

THE SOUTH AFRICAN RAND EXPOSÉ



The SA Rand Exposé THE FUNDAMENTAL TRUTH





The South African Rand Exposé – the Fundamental Truth

The FACTS ...the FALLACIES ...and the TRUTH!

**A comprehensive non-economist contrarian, but realist overview of
the South African economy and the Rand**

September 2012

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- Updated and refined quarterly

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INTRODUCTORY PREFACE

This is not your Economics 101 overview – but is a realist (perhaps contrarian – but realist) overview of the South African economy and its effect on the Rand (and vice-versa) giving you the fundamentals, the facts, the fallacies, and the truth in this more accurately entitled:

“Rand Exposé – The Fundamental Truth”

ex-po-sé [èks pō záy]

Definition: 1. an exposure or revelation, often by way of an article or book, which provides shocking or surprising information
2. a declaration of facts: a formal and systematic statement giving facts about something.

The time has come to let it all out – **the facts, the fallacies and the truth** on the Rand. You will get an understanding, we believe, perhaps like never before, as we give you the following lowdown:

- ❖ What is an exchange rate, why it is needed and why exchange rates need to adjust
- ❖ What the Rand's true value is, based on at least 3 different collaborations of factual data
- ❖ How “competitive” South Africa actually is compared to its trading partners
- ❖ How to analyze an economy like a business – like your business
- ❖ Whether direct foreign investment is all it is made out to be
- ❖ Whether the past few years of economic growth has actually been healthy
- ❖ Whether South Africa is really still a commodity-based economy
- ❖ What danger signals you should be looking out for, and what has happened historically

And then, most importantly:

- ❖ Why the Rand mostly doesn't move in line with trade-competitive fundamentals
- ❖ Understanding the global foreign exchange market, the Rand exchange market and the players in it
- ❖ The difference between economic and financial markets and what actually drives each of them
- ❖ How a discovery 80 years ago and its recent refinement helps us to see what is happening today
- ❖ How you can use this knowledge to provide you with a level of certainty instead of uncertainty
- ❖ ...AND how **you** in future can benefit and profit by knowing this

This is a **FREE REPORT**, because we want to ensure that this gets to as many persons as possible that are affected by the South African economy, especially by the Rand's movements.

BUT (and this is important)...we want YOU to please do your bit.

The basis we are sharing this with you is that, if you find value in this FREE report, you will undertake to ensure that every person you know that is affected by the Rand's movements gets their hands on this as well – you owe it to them to ensure they see things as they should, so that they don't get hurt again.

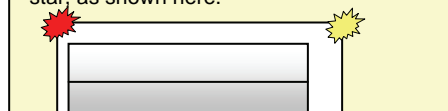
And do you know? They will be indebted to you!

Agreed? OK, here goes.

Thanks and enjoy!


James Paynter
Director and Market Analyst

Note: We have identified charts that have been **updated** since the last issue with a **yellow** star and **new** charts with a **red** star, as shown here.



The Story Behind the Truth

Having been in an export-related business since 1993 (tank container investment management – see www.premiertank.co.za), by 2001 we fully believed (after being 8 years in the business) that we were clearly operating in a definite, steadily-depreciating currency market.

In this period we had seen the Rand rise (fall against the Dollar) in a clear trend from the low R3's to the mid R6's by 1998, and we were not surprised to see this trend continue the next 3 years – although the sharpness of the rise in 2001 to over R13 by the end of the year was mind-numbing.



But from then, our world turned upside down, as the market retraced sharply to R8.50 the next 12 months, and to R6.20 by December 2003 and further in the next few months. And we burnt our fingers badly, like many others out there.

In a few short years, our business model had been turned on its head. This change in the Rand's fortunes was lauded by economists, government and SARB Governor alike, who with one voice acclaimed:

"A Strong Rand is Good – it means a Strong Economy"

...BUT, did it really?

We asked ourselves, "Was this true, and if so, what had changed?"

We looked for answers from traditional "experts". But the more we heard and the more we read, the more it did not make any real, logical sense. Eventually, we decided the only way was for us ourselves to undertake an in-depth study into the Rand, looking at the real fundamentals of the South African economy to determine where the Rand should be, based on these base fundamentals, whether we were now in a "strengthening currency economy" going forward, and to answer the question as to whether the above statement was true or not.

The results of our initial study were first published in July 2004. But since that date, we have continually updated and expanded it to cover other aspects that affect the South African economy as a whole, as we have understood better what moves this market.

And then, of course, since that date, we have had another MASSIVE rollercoaster ride on the Rand:



In effect, by early 2011 we were back to where persons are asking the same questions we had back in 2004, with the Rand having strengthened significantly after having weakened exponentially in the last half of 2008. This makes the need to have the information contained in this study as vital as it ever was – understanding both the fundamentals ... and understanding the truth.

Having discovered the truth, the whole truth and nothing but the truth, we take pleasure in sharing it with you in this completely revised and updated issue – **so you can share it with others**. In order to comply with the Copyright requirements, please request these persons to download their own copy of this Report from our website [here](http://www.DynamicOutcomes.co.za).

NOTE: This issue has been fully revised & updated with the latest available data to provide a current insight into the fundamentals as well as what actually moves the markets, and how knowing this can bring some certainty in an area of uncertainty.

In order to understand the fundamentals regarding an exchange rate and its effect on its economy and vice-versa, we need to first answer 3 questions:

- **What is an exchange rate?**
- **Why should an exchange rate adjust?**
- **What are the base fundamental factors that cause a change in product or service cost?**

1) WHAT IS AN EXCHANGE RATE?

In a **closed economy**, there is no export or import of goods and services. And as a result, there is no need for an exchange rate in respect of the local currency used for purchase and sale within that economy – it is insulated from every other economy.

However, when we get an **open economy**, there is now an exchange (import and export) of goods and services between that economy and the one it is trading with.

There therefore needs to be an agreed rate at which a country's goods or services are priced, in the currency of the country being traded with, compared with its price in the home currency.

And thus you have an exchange rate – a rate at which one currency is exchanged for another, based on the cost of goods and services in each of these economies.

So, as an example, if we have a widget that costs R700 to produce here, and costs \$100 to produce in the US, the exchange rate based on these costs is $R700 / \$100 = R7.00$ per 1 US Dollar.

2) WHY SHOULD AN EXCHANGE RATE ADJUST?

Now, this rate of R8.00 might be fine at a point in time, but what about a year later?

As we know, the cost of goods or services in any economy does not remain static, but adjusts from continuously, and could vary between one economy and its trading partner.

Therefore, if there is a difference in the new cost to produce the same goods or services domestically compared with the same trading partner's cost, in order for these two countries to continue to trade (whether export or import) at competitive prices, there needs to be an **adjustment of the exchange rate**.

South Africa	(Illustrative data used)	United States
R 800	Domestic Price	\$100
= Exchange Rate of R8.00/\$		
5.0%	Change in Product Cost	3.0%
New Domestic Price		
R 840	adjusted change in costs	\$103
= New Exchange Rate of R8.16/\$		

So to use the example above, if there is a 5% increase in the cost of a widget domestically (from R700 to R735), but only a 3% increase to produce the same widget in the USA (from \$100 to \$103), we see from the table below that the exchange rate needs to adjust from R7.00 to R7.14 in order for these two economies to continue trading competitively.

And therefore you see the need for this **adjusting mechanism**, so that the two economies can continue to trade competitively.

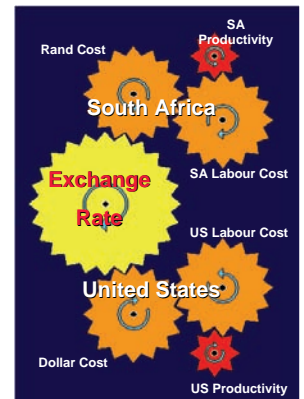
International trade succeeds through this essential gear working efficiently, or fails if interfered with!

3) WHAT ARE THE FUNDAMENTAL FACTORS?

Having understood the need for an exchange rate and for it to adjust when the cost of these goods or services changes, we now need to answer the question:

What causes this adjustment in domestic cost of goods or service?

If we bring it down to base fundamentals, a Domestic Supply Chain Cost of any product and its ultimate Value Added can be reduced to its essential elements:



Labour Cost and Productivity

So, year on year, a product's cost will adjust depending on:

- **Change in Labour Cost**
- **Change in Productivity**

So to expand the summary table, we could break down the net change in product cost as follows:

South Africa	(Illustrative data used)	United States
R 800	Domestic Price	\$100
= Exchange Rate of R8.00/\$		
106%	Labour Cost Index	103%
101%	Productivity Index	100%
=		
5.0%	Change in Product Cost	3.0%
R 840	Local Price	\$103
= New Exchange Rate of R8.16/\$		

These 3 steps are fundamental to understand the primary reason as to why an exchange rate exists, and why it may need to adjust regularly.

So, to summarize:

In essence, an exchange rate is the **adjusting factor** (an economic mechanism) between a domestic economy and that of its international trading partners...

...so that exported goods & services remain competitive

...and goods produced for local consumption are not threatened by cheaper imports.

The exchange rate **compensates for product cost differentials**, and other factors that affect international trade competitiveness.

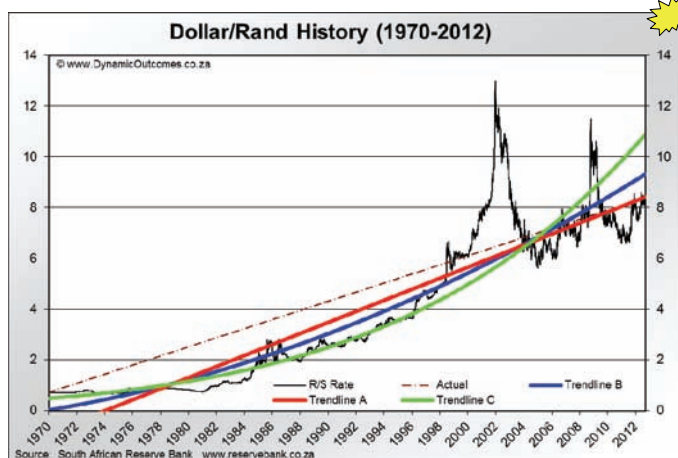
So now we have the necessary understanding, we now need to apply this to the Rand and the South African economy, through answering the following questions:

- **What is the present trendline value** of the Rand?
- What are the **product cost** and **competitiveness differentials** between South Africa and its trading partners?
- **How have these factors changed** over the past years, and especially since the opening up of the South African economy to the global market in 1994?
- **What should be expected for the future based on these fundamentals?**

4) WHAT IS THE RAND'S PRESENT TRENDLINE VALUE?

Taking a look at the long term history of the Rand provides some indication as to how the Rand has adjusted in the past, and might be expected to move in the future.

For a start, let's take a look at the long term historical performance of the Rand from 1970, when the Rand was valued (fixed) at 71 cents to the Dollar!



The above Graph shows the **Rand's performance since 1970** (in **Black**) reflecting *daily average* over the 40+ year period (past quarter's data follows in brackets in each case).

Based on the actual present exchange rate in September 2012

of **R8.38/\$** [Mar'12=R7.68], the average historical trendline depreciation has been **5.9%** [Mar'12=5.8%] per annum since January 1970 (dashed **Brown** line).

