Rand to the Dollar. This is because depreciation requires more Rands to buy the same amount of Dollars.

regions is again spiking the price predictions. This year alone, the oil price has increased by more than 38% (own calculations based on World Bank data – see Annexure B.)

Constraints

The original constraints of the model were constructed as follows:

Table 5: Original Forecast Constraints to the Cape Town Economy

CONSTRAINT	Annual constraint to growth		
	2005-2010	2010-2015	2015-2030
Transport	0.957	0.957	0.957
Labour Issues	0.991	0.991	0.991
Skills	0.993	0.992	0.988
Other infrastructure and resources (electricity, telecoms and water)	0.996	0.996	0.996
Crime and grime	0.996	0.996	0.996

Each constraint indicated above was calculated into the performance of each sector of the economy. In simple terms, if any one sector is affected very heavily by any of these constraints, then it will only perform at the relevant percentage of its original estimate. For instance, if the mining sector would have grown by 10% per annum without a "labour issues" constraint, but is heavily affected by labour issues, then it would only grow by 0.957 of 10%. Of course, each sector will respond in varying degrees to the constraints that are relevant to it. The model is particularly sensitive to changes in these constraints, as they are built into every sector. As such, they were altered with particular care to avoid an over reaction in the final account.

The updated Constraints appear below, followed by an explanation of the assumptions

Table 6: Updated Forecast Constraints to the Cape Town Economy

CONSTRAINT	Annual constraint to growth		
	2005-2010	2010-2015	2015-2030
Transport	0.957	0.957	0.957
Labour Issues	0.991	0.991	0.991
Skills	0.957	0.992	0.988
Other infrastructure and resources (electricity, telecoms and water)	0.7	0.75	0.98
Crime and grime	0.996	0.996	0.996

Assumptions

Electricity Constraints

Electricity prices are likely to be hiked by 18%, 17%, and 30% respectively over the next 3 years if the National Energy Regulator (NERSA) permits Eskom's proposed tariff increases. Eskom, the country's national supplier of coal-fired power, have announced that they are operating within 8% of their maximum power generating capacity. Independent analysts hold that this is doubtful, with increased load-shedding and blackouts becoming a common phenomenon across the country. Failure to plan ahead and government's insistence on the continuation of South Africa's 'investment attraction' as a destination of cheap electricity has created an electricity security crisis. The irony of this situation is that investors are more likely to be deterred by the current unavailability of supply rather than by the prospect of cheap electricity. That said, even if the tariff increases go ahead, South Africa will still be the cheapest supplier of electricity on the planet.

Power blackouts have been particularly costly to Cape Town over the last few years, and estimates of productivity and value lost runs into billions of Rands. The Koeberg Nuclear Reactor powers most of Cape Town's electricity requirements, but if anything malfunctions Cape Town has to rely on transmission of coal-fired power from 1500km away in Mpumulanga. The transmission lines were never designed to cope with that volume of electricity and the amount of power lost en route creates significant inefficiency.

In addition, coal-fired power contributes to South Africa's less-than-reputable status as the world's 13th highest emitter of Carbon Dioxide (CO_2). Continued reliance on coal and nuclear power (despite the uncertainty regarding the danger in waste disposal) will also be increasingly perceived as insufficiently "green" for new business looking to invest in Cape Town as the importance of environmental preservation moves ever higher on the global agenda.

Natural Resource Constraints

Cape Town's estimated ecological footprint stands at 128,264 square kilometres, which is close to the size of the Western Cape. In other words, Cape Town uses land absorptive and regenerative capacity that is 52 times larger than its jurisdictional area. The urban system is clearly resource-intensive. "Every oil price rise corresponds to net increases in the amounts of cash transferred from the Cape Town economy to national and global financial circuits" (Swilling, 2006). This means that less cash circulation is available in the local economy for households and businesses. A similar situation exists for water, building materials, coal-based energy and food supplies (whose prices are directly linked to the oil price) as mentioned earlier.

Future planning, then, must consider that these costs will continue to rise. Ecosystem thresholds will continue to constrain economic growth, and response strategies must be constructed on the premise of this consensus.

Cape Town's existing water supply is set to reach its limit by 2025. Despite this, its water use is highly inefficient. In 1998, 60% of all domestic water was consumed by the highest income bracket, while in 2000, 20% of the population had no piped water supply. The inefficiency is highlighted by the fact that 61% of all water used by households in Cape Town was used to flush toilets and transport sewerage – potable water purified by a costly purification plant. At the same time, 11% of the population had no waterborne sewerage facilities. Finally, of the 550,000 tonnes of sewerage produced annually, only 5% is recycled. It is feasible that productive recycling of sewerage would generate enough savings of purified water to cover the cost of providing sanitation to those currently unserviced.

Solid waste is also a hindrance to economic growth. Only 6.5% of residential and commercial waste is recycled. The bulk of the unrecycled waste goes to landfills located on the Cape Flats. Toxins leaking into these landfills are polluting underground aquifers. Most of this waste is produced by high income residential areas – 1.3kg of waste per person per day for high income areas, and only 0.35kg for low income areas. Effectively, then, the large poor communities on the Cape Flats host rubbish dumps that absorb waste generated by a minority of rich Capetonians; this is "eco-inefficiency subsidised by nature and the poor" (Swilling, 2006).

