



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**

March 2014

• First published June 2004 •
Updated and refined quarterly

TABLE OF CONTENTS

	Page
1. INTRODUCTORY PREFACE	4
2. The Story Behind the Truth.....	5
3. WHAT IS AN EXCHANGE RATE?.....	6
4. WHY SHOULD AN EXCHANGE RATE ADJUST?.....	6
5. WHAT ARE THE FUNDAMENTAL FACTORS?.....	6
6. WHAT IS THE RAND'S PRESENT TRENDLINE VALUE?	7
Dollar/Rand History (1970-2014)	7
Dollar/Rand Analysis (1995-2014)	8
7. IT'S JUST DOLLAR WEAKNESS – OR IS IT?	8
8. INTERNATIONAL COMPETITIVENESS.....	10
Unit Labour Cost (1981-2011)	10
Productivity - GDP per Capita (US\$ 1981-2011)	10
Productivity – Manufacturing per Capita (US\$ 1981-2011)	10
Human Development Index History (1980-2012)	10
9. THE SOUTH AFRICAN ECONOMY - A SIMPLISTIC VIEW	12
Income Statement for RSA (Pty) Ltd (2002-2013)	12
10. THE CURRENT ACCOUNT & ITS COMPONENTS.....	13
Current Account vs Exchange Rate (1990-2013)	13
11. BALANCE OF PAYMENTS – THE ACHILLES HEEL?.....	14
Net Quarterly Foreign Financial Flows (2001-2013)	15
12. TWIN DEFICITS – DOUBLE DANGER RISK.....	16
13. HAS RECENT GDP GROWTH BEEN HEALTHY?.....	16
Exports, Domestic Credit & Household Debt vs GDP.....	16
External Debt – the Bigger Picture.....	16
What Will Burst the Bubble?	18
14. HAVE WE BENEFITTED FROM GOLD & WILL WE?.....	18
Gold in Relation to Total Exports 1946-2013.....	18
Gold Output in the Global Context	18
15. WHAT ACTUALLY MOVES EXCHANGE RATES?	20
16. THE GLOBAL & RAND FOREIGN CURRENCY MARKET	20
17. ECONOMIC MARKETS vs FINANCIAL MARKETS.....	22
18. MARKET PATTERNS – THE ELLIOTT WAVE PRINCIPLE	23
19. PREDICTING FUTURE MARKET MOVEMENTS.....	23
20. IN CONCLUSION	25
21. Risk Disclaimer:	26

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 ongoing 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**.

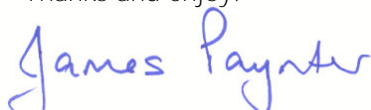
BUT (and this is important)...we want YOU to please do your bit.

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**.

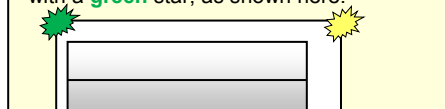
And do you know? They will be indebted to you!

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 quarterly issue with a **yellow** star and **new** charts with a **green** 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, and making 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.ForexForecasts.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 you some certainty in this 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 needs to be, therefore, 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 R900 to produce here, and costs \$100 to produce in the US, the exchange rate based on these costs is $R900 / \$100 = R9.00$ per 1 US Dollar.

2) WHY SHOULD AN EXCHANGE RATE ADJUST?

Now, this rate of R9.00 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 continuously, and varies 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 1 000	Domestic Price	\$100
= Exchange Rate of R10.00/\$		
5.0%	Change in Product Cost	3.0%
New Domestic Price		
R 1 050	adjusted change in costs	\$103
= New Exchange Rate of R10.19/\$		

So to use the example above, if there is a 5% increase in the cost of a widget domestically (from R900 to R945), 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 R9.00 to R9.17 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.