Then, off this data, we have computed two different trendlines:

Linear Regression Trendline (Red)

The first is a **Linear Regression Trendline** from January 1970 to date.

This linear trendline has an annual depreciation of **5.9%** [Mar'12=6.0%] and indicates the Rand should at present be **R8.40/\$** [Mar'12=R8.30].

Polynomial Regression Trendline B (Blue)

Instead of a pure linear regression, we have produced a **Polynomial Regression Trendline** for the full period, which is a curve-fitting trendline instead of a linear one.

- This "curve-fitting" trendline has an annual depreciation of **6.2%** [Mar'12=6.2%] and indicates that the Rand's fair value is **R9.30** [Mar'12=R9.25] to the Dollar at present.

Exponential Trendline C (Green)

- We have also included an **Exponential Trendline** for this period, which indicates that the Rand's fair value is around **R10.90/\$** [Mar'12=R10.70] which equates to an annual depreciation of **6.6%** [6.6%] since 1970.

So, what can we learn from this?

- The actual average depreciation per annum compounded is **5.9%** for the period 1970 to date (**Brown** dashed line).

This means that the currency has had to adjust by an average of 5.9% year on year during these 40+ years for South African goods to continue to be competitive.

- On a linear trendline basis (**Red** line), the Rand at present (at R8.38/\$) is fair-valued and needs to adjust at **6.0%** annually for South African goods to continue to be competitive.
- And on a curve-fitting basis,

The **Blue** polynomial trendline suggests a present fair-value of **R9.30/\$**, which would require an annual depreciation of **6.2%** from 1970.

- The **Green** exponential trendline suggest present fair-value of **R10.90/\$**, which would require an annual depreciation of **6.6%** per annum.

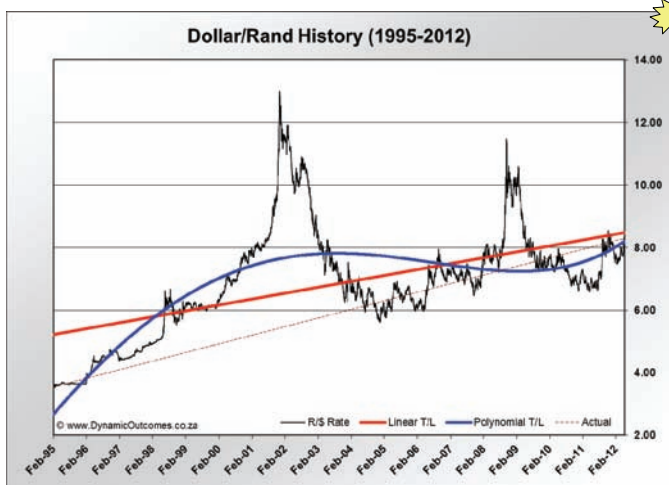
So, based on a long term historical trend since 1970, the Rand's present true trendline value is between **R8.40 and R10.90** and should be expected to depreciate between **5.9% and 6.6% per annum**.

However, when we looked at this, we believed this period (1970 to present) could be seen to be too long a view considering the considerable changes that had taken place in South Africa since 1994:

- abolition of apartheid,
- establishment of a democratic government
- scrapping of the Financial Rand
- reduction of import duties
- monetary policy tied to inflation targeting
- relaxation of Exchange Controls

So we then said, let's look at the period since the Financial Rand was discontinued in February 1995 and ceased to exercise an abnormal influence on the Rand currency market:

The next Graph shows the Rand movement (**Black** line) since February 1995 to date, reflecting the daily average rate since that date, showing the rise from under R4.00/\$ up to the peak of R13.85 in December 2001 and then down to the low of R5.65 in 2004 before rising up to the R11.85 level in 2008 before falling back down below the R7.00 level again, until it breached this level early August 2011 and then hit 8.60 in November 2011, before falling below R8.00 again.



Based on the actual present exchange rate in September 2012 of **R8.38/\$** [Mar'12=R7.68] the average historical depreciation has been **5.0%** [Mar'12=4.6%] per annum since February 1995 (dashed **Brown** line).

Then, off this data, we have computed two trendlines:

Linear Regression Trendline A (Red)

The first is a linear regression trendline from February 1995 to date, which takes into account all the abnormal spikes and troughs in this period.

- This linear trendline indicates that fair-value for the Rand at present is **R8.55/\$** [Mar'12=R8.50].

Polynomial Trendline B (Blue)

Instead of a pure linear regression, we have again produced a polynomial regression for the full period, which is a curve-fitting trendline instead of a linear one.

As you will notice, this curve effectively oscillates about Trendline A (**Red** line).

- This "curve-fitting" trendline indicates that the Rand at **R8.45** [Mar'12=R8.15] is at fair value is to the Dollar at present.

5) "IT'S JUST DOLLAR WEAKNESS" – OR IS IT?

Now, we have looked at the Rand against the US Dollar, but this is not a complete picture, because it could be said that any Rand strength is purely due to Dollar weakness and vice-versa.

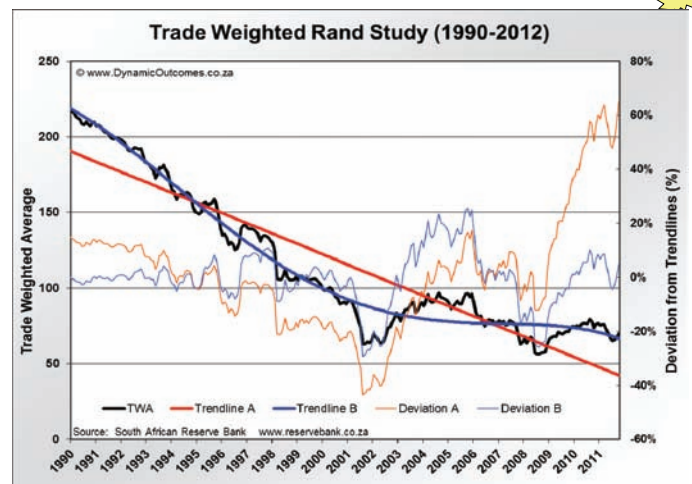
This perhaps has some merit outwardly...

...but is it *the truth*?

Let us take a look, by analyzing the **Trade Weighted Value** of the Rand – how it measures up against a trade-related basket of currencies, not just the Dollar.

Firstly, we have to determine the trend of the Trade Weighted Value of the Rand, which we show next in an updated Chart.

The above Graph shows the monthly Trade Weighted value of



the Rand (source: SA Reserve Bank) from 1990 to date (**Black** Line)

Based off this data, we have computed two trendlines:

May 1990 – Aug 2012 Linear Trendline A (Red)

The first again is a **Linear Regression Trendline** from May 1990 to date (**Red** line).

- This indicates that the March 2012 Trendline Trade Weighted Value is **39.04** [Mar'12=39.83] compared with an Actual Trade Weighted Value of **66.90** [Mar'12=71.04] (base being 100 in year 2000).

The above data enabled us to produce a Deviation (**Orange** line) between the **Actual Trade Weighted Value** (**Black** line) from the regression Trendline Trade Weighted Value over the same period (**Red** line).

This data reveals the following:

- In Q4 2001, the Rand was 43% *undervalued* compared with its trendline Trade Weighted Value.
- In Q2 2006, the Rand was 17% *overvalued* compared with its trendline Trade Weighted Value
- Over the next couple of years, with the depreciation of the Rand against its trading partners, this reduced to being fair value by Q1 2008.
- However, this has reversed once again to **71% overvalued** by August 2012 (Mar'12=78%), indicating the Rand is *significantly more overvalued on this basis than in 2006*.

May 1990 – Aug 2012 Polynomial Trendline B (Blue)

We have also produced a **Polynomial Regression Trendline** for the full period – a curve-fitting rather than a linear trendline.

Again, as you will notice, this curve effectively oscillates about Trendline A (Red line).

- This analysis indicates that the Aug 2012 Polynomial Trendline Trade Weighted Value is **63.43** [Mar'12=64.96 compared with the Actual Trade Weighted Value of **66.90** [Mar'12=71.04] (base being 100 in year 2000).

Again, we have used this data to produce a Deviation (Aqua line) between the Actual Trade Weighted Value (Black line) from the Polynomial Trendline Trade Weighted Value over the same period (Blue line).

As can be seen, the variance is not as marked as the linear trendline, but we can still deduce the following:

- In Q4 2001, the Rand was 29% *undervalued* compared with its trendline Trade Weighted Value.
- In Q1 2006, the Rand was 25% *overvalued* compared with its polynomial trendline Trade Weighted Value
- Over the next couple of years, with the depreciation of the Rand against its trading partners, this reversed again to being 26% *undervalued* by Q4 2008.
- However, this reversed once again to 10% overvalued by Q4 2010 before reducing to 5% overvalued by August 2012.

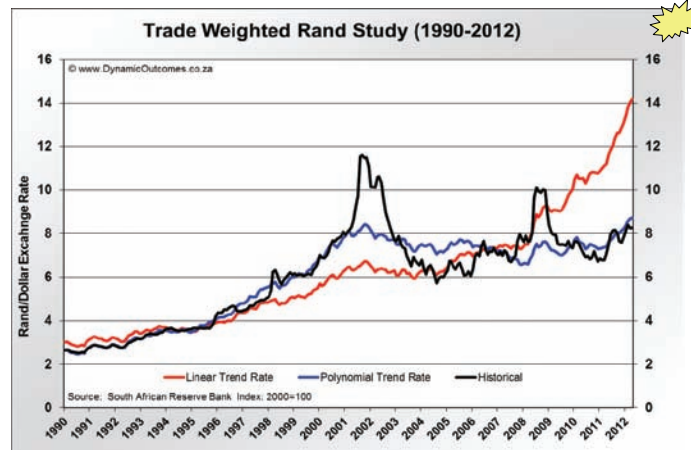
Now, in order to interpret this data in numbers that are meaningful, we have incorporated the Dollar/Rand rates that result from the above two deviation lines into the below chart.

This chart now reflects the following:

- The **Actual** Dollar/Rand monthly exchange rate from 1990 to date (**Black Line**).
- An **Adjusted** Dollar/Rand exchange rate, computed by adjusting the actual monthly exchange rate by the Deviation Factors (referred to above), in respect of:
 - The linear regression trendline (Red line).
 - The polynomial regression trendline (Blue line).

By applying this Deviation Factor to the actual Rand exchange rates, we can establish what **the Rand's trendline rate would be** for the period 1990 to date **based on international competitiveness with trading partners**.

...that is, recognizing currency movements of *all* South Africa's major trading partners in relation to the Rand, using the SA Reserve Bank's computed index.



The revealing results are as follows:

A. On a linear regression basis (Trendline A):

- The Rand was undervalued from mid-1998 through to Q2 2004.
- It then moved into mostly overvalued territory until Q4 2008, touching the trendline a couple of times during this period.
- Since the 2008 peak, it has fallen again sharply into overvalued territory.
- As at **Aug 2012** the Rand should be **R14.20/\$** [Mar'12=R13.55] on a Trade Weighted basis.