We have spent much time on the ecological constraints to growth as they have often been misunderstood or cast aside on political agendas: It is an issue that can no longer be swept under the carpet. Ecological efficiencies will translate into savings for households, businesses and the City of Cape Town. This argument holds exactly the same line of reasoning as the one that Telkom's high charges should be reduced to attract businesses to South Africa. On this, much has been written about the constraint of high telecoms costs to doing business in South Africa. For as long as the infrastructure remains under the control of Telkom's monopoly, the economy remains unlikely to take off.

The Transport, Skills and "Crime and Grime" constraints remain as they did at the construction of the original model (see Annexure A). In an optimistic scenario, the transport restraint could be relaxed against the current implementation of the Integrated Transport Plan (ITP), but this is beyond the scope of this paper.

Concluding Remarks and Implications

The Cape Town Economy is a complex entity. It is important to conceptualise it as a dynamic system of ever-changing parts, some present within and some affecting it from the outside. The growth scenarios model has aimed to endogenise some of the external variables, though this still cannot account for an external shock (such as an immediate rise in the oil price of $20 a barrel, or other such unpredictable occurrences.) The original model was a robust effort, especially in light of the difficulty of capturing all the influencing variables, as well as the relationship between them in terms of their effect on economic growth.

Updating the model has demonstrated how quickly variables can change. However, this does not undermine the strength of the model, as its only true test of reliability can only occur in 2030. That said, it has been shown that interest rates have moved up quicker than expected, the Rand value is plausibly overvalued at present, and the oil price is likely to increase more rapidly than initially expected. These variables have a considerable effect at the local level, and it is important that this be captured.

Practical implications of the updated model will provide a useful informant to practical recommendations going forward.

First, small business is likely to suffer as a result of increased interest rates. The cost of borrowing capital is likely to turn risk-averse investors away as well as slowing any plans for business expansion. Given the importance of SMME development as a catalyst for job creation, this turn of events is cause for concern. However, businesses that rely on imported products stand to benefit as higher interest rates buoy the Rand. Overall, though, the likelihood that economic growth rates are likely to slow towards 2015 will lower the level of demand for products and services produced by business.

Second, the threat created by natural resource constraints also carries within it an opportunity to react proactively. Cape Town's behaviour alone is unlikely to have any noticeable effect on global warming, but a move towards positioning itself as a "green hub" can only serve to attract investment and benefit the economy in the long run. Of course, the process of being perceived as a "green" destination requires concrete action. The most obvious action appears to be more efficient water use and waste recycling. Beyond that, eco-tourism to both create jobs and protect biodiversity is something which carries great economic potential. Appreciation of the natural environment will determine the extent to which the economy can grow at all in the future – to be sure, if water runs out, and economic growth depends on reliable water supply, economic growth will be retarded.

Third, energy supply concerns will dampen economic growth efforts. The implications are twofold. First, Cape Town must work hard to reduce its dependence on oil imports, as this model has demonstrated that rising global oil prices will have a significant on the economy and thus indirectly on the poor, but will also have an immediate direct effect on the poor through food and transport prices. Second, alternative electricity supply (preferably renewable) must become a priority that is coupled with the importance of achieving economic growth. The latter cannot occur without the former. A disclaimer must accompany this recommendation. While the City looks for "quick wins" regarding its electricity supply crisis, it must be careful to refrain from entrenching Eskom's position as a monopoly. Part of the idea would be to stimulate a growing private market in renewable energy that will serve to provide viable competition for Eskom.

Finally, the skills and transport constraints should never be underestimated. Importing foreign skills to cover the skills deficit is potentially risky. Skilled foreigners earning high salaries will tend to raise property prices in areas that are traditionally close to areas of work. This means that local labour will tend to live further away, thus increasing commuter time, congestion and placing further strain on service infrastructure that is currently unable to be maintained and upgraded, let alone expanded. Furthermore, importing skills continues to grow the economy but almost at the expense of the unemployed (given that unemployment is a function of lack of skill in the labour force). It can therefore not be overstated that the City's role in equipping the labour force with skills is imperative to future economic growth.

Given that transport constraints are the most significant constraint to job search in Cape Town, the thorough implementation of the Integrated Transport Plan is a serious priority. A well functioning transport system will serve to reduce congestion, pollution and commuter time, thus promoting productivity and service delivery efficacy.

References: (to be properly updated)

1. World Bank Database
2. Business Day Newspaper
3. Swilling, M. Sustainability and Infrastructure Planning in South Africa: a Cape Town Case Study
4. IMF Working paper – Oil Shock vulnerability in Developing Economies
5. Quantec Database
6. Futurelead and City of Cape Town

Annexure A – Original Economic Growth Scenarios Model

Annexure B – Oil Price History Excel Spreadsheet