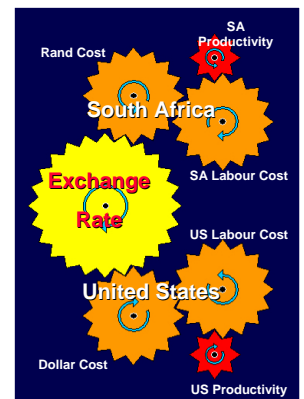
International trade succeeds through this essential gear working efficiently, or fails if interfered with!

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 1 000	Domestic Price	\$100
= Exchange Rate of R10.00/\$		
106%	Labour Cost Index	103%
101%	Productivity Index	100%
=		
5.0%	Change in Product Cost	3.0%
R 1 050	Local Price	\$103
= New Exchange Rate of R10.19/\$		

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.

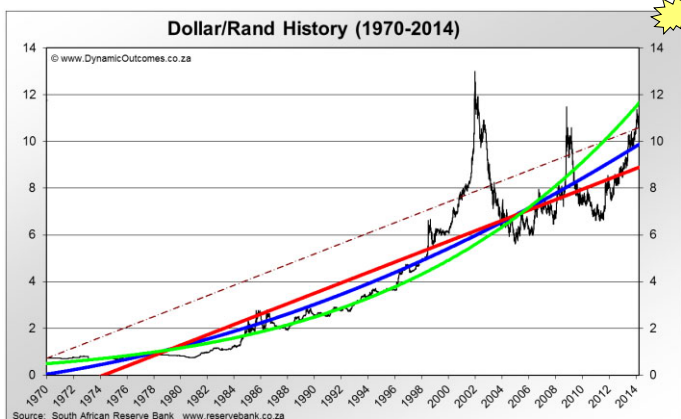
So having the necessary understanding, we now need to apply this to the Rand and the South African economy, through answering the following questions:

- **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 (\$1 = R0.71)!



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

Based on the actual present exchange rate in March 2014 of

R10.60/\$ [Mar'13=R9.29], the average historical trendline depreciation has been **6.3%** [Mar'13=6.1%] per annum since January 1970 (dashed **Brown** line).

Then, off this data, we have 3 different computed 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'13=5.9%] and indicates the Rand should at present be **R8.90/\$** [Mar'13=R8.55].

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 **6.1%** [Mar'13=6.1%] and indicates that the Rand's fair value is **R9.88** [Mar'13=R9.45] to the Dollar at present.

Exponential Trendline C **(Green)**

We have also included an Exponential Trendline for this period.

- This line indicates that the Rand's fair value is around **R11.75/\$** [Mar'13=R11.00] which equates to an annual depreciation of **6.5%** [Mar'13=6.5%] since 1970.

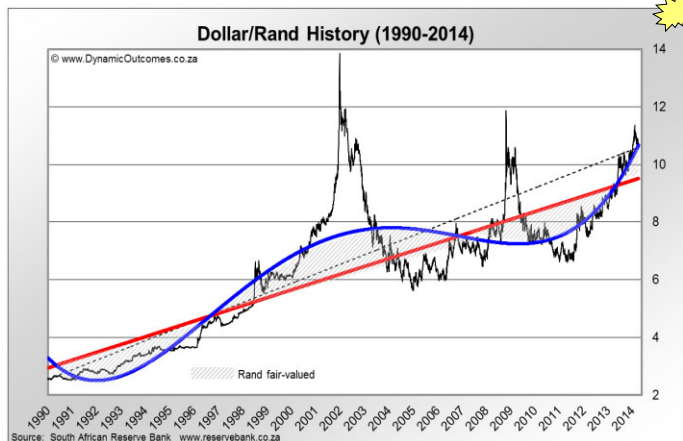
So, based on a long term historical trend since 1970, the Rand's present true trendline value is between **R8.90 and R11.75** and should be expected to depreciate between **5.9% and 6.5%** per annum.

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 early 1990s:

- 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. (*We have now extended this a bit to include from January 1990)

The next Graph shows the Rand movement (**Black** line) since January 1990 to date, reflecting the daily average rate since that date, showing the rise from R2.54/\$ up to the peak of R13.85 in December 2001, then down to the low of R5.65 in 2004 back up to the R11.85 level in 2008 before falling back down below the R7.00 level again in 2011 before moving back above 9.00 again in 2012/2013.