B. On a polynomial regression basis (Trendline B):

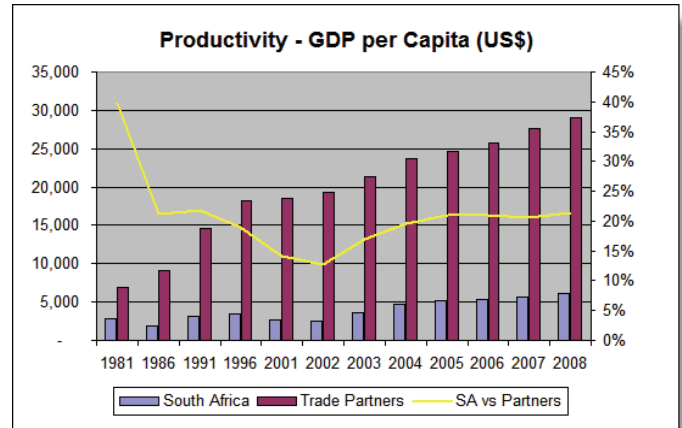
- The Rand was undervalued from mid-2001 until mid-2003, before moving into overvalued territory for the next three years.
- It then remained fair-valued until late 2007, before once again heading into undervalued territory the next couple of years.
- From early 2010, this has reversed back into overvalued territory until late in 2011, when it came back to fair value, this trendline indicating that as at **August 2012** the Rand should be **R8.30/\$** [Mar'12=R8.30] on a Trade Weighted basis.

Surprising stuff, considering that it has been claimed that Rand strength was merely due to just Dollar weakness.

To summarise then, we have the following indication of where the Rand's present value lies:

40+ Year History	Value	Depr p.a.
1970 – 2012 Actual	8.38	5.9%
1970 – 2012 Linear Trendline	8.40	5.9%
1970 – 2012 Polynomial Trendline	9.30	6.2%
1970 – 2012 Exponential Trendline	10.90	6.6%

17+ Year History (since abolition of apartheid & FinRand)	Value	Depr p.a.
Feb 1995 – Sep 2012 Actual	8.40	5.0%
Feb 1995 – Sep 2012 Linear Trendline	8.55	
Feb 1995 – Sep 2012 Polynomial T/Line	8.45	
Trade Weighted Linear Trendline	14.20	
Trade Weighted Polynomial T/Line	8.75	

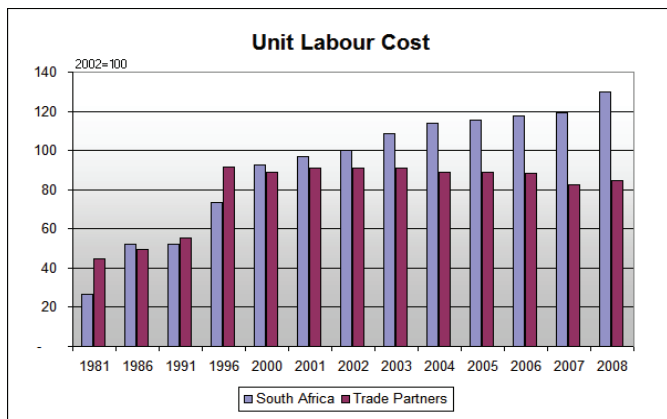


BUT, as already stated, an exchange rate is an adjusting mechanism for differences in productivity and labour cost between one economy and another so that they can continue to trade competitively.

It was essential therefore to investigate how this definition of the Rand correlated with the above Trade Weighted analysis.

We needed to determine how South Africa has fared historically.

6) INTERNATIONAL COMPETITIVENESS



Based on data gleaned from the Bureau of Labour Statistics, the OECD and the International Monetary Fund, we were able to look at comparisons in Labour Cost and Productivity between South Africa and its Trading Partners (latest full available 2008).

Firstly, the above chart shows the Labour Cost Index for South Africa and its trading partners.

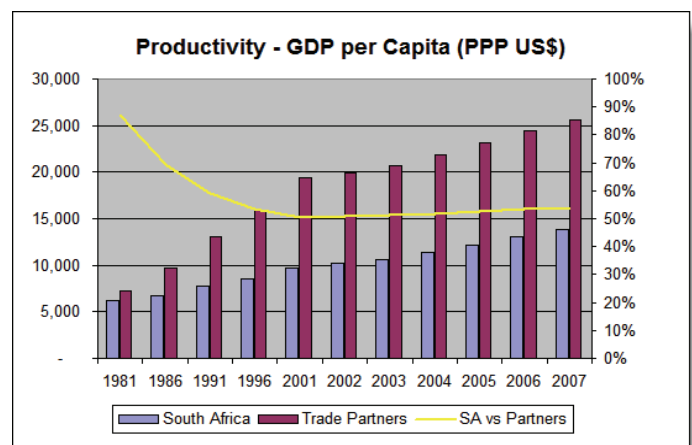
You can see that South Africa's Labour Cost Index has increased steadily – compared with its trading partners, which have actually gradually reduced slightly since 1996.

Compared with its trading partners, South Africa's labour cost has increased by **11% p.a.** since 1981, **7.0% p.a.** since 1996, and **5.8% p.a.** since 2001.

As can be clearly seen from the above Chart, South Africa is still way behind in Productivity, currently **just 21% of its trading partners** (Yellow Line), down from 40% in 1981, but improved from 13% in 2002, almost recovering to 1991 levels.

Another measurement of Productivity would be on a Purchasing Power Parity (PPP) basis, shown in the Chart below.

On this basis, South Africa is currently producing **55% of its Trading Partners GDP per Capita** (Yellow Line again). This has dropped from 87% in 1981 but has recovered slightly from around the 50% level in 2001.



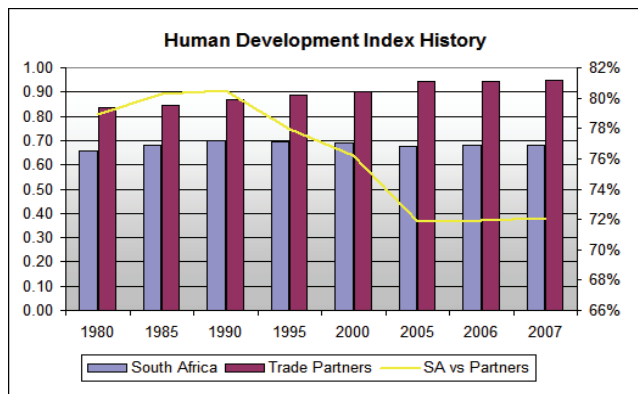
Compared with its trading partners on a GDP per Capita (US\$) or PPP (US\$) basis, South Africa's productivity is between **21% and 55% of its trading partners** – with a sharp drop from 1981 levels and 2008 showing not much change from mid-1990 levels

Now this computation is purely on GDP per capita and gives a good indication, but not an overall picture.

An overall comparison would be to use the data as provided by the United Nations Development Program (www.undp.org).

One of its reports provides a Human Development Index (HDI) which is a composite measurement incorporating life expectancy, literacy, education and PPP GDP/capita per nation.

Going onto Productivity, we have used GDP per capita as a first yardstick here.



The above Chart (latest available data) clearly shows the true story of the progress over the past 30 years or so. And here's the shocker:

In 2007, South Africa's Human Development Index (HDI) was 0.683 – ranking **129th out of 182 countries**.

More significantly, South Africa **dropped 42 places** between 1990 and 2007!

From the chart it can be seen that to 1990, South Africa not only kept abreast of its trading partners in terms of Human Development, but improved, reaching 81% of that of its trading partners.

But since 1990, it has fallen away sharply – virtually back to 1980 levels! And by comparison, the steady upward trend of other developed and developing countries has continued, resulting in SA dropping to 72% of the HDI of its trading partners.

So, has South Africa kept up with its trading partners?

...Definitely not – we are back to where we were in 1980!

Will this affect South Africa compete with its trading partners?

...Yes, it most certainly has – and will!

The big question arises: **What has been the cause?**

Well, the following three factors have had a significant effect:

➤ HIV/AIDS Pandemic

- The United Nations estimated in 2006 that there was a 18.8% prevalence of HIV/AIDS in persons aged 15 to 49 in 2006.
- This equates to 5.5 million people living with HIV.
- In the same group 71% of deaths are caused by AIDS.
- South African average life expectancy is now 49 years, and is forecast to be 41 by 2015.

- Two macroeconomic studies quoted by the IMF estimate that average labour hours lost amounts to between 33.3% to 40% for employees with AIDS.
- Extrapolating this into the workforce, based on an estimate that 25% of the 5.5 million affected had full-developed AIDS and were employed, this would equate to a loss of close to a billion man hours per annum, or 1.5% of total man hours per annum.

➤ Black Economic Empowerment (BEE/BBBEE)

- Perhaps a touchy subject in some quarters, but the bare facts are that this is a race-based policy which has not worked and has seriously affected the South African economic machinery adversely.
- The government's implementation of this policy has meant that, in most cases competent, highly-qualified and trained persons in positions of vital importance and responsibility (in both government and quasi-government organizations as well as public and private enterprises) have been replaced by unqualified and incompetent persons purely on the basis of skin colour.
- This has resulted in a significant reduction in efficiency and productivity, an increase in corruption, and a breakdown in the country's essential services and infrastructure – affecting Health Services, Education, Electricity Supply, Fuel and Power Supply, Crime Prevention and Transportation networks.
- The Eskom electricity debacle is a case in point. How many billions have been lost due to bad planning, a lack of foresight and preventative maintenance?

- The enforced policing of this policy in businesses has resulted in a similar reduction in efficiency and productivity.

➤ Emigration of Skilled Labour/Professionals

- A secondary effect of BEE (directly or indirectly) is the massive exodus of skills, qualifications and experience, especially of professionals and highly skilled tradesmen, who either cannot get work in South Africa due to BEE implementation and/or have left due to the breakdown in essential services and increase in crime.
- Statistics released by the SA Institute of Race Relations in 2007 said that one million white people had left the country.
- This is set to rise even more after recent ongoing power outages and political uncertainty – in January 2008 applications for emigration increased 400% with some agents claiming the largest recorded enquiries in 23 years.
- These skills will take years to be replaced,

some never, and has a serious impact on this country's ability to compete with its trading partners.

We can now summarise this data regarding International Competitiveness:

- **SA labour cost** has increased at a higher rate than its international trading partners – **11%** annually since 1981, although this has reduced to **5.8%** since 2001.
- **SA productivity** is between **21% and 54%** of its trading partners and has decreased while increases were achieved by its trading partners – a differential of **5.8%** annually since 1981, although this has improved marginally (0.5%) since 2001.
- **SA Human Development Index** has fallen sharply since 1995 – almost back to 1980 levels – while all its trading partners have increased steadily.
- The three major Secondary Factors highlighted above all show in no uncertain terms that risks to the upside have increased dramatically in the recent short term, with the real effects on the economy probably still to be felt.

Since 1996 the situation seems to have improved, but from an overall perspective it would appear we have not moved too far at all, if the Human Development Index is anything to go by.

	Annual Differentials		
	1981-2008	2001-2008	Future
Primary Factors (Quantifiable Effects)	16.7%	5.4%	5.4%
Labour Cost	11.0%	5.8%	5.8%
Productivity	5.8%	-0.5%	-0.5%
Secondary Factors (Semi-definable Effects)	2.0%	2.0%	5.0%
AIDS Pandemic			↑
Black Economic Empowerment			↑
Emigration of Skilled Labour/Professionals			↑
Structural Factors (Indefinable Effects)		1.0%	4.0%
Infrastructure Inefficiencies (Transportation/Energy/Fuel)			↑
Crime and Security Factors			↑
Immigration Burden Costs			↑
Illiteracy/Education Levels			↓ ?
Unemployment Burden Costs			↑
Delivery Costs (remoteness from major markets)			→
Total		8.4%	14.4%

Using these data, we produced this summary comparing **South Africa's competitiveness with its trading partners** - broken down into Quantifiable, Semi-definable and Indefinable Effects.

Based on the above facts and assumptions:

The differential in competitiveness between South Africa and its trading partners is estimated to have been **8.4% annually from 2001 to 2008**, with the future in all likelihood looking bleaker, **possibly as high as 14.4%**.

So, there we have an overview of this country's fundamental competitiveness, but it will be of use to actually look at the actual trade figures to see how we have actually fared.

7) SOUTH AFRICA'S ECONOMY - A SIMPLISTIC VIEW

When looking at the performance of an economy, economists speak in terms of Trade Account, Services Account, Current

Account, Balance of Payments, Net Capital Inflows, etc. But what do these terms and numbers actually mean? Can we relate these numbers to an ordinary business, and if so, how?

The simplistic viewpoint set out hereunder helps to explain a complex situation, which is perplexing to many:

Consider South Africa to be a huge business venture, a private company, called **Republic of South Africa (Pty) Ltd**, and that:

- All SA's workforce are employees of RSA (Pty) Ltd
- There are various departments in RSA (Pty) Ltd making up the supply chain so that ultimate finished goods are sold to other companies i.e. exported to other countries.
- The interdepartmental transfers (trade within South Africa), although value added, are not accounted as turnover and profits, it is the finished goods and services when exported, and sold at profit, that achieve turnover and profits for RSA (Pty) Ltd.

The economic data relating to South Africa's foreign trade can be restructured in a form which suits this simple Company viewpoint, as set out in the Income Statement below (data in Rand billions).

Understandably, there is no scope in this summary to comment on the data in detail – **but please study it yourself**.

When *we* did so in 2004 for the first time, and with every update since –

It was for us the **Exposé of the Rand!**

As can be seen from this Income Statement, RSA (Pty) Ltd had a good year in 2002, recording a *Gross Profit* (Trade Surplus) of R50.2bn and a *Net Profit* (Current Account Surplus) of R9.7bn.

But that was the last. Since 2003, trade performance started sagging and the situation has progressively deteriorated:

- In 2004, a Gross Profit had reversed into a small Gross Loss, while Net Other Revenue Loss (Services Deficit) had also increased, resulting in a worrying R43 billion Total Net Loss, which further deteriorated in 2005 to a R54 billion loss.
- And then from 2006 through to 2008, both Gross Loss (Trade Deficit) and Net Other Revenue (Services Deficit) deteriorated sharply with Total Net Loss (Current Account deficit) hitting R162 billion (300% that of 2005)!
- From 2009, we have seen an encouraging turnaround on the trade side, with this turning into a Gross Profit (Trade Surplus) of R27bn in 2010 and R16bn in 2011.
- Net Other Revenue (Services Account) reduced from 2008 loss of R126bn and continued to do so, resulting in a lower Total Net Loss (Current Account deficit) of R75bn in 2010, but reversed again in 2011 to R99bn.

Income Statement for RSA (Pty) Ltd (R billions)											
Ordinary Description	Technical Description	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sales	Exports	333	291	311	358	448	538	704	556	625	747
Cost of Sales	Imports	-283	-265	-312	-360	-477	-574	-740	-554	-598	-730
Gross Profit/Loss	Trade Balance	50	27	-1	-2	-29	-36	-36	2	27	16
Other Revenue	Offshore Services	57	68	69	80	93	110	123	118	119	127
	Offshore Investment Interest/Dividends	20	18	18	26	37	43	42	27	26	30
Expenditures	Foreign-sourced Services	-70	-75	-85	-104	-126	-148	-178	-166	-171	-178
	Foreign Investment Interest/Dividends	-47	-51	-43	-54	-69	-109	-113	-78	-77	-94
Net Other Revenue	Services Account	-41	-39	-42	-52	-65	-104	-126	-99	-102	-115
Total Net Income	Current Account	10	-13	-43	-54	-94	-141	-162	-97	-75	-99
% of GDP		0.8%	-1.0%	-3.0%	-3.5%	-5.3%	-7.0%	-7.2%	-4.0%	-2.8%	-3.3%
Cash outflow requiring short-term funding:											
Bank Overdraft/Loans	Foreign-sourced Loans	0	-13	-43	-54	-94	-141	-162	-97	-75	-99

We believe the change in 2009 can be attributed mostly to the effect of the global recession, which reduced exports, but reduced imports even more (as consumer demand dropped sharply), and foreign investment interest and dividends fell along with global interest rates and company profits.

However, as we can see, this has reversed in 2010 and 2011, with increases in both exports and imports as well as the various elements of the Services Account, which has pushed up the Current Account deficit to 3.3% of GDP.

Let's put all this into graphic form by Quarter, to give a better picture of what has happened.

8) THE CURRENT ACCOUNT & ITS COMPONENTS

In previous updates of RSA (Pty) Ltd historical data, we have provided in-depth analysis of the Trade and Services Accounts, and the resultant effect on our Current Account, but since November 2010, we have condensed this into the essential analyses to understand what has happened in terms of this economy.

In the next Chart (overleaf), we show the two income generating sources of this economy since 1990 (quarterly annualized):

- Actual export of physical goods less goods imported (Trade Account – **Green** bars)
- Exported services and offshore investment income less import of the same (Services Account – **Blue** area).

Combined, these make up the Current Account (**Red** line).

Against this data, we have superimposed the actual Rand exchange rate history (**Black** line) and the computed Trade Weighted Rand Trendline (**Grey** line) from Section 5.

We comment on the various elements of this Chart:

Trade Balance [Gross Profit/Loss]

Green

As can be seen from the Chart, the Trade Balance remained healthy and positive all the way from 1990 through to 2003 or so, peaking soon after the Rand hit its high in 2001.

But this trend changed once the Rand (**Black** line) strengthened below its trade-weighted fair-value (**Grey** line) (marked **X**).

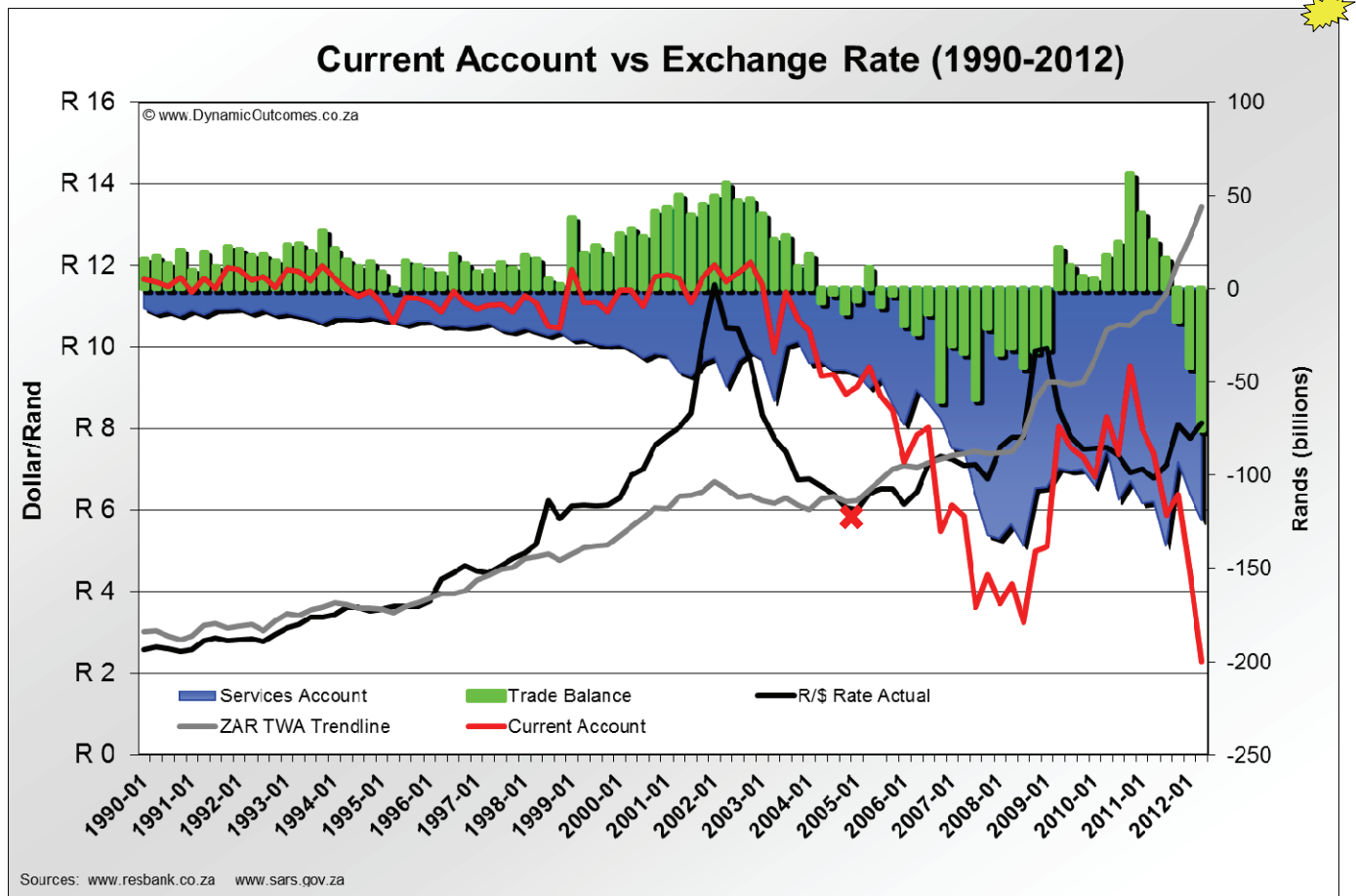
This critical economic aspect of the economy remained in deficit (running at a loss) right through until late 2009, when it pushed back into positive territory for the next 10 quarters, we believe for the following reasons.

Firstly, the weakening of the Rand towards the end of 2008 (when it spiked back up to touch the trendline) generated improved Export revenues in the quarters following, and suppressed Imports due to higher landed cost.

Secondly, the global recession reduced the volume of both Export and Import demands, but Imports to a greater extent than Exports.

The effects of an overvalued Rand on our Trade Account are quite clear to see, with a double-edged sword effect – damaging manufacturers in both the export market (losing business though not being competitive) *and* the domestic market (not being able to compete with cheap imports).

According to a Bureau for Economic Research survey in 2005, 40% of manufacturers had closed their export facilities due to a strong Rand – most closing for ever!