Based on the actual present exchange rate in March 2014 of **R10.60/\$** [Mar'13=R9.29] the average historical depreciation has been **6.1%** [Mar'13=5.7%] per annum since January 1990 (dashed **Brown** line).

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

Linear Regression Trendline A (Red)

The first is a linear regression trendline from January 1990 to date, which takes into account all the abnormal spikes and troughs in this period.

- This linear trendline has an annual depreciation of **5.0%** indicates that fair-value for the Rand at present is **R9.51/\$** [Mar'13=R9.15].

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 has an annual depreciation of **6.1%** and indicates that fair-value for the Rand at present is **R10.67** [Mar'13=R9.00] 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.

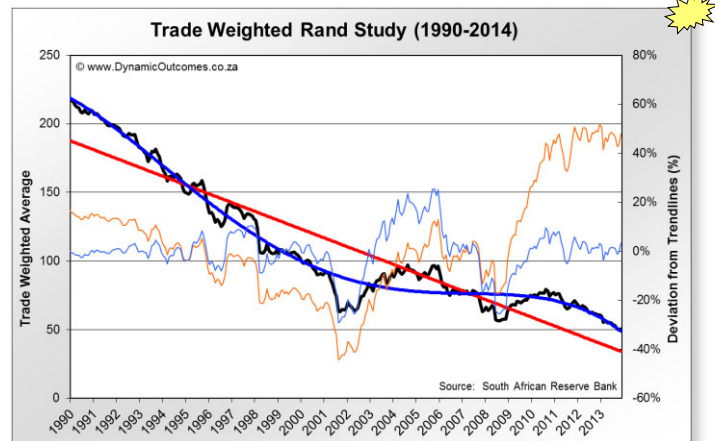
This perhaps has some merit outwardly...

...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 next Graph shows the monthly Trade Weighted value of the Rand (**Black** Line) from 1990, March 2014 being **50.67**.



Based off this data, we have two computed trendlines:

Jan 1990 – Mar 2014 Linear Trendline A (Red)

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

- This indicates that the March 2014 Trendline Trade Weighted Value is **34.27** [Mar'13=37.80] compared with an Actual Trade Weighted Value of 50.67 [Mar'13=61.48] (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 44% *undervalued* compared with its trendline Trade Weighted Value.
- In Q2 2006, the Rand was 13% *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 reversed to 17% *undervalued* by Q3 2008.
- However, this has reversed once again to **48% overvalued** as at March 2014, indicating the Rand is still significantly more overvalued on this basis than in 2006.

Jan 1990 – Mar 2014 Polynomial Trendline B (Blue)

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

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

- This analysis indicates that the Mar 2014 Polynomial Trendline Trade Weighted Value is **49.08** [Mar'13=59.99] compared with the Actual Trade Weighted Value of 50.67 (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).

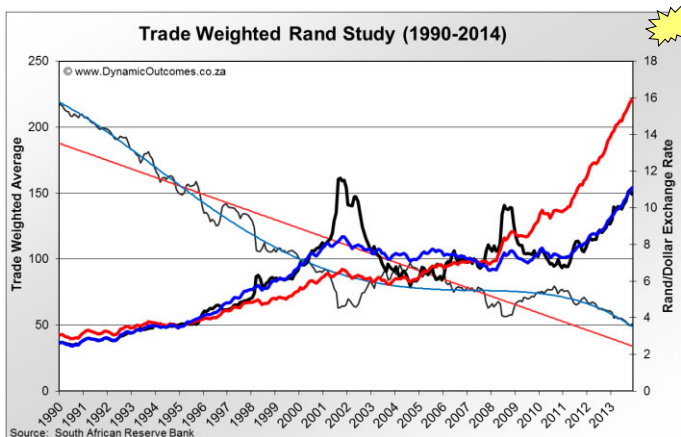
As can be seen, the variance is not nearly as marked as the linear trendline, but we can still deduce the following:

- 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 25% *undervalued* by Q4 2008.
- However, this reversed once again to 10% overvalued by Q4 2010 before reducing to 3% overvalued by March 2014.