True that this state of affairs has forced innovative reductions in costs, and production efficiencies, but when these thrifting actions have been exhausted, the **economic mechanism** – the exchange rate – is needed to maintain secondary sector business, so essential to this economy.

And its effects has been felt, with the last 3 Quarters evidencing a gradual decrease in the Trade Balance since Q1 2011 and a dramatic deterioration the past Quarters, with Q2 2012 registering a record Trade Deficit of **R76bn**

Services Account [Net Other Revenue] **Blue**

There has been considerable public comment and concern on the Trade Account situation, and with good reason too. But it is the Services Account that should be of just as much concern, in fact more so, with the trend that has developed.

As can be seen, this sector has run at a deficit since 1990, gradually increasing, but mostly being offset by the favourable Trade Balance up to 2002, and thus has not attracted concern.

There followed a short-term recovery until early 2004, after which the Rand strengthened below its Trade Weighted Value trendline computed earlier in this study.

From then, the Service Account Deficit more than **trebled** to hit a record **R137bn** (q.a.) in 3rd Quarter 2008 and a record annual deficit of R126bn for the full year 2008.

From Q2 2009, the Trade Account once again turned positive until Q4 2011, while the Services Account deficit (while reducing somewhat), remained at more than double pre-2003 levels, before returning back in Q3 2011 to register a record \$138bn (q.a.) deficit in Q3 2011.

It should be noted that Interest and Dividend Payments remitted offshore are responsible for the major portion of the Services Account.

These are the major causes of the deteriorating trend of the Services Account, but why is this, and why should this be of increasing concern, but apparently is not?

The major contributor to this irreversible outflow of funds has been (so-called) Foreign Direct Investment, most notably a few large transactions which have been highly publicized and lauded:

- 2001 – DeBeers/Anglo American
- 2005 – Barclays/ABSA
- 2006 – Vodafone/Vodacom
- 2007 – Bain Capital/Edcon
- 2008 – ICBC/Standard Bank
- 2011 – Walmart/Massmart

Whereas these inflows might look like good direct investment, *it is just the opposite!*

Not one of these has been incremental “greenfield” investment – i.e. new permanent income-generating assets!

Instead, we have merely been selling off our profit-generating assets! The family silverware!

The net result: Instead of the profits from these home-grown operations being for the benefit of the economy through staying within it, they have now been for the benefit of the new foreign owners and have been taken out through foreign Interest and Dividend payments.

And hence the irreversible and highly concerning level of the Services Account deficit.

Current Account Balance [Net Profit/Loss] Red

We have highlighted how the Trade Balance (Gross Profit/Loss) turned to a deficit (loss) as a consequence of declining exports (and of escalating cheaper imports challenging domestic manufacture) and how the Services Account (Net Other Revenue) has deteriorated overall –

But how has this affected the Current Account (Net Profit/Loss)? As can be seen:

- From about 1990 through to 2003 the Current Account fluctuated between R10bn surplus and R20bn deficit.
- Since 2004, when the Rand fell below its long-term Trendline, the situation steadily deteriorated – and at an increasing rate, with 2007 and 2008 recording massive Current Account deficits of **R141bn** and **R162bn** respectively – **both over 7.0% of GDP!**
- After peaking in Q1 2008, the Current Account deficit reduced significantly as the Trade balance improved and the Services Account deficit reduced.
- However, with the Trade Account having peaked in Q1 2011 and started falling over subsequent quarters, and the Services Account deteriorating again, this has had a dramatic impact on the Current Account Deficit, which has plunged in Q2 2012 to **a record R200bn (q.a) – a deterioration of R159bn in 6 quarters!**

What is the effect of this Net Loss situation?

In essence, since 2003, we have needed to borrow money from offshore (Net Foreign Inflows) to fund these losses – BUT, just remember, these foreign investors are here to get a return:

The higher your borrowings, the greater your interest cost

...the greater your interest cost, the bigger your loss

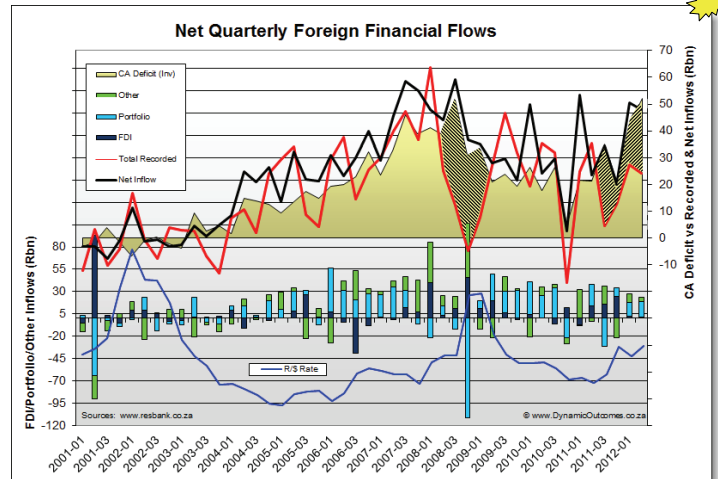
...the bigger your loss, the more you need to borrow

... it becomes a vicious circle – and has become so!

Let's take a look at this in more detail.

9) BALANCE OF PAYMENTS – THE ACHILLES HEEL?

How have shortfalls on our Current Account been funded all these years, and what certainty is there of these being funded in future?



In order to determine this, we provide herewith a Chart which analyzes the financial flows as reported by the Reserve Bank.

The next chart shows 3 sets of data:

- The top section (Line & Area Chart) [RHS scale] is:
 - Total Recorded Transactions, being a sum of the above 3 sets of data (Red line)
 - Net Inflows including Unrecorded Transactions (Black line)
 - Current Account Deficit per Quarter (Yellow Area portion) [*scale inverted*].
- The bottom section (Bar Chart) shows the 3 recorded foreign investment transactions types (LHS scale), being
 - Foreign Direct Investment (Navy portion of bar),
 - Portfolio Investment (Aqua portion of bar) and
 - Other Investment (Green portion of bar).
- And the overlay on the bottom section shows the average Dollar/Rand exchange rate for this period (Blue line).

What does this invaluable and critical set of data tell us?

- From the time the Current Account went into Deficit in 2003, Total Recorded Transactions (Net Foreign Inflows – Red line) were on average sufficient to fund the growing Current Account Deficit (Yellow area).
- Of these recorded transactions, Portfolio inflows (into the JSE and Bond market) have been an essential element to the funding of the Current Account Deficit and these inflows were robust for several years but started to reverse in the last quarter of 2007.
 - 4th Quarter 2007 recorded a net foreign portfolio outflow of R6bn, the first since 2003, followed by an outflow of R22bn in 1st Quarter 2008.
 - 2nd Quarter 2008 saw portfolio inflows turn slightly positive again, but, as the global crisis caused a rush to safe-havens and away from risky assets, the next two Quarters recorded massive portfolio outflows, and 4Q2008 a mind-numbing **R112bn!**

So, let's look at how the books were balanced:

Firstly, of interest, you will notice that it is only in the periods of negative portfolio inflows that there was any significant Foreign Direct Investment, which has been welcomed and endorsed by the Authorities in order to bring in some much needed foreign cashflow relief (we have referred to this short-sighted policy already).

But as can be seen from the **hatched** (\\) area in 2008, even with these inflows, there was a gaping hole between the Total Recorded Inflows (**Red** line) and the Current Account Deficit (**Yellow** area)...

.... and it required **huge Unrecorded Transactions in order** to balance the cashflow.

So, the ship has been kept afloat by short-term investors funds, by selling off our assets, and with record unrecorded transactions! (b.t.w. *How does SARB record unrecorded unidentified transactions?*)

Does this sound look a good picture? To us, certainly not.

As we have warned repeatedly, since we first released our findings in 2004, that these offshore investors (in the bond and money markets particularly) can and will recall their funds immediately they see their capital being at risk...

...be it, another sharp drop in global stock markets, our own "subprime" fallout... or some political event that would cause investor uncertainty...

...and that a sharp adjustment in the Rand would result.

And that is what we saw in 2001 and again in 2008 (as shown by the arrows), that is, large portfolio outflows resulted in a sharp depreciation of the Rand to record multi-year lows as a result.

Then finally, in regard to 2009 and in 2010, short-term fund inflows returned again until the Q4 2010, when it reversed to R21bn outflow, but in Q2 2011 these portfolio inflows returned to a positive R25bn.

This was undoubtedly due to a paradigm shift resulting from the Credit Crisis: Western World and their economies being destabilized; and the disparate interest-rate regime that accompanied this.

This created favourable carry-trade conditions (whereby investors can borrow in Dollars, Euros and Pounds at virtually no cost, and receive higher yield in Rand investments), despite these being more risky asset types.

This had the effect of pushing the Rand back to strong levels below R7.00, but this reversed in 2011 with Q3 showing a R31bn outflow as "short-term bankers" withdrew their funds from the market with renewed jitters in global markets, and a flight to safer havens.

Total inflows for 2011 were just R2.5bn compared with R75bn in 2010 and R94bn in 2009, and together with minimal FDI in 2012 this has resulted in a continued

shortfall to fund our Current Account deficit from normal funding sources for the past four quarters.

And, once again this has required Other Transactions to make up the resultant funding shortfall. And once more, we have seen the Rand beginning to weaken back to the mid-R8.00s – only reinforcing the fragile nature of our funding.

Now perhaps, let's just answer a couple of other questions that might arise:

➤ **Has Recent GDP Growth Been Healthy?**

➤ **What effect has Gold had in Recent Years?**

10) HAS RECENT GDP GROWTH BEEN HEALTHY?

Now, a question will no doubt arise, being:

"What about the amazing growth that was experienced the past few years – GDP of around 5%?"

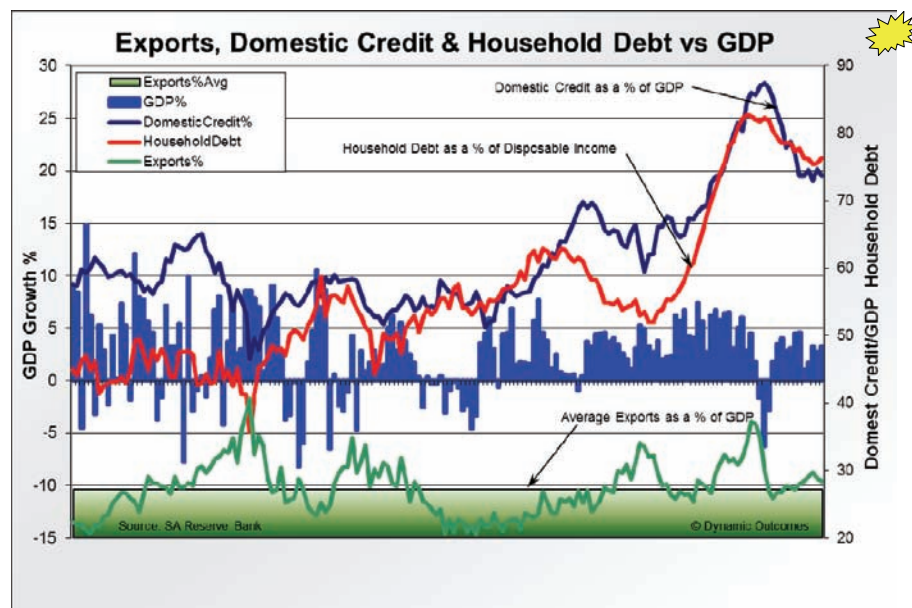
How can this be so, if the foreign trade picture is really as stark as is spelt out above?"

Well, we need to take a look at these aspect of economic activity, as well as their correlation.

The below chart shows the **GDP Growth** per quarter (**Blue** bars) for the past 40 years, and then superimposed upon this:

- **Exports** as a percentage of GDP (**Green** line), with a Light Green area identifying periods of above and below average for this total period.
- **Domestic Credit** as a percentage of GDP (**Navy** line).
- **Household Debt** as a percentage of Disposable Income (**Red** line).

As can be seen from this chart:



- Historically, when Exports as a percentage of GDP have been higher than average, GDP figures have

been good and Domestic Credit and Household Debt have both reduced.

- A sharp fall in Export composition has coincided with poor economic growth in the years through to early-1990s and increased domestic credit and household debt.
- But then, for a short period in the mid-1980s, but more specially in the mid-1990s and again in the mid-2000s, there have been sustained periods when Exports have been suppressed, while the local economy was experiencing a sustained boom in GDP growth, while Domestic Credit and Household Debt has risen.
- We then have an anomaly in 2007-2009 where Exports improved quite dramatically to 37% of GDP (the best levels since 1980), but, despite this, GDP sagged in recession (3 quarters negative growth), while Domestic Credit and Household Debt increased to record levels.
- 2010/2011 has seen a reversal of this, with Exports as a percentage of GDP dropping off sharply, while GDP has turned positive and Credit/Debt has reduced.

What does this tell us? Well, exports contribute some 25%-35% to GDP, but what is the biggest component by far?

Private consumption.

This sector contributes over 60% to the Gross Domestic Product, and this boom in consumer demand has been the driver behind the growth the past few years...

But has it been healthy demand? No, not all!

From the chart above, one can see:

- **Domestic Credit** swelled to over 87% of GDP in 2008 from 56% in 1993 – mostly since 2002 when it was 65%. The credit crisis has seen this reduce to around 73% in 2011Q4.
- **Household Debt** as a Percentage of Disposable Income rose from just 52% in 2002 to 82% in 2008 where it stayed until 2009Q2, and has since reduced gradually to 76% by 2011Q4.

In essence, therefore, consumer demand has been on the back of an explosion in credit extension, and thus GDP growth has been achieved, but at a high price – more and more **consumer debt!**

Admittedly, this increase in debt has been to the same extent that has been seen in the US and some other countries, but nevertheless, this is not a healthy situation at all, as it is **exactly what caused the global credit crisis and meltdown in 2008 and is causing the renewed jitters internationally!**

It is therefore encouraging to see the reduction in debt levels the past few quarters – but we remain at dangerous levels.

11) HAVE WE BENEFITTED FROM GOLD & WILL WE?

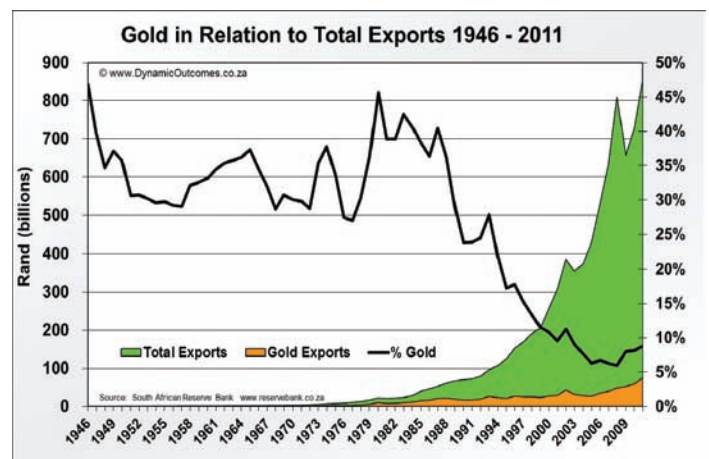
This study would not be complete without addressing Gold – historically the bright side and strength of this economy.

What about the bullishness of gold – is this the reason for the Rand's strength after 2003 and, more importantly, will this not support the Exchange Rate and the economy going forward, recognizing that South Africa has been largest producer globally of gold and of some other major commodities?

Is it correct that this economy, in a global sense, is a "commodity-based economy" and will rise or fall with the fortunes of the commodity market internationally?

Let's take a look at the performance of this well-nurtured prized asset over the past few decades – SA's foreign exchange earner!

The next Chart tells us the following:



- From 1950 to early 1970s, Gold Exports represented around 30-35% of Total Exports.
- By the time the Gold price peaked in 1981, Total Exports had increased more than 7 times and Gold Exports by more than 11 times, making up 45% of Total Exports!
- Since the mid-1980s, Total Exports have steadily increased in Rand terms until the global economic crisis.

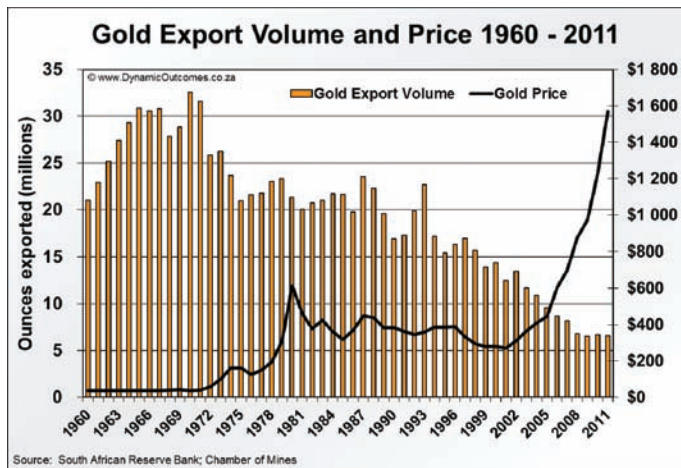
Over this same period, of concern, Gold Exports **steadily decreased to 6%** in 2008 – and this, despite the Gold price (in Dollars) having *more than trebled* in price!

The past year (2011) has seen this figure claw back to 8.9% of Total Exports.

To further highlight, the next Chart which shows the actual volume (not value) of Gold exported by year, which tells the dismal story as it is:

- Actual volume of Gold exported has reduced substantially the past 30 years – from over 30 million Troy ounces in the 1970's to well below 10 million the past 5 years.

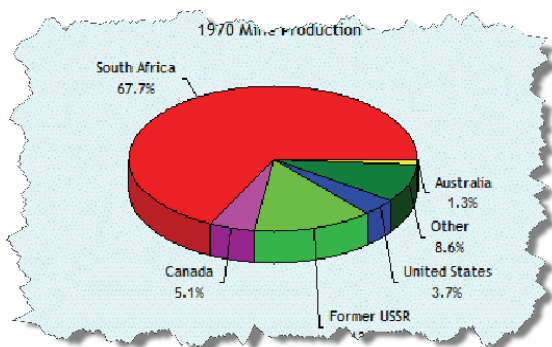
- And noticeably, despite the Gold price having more than quintupled since 2000, this trend has continued.
- And in 2011, with the Gold price at its best levels ever, South Africa exported its second smallest volume in living memory – just 6.58 million ounces (that is 212 metric tons) – equal to 46% of 2000 output, and **just 20%** of the record 1047 metric tons in 1970)!



We had all probably taken it as an accepted fact that South Africa has always been, still is, and will always be the largest gold producer internationally.

However, with the astonishing deterioration in the Gold output performance, we decided to take a closer look at this situation.

The below pie-chart shows Gold production by volume by country in 1970, with South Africa producing over two-thirds of the world's gold – more than double the rest of the world put together – with the next largest the former USSR at just 13.7%.



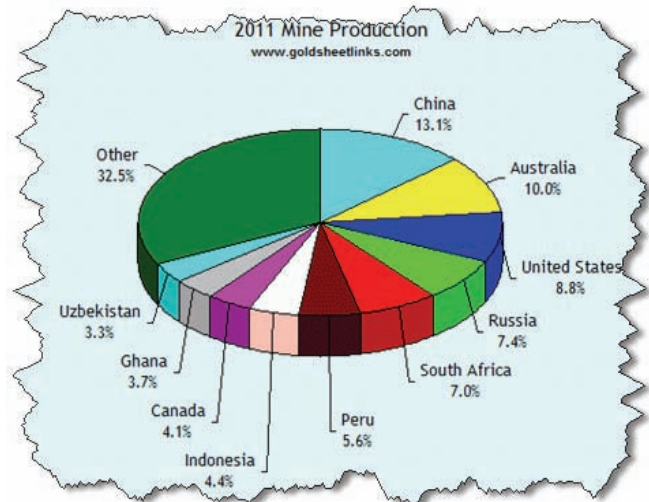
Let's roll on to 2010 – what a dramatic change in a few years!

During this period of some 40 years, and more particularly, the past 15 years, the international Gold mining industry has evidenced some significant improvements in a number of operational spheres, with resultant benefits.

Moreover, there has been steady expansion of areas mined, with the result that the tonnage of refined Gold has increased from 1660 tons in 1987 to peak at 2600 in 2001 – a growth of 56%, before scaling off somewhat to 2500 tons in 2010.

However, South African has not shared in this growth at all!

From the next Chart (preliminary data) you can see **South Africa has lost its long-held crown** of the world's largest Gold producer – to China (who would've believed a few years back that China would become the world's largest producer of Gold?), who now produce 13.1% of the world's Gold.



And not only that, having dropped to 7.0% (from 9.8% in 2008), South Africa has also dropped below both Australia, USA and Russia as well in terms of output.

So, to get back to the question:

"What effect does Gold have on our economy?"

The truth is that, apart from lingering remembrance of a commodity-based economy – **VERY little!**

Furthermore, have these mining industry casualties of a strong Rand escaped the attention that they ought to have been given?

- the alarming extent of closure of gold mines and precious metal mines in recent years?
- And, as concerning, the abandoning of plans to proceed with new exploitation ventures of precious metals?
- And, more concerning still, the possible closure of more mines due to enforced Black Economic Empowerment and crippling rationing of electricity supply?!

And then, the "kiss of death" –

- The "call for nationalization of mines" spectre has loomed increasingly larger the past couple of years.

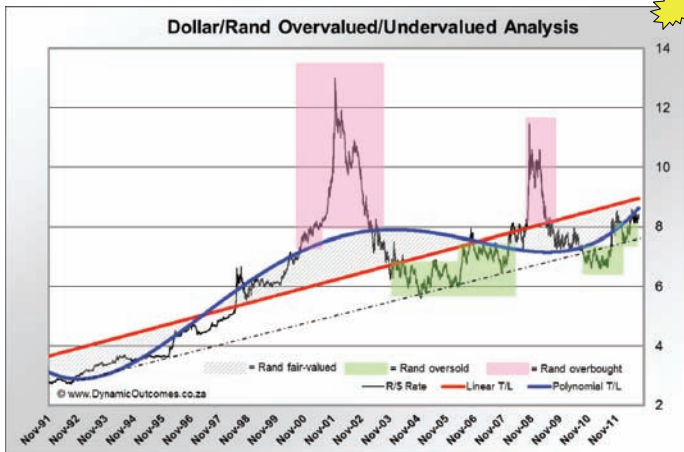
12) WHAT ACTUALLY MOVES EXCHANGE RATES?