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 January 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 remained fair-valued until Q4 2008, before once again heading into undervalued territory with the spike in 2008.
- Following this spike, it has fallen sharply once again into overvalued territory.
- As at **Mar 2014** the Rand should be **R15.89/\$** [Feb'13=R14.45] on a Trade Weighted basis with.

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 mid-2011, when it came back to fair value, where it has pretty much stayed, this trendline indicating that as at **March 2014** the Rand should be **R11.10/\$** [Feb'13=R9.10] on a Trade Weighted basis.

Surprising stuff, considering that it has been claimed that any 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**:

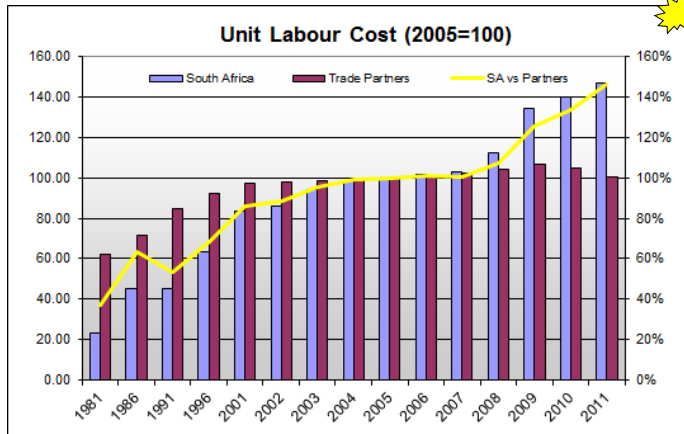
44+ Year History	Value	Depr p.a.
1970 – 2014 Actual	10.60	6.3%
1970 – 2014 Linear Trendline	8.90	5.9%
1970 – 2014 Polynomial Trendline	9.90	6.1%
1970 – 2014 Exponential Trendline	11.40	6.5%

24+ Year History (since Jan 1990)	Value	Depr p.a.
Jan 1990 – Mar 2014 Actual	10.60	6.1%
Jan 1990 – Mar 2014 Linear T/L	9.51	5.0%
Jan 1990 – Mar 2014 Polynomial T/L	10.67	6.1%
Trade Weighted Linear Trendline	15.89	
Trade Weighted Polynomial T/Line	11.10	

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



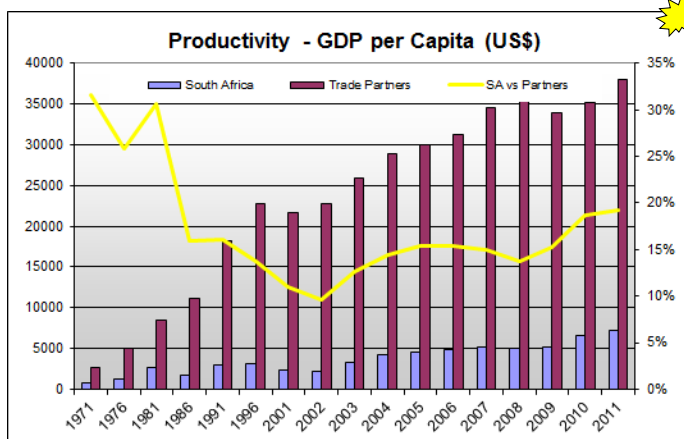
Based on data gleaned from the Bureau of Labour Statistics, the OECD and the International Monetary Fund, we were able to look at comparisons in Labour Cost and Productivity between South Africa and its Trading Partners (latest full data available being 2011).

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 – from 37% in 1981 to 147% in 2011.

Compared with its trading partners, South Africa's labour cost has increased by **15.9% p.a.** since 1981, **10.4% p.a.** since 1991, and **9.0% p.a.** since 2006.