So now we have an understanding of the economy from a fundamental perspective, and that:

- The exchange rate is a adjusting mechanism, and

based on South Africa's comparative change in labour cost and productivity, that there needs to be an adjustment to the exchange rate to compensate for this.

- If we analyze the economy as a business, we have been running at a loss for a considerable period of time, and this shortfall is mostly being funded by short-term foreign inflows.
- While there has been GDP growth, it has not been healthy growth but rather a growth of debt.



But now, as can be seen from the above Chart, there have been HUGE aberrations from fair-value, especially since 2000.

That leaves us with a serious question:

Given that that an exchange rate is an adjusting mechanism for exports and imports, why has the Rand rate moved like this?

13) THE GLOBAL & RAND FOREIGN CURRENCY MARKET

To determine and understand the Rand foreign exchange market, we firstly need to have some comprehension of the global forex market and where the Rand fits into this global arena.



The above chart shows the global currency market, which has exploded as a financial tradable market in the past few years, reaching a **Daily** average turnover of \$4 trillion in 2010, and an

estimated **\$4.7 trillion in 2011** (an 18% increase over 2010)!

This makes it by far the largest traded market globally, more than all the stock, bond and commodity markets put together.

...To put this in perspective, the total output of the United States economy (Gross Domestic Product) was \$14.7 trillion in 2010. Based on the latest data, the forex market trades more than this **every 3 days or so!**

Of this vast volume, trades against the South African Rand amount to **less than 1%** of the global market turnover!

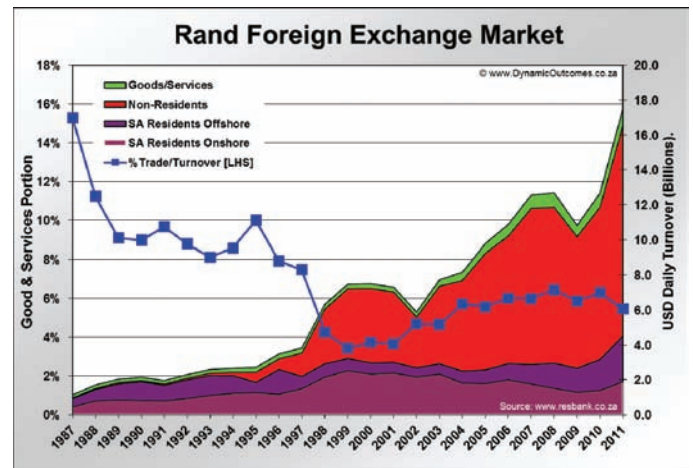
The average **daily turnover** on the Rand currency market for 2011 was **US\$17.5 billion**, compared with US\$12.8 billion in 2008, \$6.3bn in 1998 and US\$2.3bn in 1992.

Rand Foreign Exchange Market Breakdown

Then, of great importance, who are the actual players in the Rand currency market?

Per the Chart above, these can be broken down into 3 basic groups:

- South African exporters and importers of goods and services (**Green** area).
- Foreign investors in the South African bond and equity markets and other domestic investments, together with currency traders and speculators, who buy and sell the Rand as a mere commodity (**Red** area).
- SA Resident transactions, both offshore and onshore (**Purple** and **Mauve** areas).



As can be seen from the Chart, of this total turnover of US\$17.5 billion in 2011...

Goods and Services account for a mere **5.4%** of Rand Forex turnover, the **94.6%** balance being investment and speculative!

This is one of the most important facts to understand concerning the Rand!

And of this 94.6% that is non-trade related, the break down is:

- **69.0% are transactions by foreigners** (Non-Resident Investors/Speculators), having increased from a mere 4.3% in 1992 to 50% in 1998 to current levels.
- **10.8%** are by residents living in South Africa or its neighbours, that is, in the Common Monetary Area (SA Residents Onshore) – down 2.1% pts since 2007.
- **11.4%** are by SA residents living overseas (SA Residents Offshore) – up 2.3% pts since 2007.

Now to ask the important questions:

- 1) Do forex traders/speculators care where the Rand is pegged?
 - NO, as long as they can make some profit on its movement, either way (e.g. buy at R8.00/\$ and sell at R10.00/\$, or sell at \$9.50 and cover at \$8.00)
- 2) Do investors in South African bonds and equities care where the Rand is pegged?
 - NO, they are looking for the highest returns, as long as their capital is secure (e.g. bring funds in at R7.00/\$ and earn 10% p.a. in the money market for a year, and take it back out at the same level or better).

If the Rand is at R7.00 to the Dollar or R3.00 or even R300 to the Dollar, this wouldn't make any difference to these players, as long as they enter and exit the market at the right rate and right time.

It can therefore easily be understood that a currency's level is influenced by these large players – who have no real concern as to whether it is “weak” or “strong” – trading it to suit their own purposes, that is, the use that they make of any currency (as a tradable or an investment commodity).

Thus, investors and speculators are largely responsible for *short-term* and *medium-term* price movements.

So what does/should determine the true value of the Rand?

Goods and services, whether exported or imported.

Eventually, economic forces will ensure that a currency adjusts **back to its true trendline level**, which is determined by *international competitiveness* in **trade of goods and services**.

However, due to the miniscule effect that goods and services have on total trade, there can be huge imbalances in the interim period and considerable diversion from this trendline until economic forces bring the currency back into line.

But the important aspect that needs understanding, and resolving, is that the during these periods when the actual rate is not in competitive territory, there is serious damage done to our local industry and commerce (and, by extension, job losses, rising unemployment and labour dissatisfaction).

This is a problem much debated and many suggestions and ideas have been put forward, but mostly of no value.

The main reason for these inflows is the carry-trade, whereby speculators can take advantage of the interest rate differential between South Africa where the repo rate is still at 6% compared with the likes of the US, UK, Euroland and Japan, where central bank rates are close to zero.

The solution we have given is simple:

Tell the world, in clear terms, how detrimental a Rand at stronger than R8.50 is for this economy AND lower interest rates until the carry-trade reverses the foreign flow of short-term speculative funds.

Once these speculators' capital is at risk, **they will react!**

Simple! Cheap! Quick! and Controllable!

And the extra spin-off of lower rates would be a much-needed boost for the economy.

However, Government has in their great “wisdom” decided in late 2010 on another course of action – a relaxation of Exchange Controls, increasing the offshore investment allowance for individuals, and lifting the 10% levy on emigrant's blocked Rands.

Frankly, this is like the old medieval cure of cutting oneself and allowing life-blood to flow out in the belief that this would cure the illness or disease. Is this what civilization and hindsight knowledge have done for us?!

The short-term foreign capital is the problem, not the country's hard-earned wealth!

This country's hard-earned wealth is what creates business and employment, and once it has gone it will likely be gone for good, with all its benefits.

By contrast, the short-term speculative capital is costing the country a packet in interest, and when the speculators have made their pound of flesh, they will take their capital out as well.

And then what will we do, once this double-edged sword takes effect?

And with the sole anchor for many residents – their wealth – now able to be taken offshore, how many won't follow their money, resulting in a loss of professionals, entrepreneurs and skilled workers?

Unbelievable...but then, on second thoughts...

14) ECONOMIC MARKETS vs FINANCIAL MARKETS

To further understand what this market is all about and what moves it, we need appreciate the difference between Economic and Financial Markets.

Economic Markets

In economic markets, that is, the sale of **actual goods or services**, there are rational forces of supply and demand resulting in price equilibrium.

The seller can work out what his input costs are, and will try to sell his product at the highest price that someone will pay him for it.

The buyer can work out the value of what his buying, and will try to obtain these goods for the lowest price possible.

And somewhere between these, you get a price that both are happy with, resulting in a purchase and sale.

In such economic markets, what prevails is **rationality and certainty** about the relative values, and buying or selling decisions are therefore made based on **conscious rational evaluation**.

Financial Markets

However, with financial markets – the trading of **financial instruments** – the environment is completely different:

Persons are either buying in the hope that they can sell at a higher price to someone else, or selling in the hopes that they can buy again at a lower price.

Carefully consider what constitutes such markets – shares, bonds, currencies, commodities, etc – in such an environment, there is minimum underlying supply, but the demand is substantial – whether buyers or sellers.

There is **no rational certainty** of the future valuation. It is all speculative.

And therefore, instead of conscious rational reasoning, what pervades this market is **unconscious herding** (seeking safety in following the crowd).

As Robert Prechter of [Elliott Wave International](#) states:

In utilitarian economic settings, where certainty is the norm, people reason; in financial settings, where uncertainty is pervasive, they herd.

And the Rand is one of those markets that is in a financial setting – where uncertainty is pervasive, and people herd.

So, here we have the conundrum:

Although the function of the Rand exchange rate is to facilitate the international trade in goods and services ...an **economic market** setting, where certainty and rationality is the norm...

YET, the Rand forex market is itself a financial instrument ... in a **financial market** setting, where uncertainty and speculation prevail.

So, how does one export or import in goods or services in such an environment?

15) MARKET PATTERNS – ELLIOTT WAVE PRINCIPLE

Back in the 1930s, Ralph Nelson Elliott, a corporate accountant, studied price movements in the financial markets and observed that certain patterns repeat themselves. He offered proof of his discovery by making astonishingly accurate stock market forecasts. What appeared random and unrelated, Elliott said, will actually trace out a recognizable

pattern once you learn what to look for:

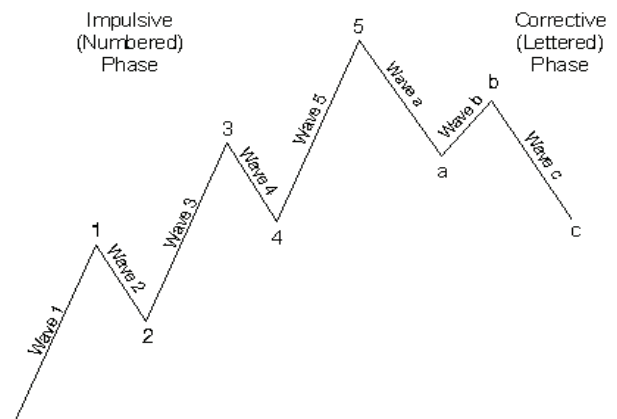
- All liquid financial markets move in definable patterns.
- This is the result of mass human emotion, flowing from hope and greed to fear and despair, and back again.
- Given a set of data, the majority of a crowd would react in the **same irrational but predictable way**.
- Not all, but most – like a human HERD INSTINCT.

Elliott called his discovery "The Elliott Wave Principle," and its implications were huge.

What has since been discovered is that Elliott had identified a common link that drives the trends in human affairs (as having been hard-wired by our Creator) not only in financial markets, but also seen in fashion, politics and popular culture.