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

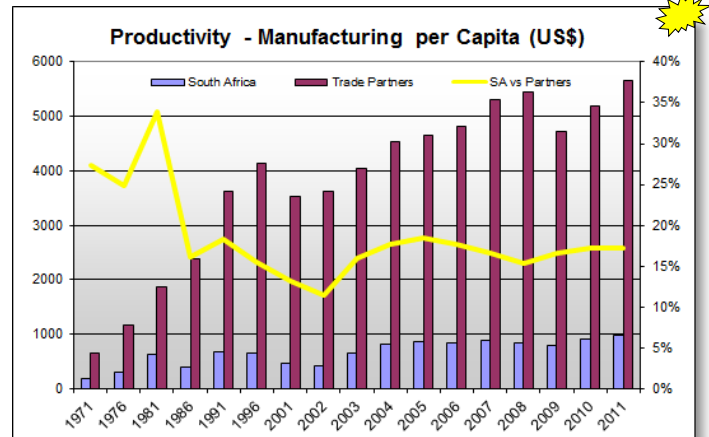


As can be clearly seen from the above Chart, South Africa is still way behind in Productivity, at **19% of its trading partners** (Yellow Line) in 2011, up from 10% in 2002 and 16% in 1991 but well below 31% of its trading partners in 1981.

Another measurement of Productivity would be on a Manufacturing per Capita, shown in the Chart below.

On this basis, South Africa Manufacturing Value per Capita was

17% of its Trading Partners in 2011 (Yellow Line). This has dropped from 34% in 1981 but has recovered somewhat from 11% in 2002.

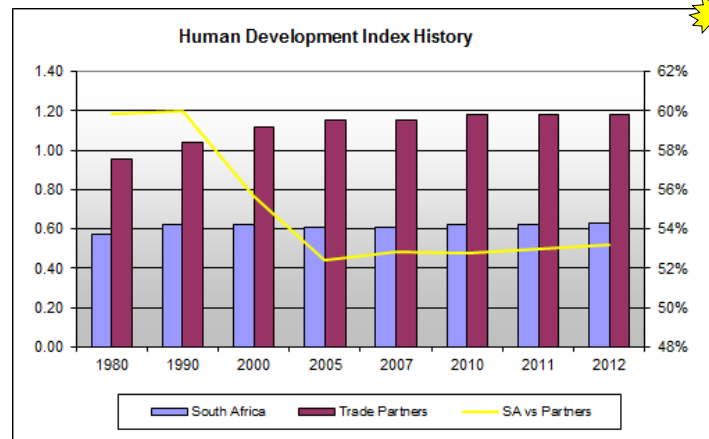


Compared with its trading partners on a GDP per Capita (US\$) or Manufacturing per Capita (US\$) basis, South Africa's productivity is between **17% and 19% of its trading partners** – with a sharp drop from 1981 levels but showing an improvement since 2002

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.



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

In 2012, South Africa's Human Development Index was 0.629 – ranking **121 out of 188 countries**.

More significantly, South Africa **dropped 42 places** between 1990 and 2007 and has remained there since!

From the chart it can be seen that to 1990, South Africa was at 60% of its trading partners (the composition of trading partners has changed since the last issue) in terms of Human Development.

But from 1990, it fell away sharply to 52% of the HDI of its trading partners by 2005, improving slightly to 53% by 2007 before.

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

...**Definitely not** – it has dropped significantly since 1990 before stagnating at these levels.

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 2012 that there was a 17.9% prevalence of HIV/AIDS in South Africa in persons aged 15 to 49.
- This equates to 6.1 million people living with HIV.
- South African average life expectancy is now 51 years, a slight improvement from what it was.
- 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 1.0-1.2 billion man hours per annum, or 8.3-10% of total man hours per annum.