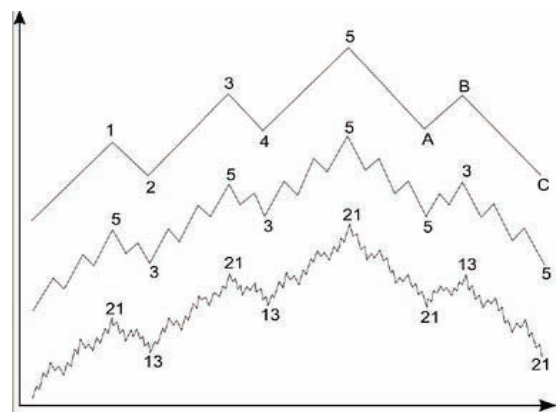
Basic Elliott Wave Structure

The basis of this pattern is an advance in 5 waves and a partial retracement in 3 waves (per illustration provided courtesy of [Elliott Wave International](#)).



Elliott Wave Pattern Fractals

Then, within each wave shown above, you will find a fractal of the same 5-3 pattern, per below, and within each sub-wave, you will find a similar 5-3 pattern in a smaller degree.



So, in essence, what this discovery meant was that by knowing what likely pattern is in play and where one is in this pattern, you are able to determine the probability of future market movements.

Simple? Unfortunately, NOT SO...

The fact is, that this well-accepted and respected Elliott Wave Principle – which made perfect logical sense – proved unreliable for most Elliott Wave practitioners in forecasting and trading actual live markets. Why?

...Because the **SAME human emotions** were unavoidably engaged when determining what pattern was in play!

16) PREDICTING FUTURE MARKET MOVEMENTS

As being involved in the export market ([tank container investment management](#)), it became clear to us that we had these same unavoidable emotions.

We knew where we wanted the market to be, and looked for every "reliable" technical analysis and reason to confirm that it was heading there.

But that all changed when in late 2004 we discovered the *most advanced forecasting technology available* and started applying its uncanny abilities to forecast the Rand.

Richard Swannell, founder of the Refined Elliott Trader (see snapshot below), fully believed in the Elliott Wave Principle, but also fully understood the inherent problem in applying it to live markets.



He was determined to overcome this problem, and proceeded single-handedly to create the first software ever to fully computerize and refine this theory and develop what has become known as the Refined Elliott Wave Principle.

Over a 3 year period, using a network of over 3000 computers across 65 countries, he analyzed over a million actual historical market patterns according to the rules of this theory, the results being stored in a massive database.

Then, he proceeded to develop this powerful software which could compare a current market situation with hundreds of thousands of actual historical market movements...

...and came up with a number of best fitting patterns, each providing the most probable completion of that particular current market pattern in both time and price.

This meant that instead of a **subjective** decision to identify the

pattern that was in play, you now had an **objective** analysis...

...based on what similar identified markets had actually done historically!

The big question we had: Could it work for the Rand?

EXAMPLE 1

Well, once we had learnt to drive the software, this is what it told us as early as March 2005, soon after the market had hit 5.60 to the Dollar.

As can be seen from the next chart, this technology forecast:

- that the market had bottomed out at 5.60 on 31 December 2004
- and that it was expected to rise over the next few years, most probably above 11.00.

And as we now know, with the benefit of hindsight, that it was **correct on both aspects**.



Further, since October 2005 when we started publishing these forecasts on a daily basis, it has shown an average accuracy of **81.7%** over short, medium and long term forecasts:

TRACK RECORD (Oct 2005 - Sep 2011)					
To Date	Total Issues	Accuracy for Next Few			Average Accuracy
		Weeks	Months	Years	
31/12/2006	271	84%	85%	100%	89.6%
31/12/2007	511	82%	81%	91%	84.4%
31/12/2008	763	84%	85%	92%	86.9%
31/12/2009	1012	83%	77%	87%	81.6%
31/12/2010	1262	81%	78%	87%	81.2%
20/09/2011	1434	80%	81%	87%	81.7%

As an example of the how understanding the Elliott Wave Principle and using this technology has assisted us, we provide herewith some more recent examples:

EXAMPLE 2

On 22 February 2008 (with the Rand at 7.6570), our analysis showed the following forecast which showed the market was expected to rise above 10.90, more likely into the 11.80 to 18.00 area the next few years (per the Chart below)

The 2 Charts below shows what happened from that point for the balance of the year (in Grey). This shows that the market moved right into the target area of the forecast graph some eight months following.

BEFORE



AFTER



EXAMPLE 3

Then, to bring this more up to date, below is the Chart dated 28 June 2011, which we published in our June 2011 Exposé.



We quote from our commentary in that issue:

"As can be see, it has already entered the 6.6000 to 5.5000 high probability target area in price and has extended way beyond it in time – in other words, well overdue for a change in trend!"

If the above Elliott Wave count is valid, while there is the

chance of some more Dollar weakness in the short-term, the next major move will be up – a strong rising of the Dollar/Rand (weakening of the Rand) over the coming months and years."



Again, the Chart above shows what has happened in the 3 months or so since that point (market data since June 2011 shown in Grey):

EXAMPLE 4

Then, 6 weeks later when the Rand had climbed to above 8.50, our updated forecast on 9 August 2011 gave us the following prediction for the next few weeks and next few months.



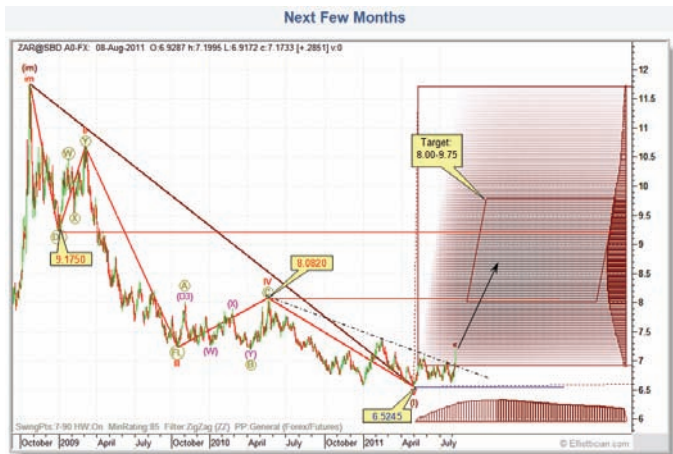
Our commentary for the Next Few Weeks:

The market has retraced after hitting 7.5000, and is likely to retrace further towards trendline support around 6.9500 to complete this correction. Thereafter, it is expected to rise strongly into the 7.4700 to 7.9200 area.

And our projection and commentary for the Next Few Months was as follows:

The market has broken above 7.0725 confirming a change in trend and is now expected to rise into the 8.0000 to 9.7000 area...

Which was accompanied by this Chart (overleaf):



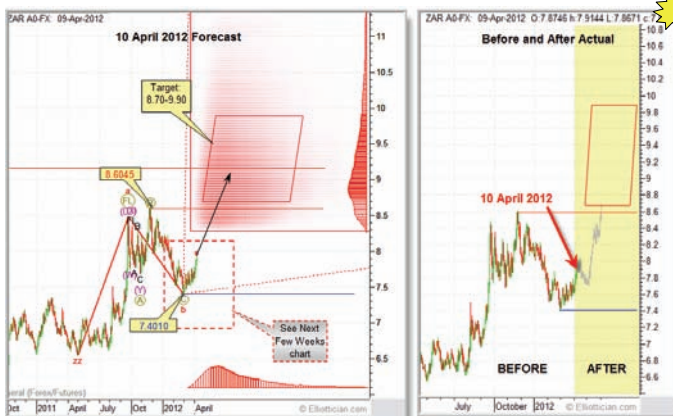
Below is the market movement up to and subsequent to these forecast issued on 9 August 2011.



As can be seen, the market just moved as predicted over the following weeks and months, and once again this allowed us and our clients to have a roadmap as to the likely movements of the Rand and especially critical turning points, providing a high level of certainty when there was a lot of uncertainty.

EXAMPLE 5

And to bring us even more up to date.



below is a forecast published for our clients on 10 April 2012 shortly after the market had made a low of 7.40 against the Dollar. Our updated forecast for the next few months stated "The market has bottomed out at 7.4010 and is expected to

rise strongly into the 8.7000 to 9.9000 area, with pivotal resistance at 9.1725 level.." which was issued together with the left hand Chart, showing the high probability target area (in pink).

The market entered this target area on 1 May 2012, validating the forecast.

17) IN CONCLUSION

The purpose of this report has been to share our own experience and knowledge gained in investigating the Rand and the South African economy, in order to provide an overview of where the Rand should be from an historical and fundamental perspective, and where we can expect the market to move in future, from an Elliott Wave perspective.

The result of these years of research has led to some astounding discoveries and observations, summarized as follows:

1. An exchange rate is an *adjusting mechanism* which compensates for product cost differentials, and other factors that affect international trade competitiveness.
2. Ongoing product cost differentials can be reduced down to two rudimentary factors – productivity and labour cost.
3. Based on historical trends, the Rand is fair-valued at present and based on South Africa's deteriorating competitiveness compared with its trading partners, it needs to adjust (depreciate) over time to remain competitive.
4. Despite the above, the Rand has for periods of time had huge deviations from these fundamental norms, indicating that something other than fundamentals is at work and influences market movements.
5. Although the Rand exchange rate is primarily to facilitate the international trade in goods and services, these imports and exports only represent a miniscule percent of total turnover in the Rand forex market (around 6%), with the majority being speculative/investment related.
6. Although the trade of goods and services is an *economic market* phenomenon, and whereas the exchange rate is there to facilitate this, yet the Rand forex market is itself a *financial instrument* where speculation prevails.
7. In an economic setting, where certainty and rationality prevails about the relative values, buying or selling decisions are made based on conscious rational evaluation; however, in a financial market setting, uncertainty and speculation prevail, and persons tend to make subconscious irrational decisions (unconscious herding).
8. The movements in all financial markets (of which the Rand is one) are the result of mass human emotion, flowing from hope and greed to fear and despair, from one extreme to the other.
9. These changes in mass human sentiment move in patterns which are definable in terms of the Elliott Wave Principle, from the very shortest to the longest time frames.

10. If one is able to determine – OBJECTIVELY – what pattern is in play in a market and where one is in that pattern, one is able to forecast how that market is likely to move from that point on, as we have shown.

As we have already said, this Rand Exposé is a non-economist, realist overview, and having an understanding of this has been critical to ourselves and those with whom we have shared this information – to not only have an understanding of the fundamentals, but more so, to have an understanding of the actual forces in play – who and what really moves the markets.

And critically, as a result of understanding this, through ongoing analysis, to have a roadmap as to where the Rand is expected to head over the short, medium and long term, with on average a high a level of probability.

In other words...

A Degree of Certainty ... Amidst Uncertainty.

We trust the above has provided you with the same level of understanding of this important aspect of business when exchange rates are involved.

As already mentioned, if you have found value in this report, please **pass it onto others** that you feel will benefit.

Alternatively, we have provided a facility on our website where you can benefit by telling your friends or colleagues [here](#).

To your success ~



James Paynter
Director & Elliott Wave Market Analyst

PLEASE NOTE: We would appreciate your feedback and comments in this regard, by emailing us [here](#).

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Email info@DynamicOutcomes.co.za Tel +27 (0)41 373-7160 Fax +27 (0)41 373-6873

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