➤ Black Economic Empowerment (BEE/BBEE)

- Perhaps a touchy subject in some quarters, but the bare facts are that this is a race-based policy, which is not only morally wrong, but 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 of **Rand's production** 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.
- Increasing political interference and promotion of racial policies is likely to ensure that this trend remains intact as new generations are forced to find equal opportunities elsewhere instead of in their country of birth.
- 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 – **15.9%** annually since 1981, but has reduced to **9.0%** since 2006.
- **SA productivity** is between **17% and 19%** of its trading partners and has decreased 5.6% annually since 1981 compared with its trading partners. However, an improvement has been seen since 2001 with GDP per Capita reflecting an improvement of 6.1% p.a. since 2006, while Manufacturing per Capita has declined 0.5% p.a.
- **SA Human Development Index** fell sharply between 1990 and 2005 and has remained stagnant since 2007.

The three major Secondary Factors highlighted above all show in no uncertain terms that risks to the upside have increased over the past 20 years, with the real effects on the economy probably still to be felt well into the future.

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.

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.

	Annual Differentials		
	1981-2011	2006-2011	Future
Primary Factors (Quantifiable Effects)	21.4%	2.9%	3.4%
Labour Cost	15.9%	9.0%	8.0%
Productivity	5.6%	-6.1%	-4.6%
Secondary Factors (Semi-definable Effects)	2.0%	2.0%	3.0%
AIDS Pandemic			↑
Black Economic Empowerment			↑
Emigration of Skilled Labour/Professionals			↑
Structural Factors (Indefinable Effects)		1.0%	1.5%
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		5.9%	7.9%

Based on the above facts and assumptions:

The differential in competitiveness between South Africa and its trading partners is estimated to have been **5.9% annually from 2006 to 2011**, with the future in all likelihood looking bleaker, **possibly as high as 7.9%**.

So, there we have an overview of this country's fundamental competitiveness. **But, let's** look at the historical 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:

- 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, and has been, 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 (Trade Deficit), 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)!

Income Statement for RSA (Pty) Ltd													
Ordinary Description	Technical Description	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Sales	Exports	333	291	311	358	448	538	704	556	657	790	815	918
Cost of Sales	Imports	-283	-265	-312	-360	-477	-574	-740	-554	-607	-743	-854	-991
Gross Profit/Loss	Trade Balance	50	27	-1	-2	-29	-36	-36	2	50	47	-40	-74
Other Revenue	Offshore Services	57	68	69	80	93	110	123	118	119	127	146	164
	Offshore Investment Interest/Dividends	20	18	18	26	37	43	42	27	26	30	40	55
Expenditures	Foreign-sourced Services	-70	-75	-85	-104	-126	-148	-178	-166	-171	-178	-200	-219
	Foreign Investment Interest/Dividends	-47	-51	-43	-54	-69	-109	-113	-78	-77	-94	-111	-124
Net Other Revenue	Services Account	-41	-39	-42	-52	-65	-104	-126	-99	-102	-115	-125	-124
Total Net Income	Current Account	10	-13	-43	-54	-94	-141	-162	-97	-53	-68	-165	-197
% of GDP		0.8%	-1.0%	-3.0%	-3.5%	-5.3%	-7.0%	-7.2%	-4.0%	-2.0%	-2.3%	-5.2%	-5.8%
Cash outflow requiring short-term funding:													
Bank Overdraft/Loans	Foreign-sourced Loans	0	-13	-43	-54	-94	-141	-162	-97	-53	-68	-165	-197

- From 2009, we saw an encouraging turnaround on the trade side, with this returning to a Gross Profit (Trade Surplus) of R50bn in 2010 and R47bn in 2011.
- Net Other Revenue (Services Account) reduced from 2008 loss of R126bn to around R100bn in 2009/2010, but reversed again in 2011 to R115bn.

However, as we can see, 2012 and 2013 have seen a severe deterioration with the Trade Account recording a massive deficit of R74bn in 2013 (more than double 2008!) and with the Services Account also equal to record deficit levels of R125bn, this has resulted in a Current Account Deficit of R197bn in 2013, equal to an alarming 5.8% 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 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, 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

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.

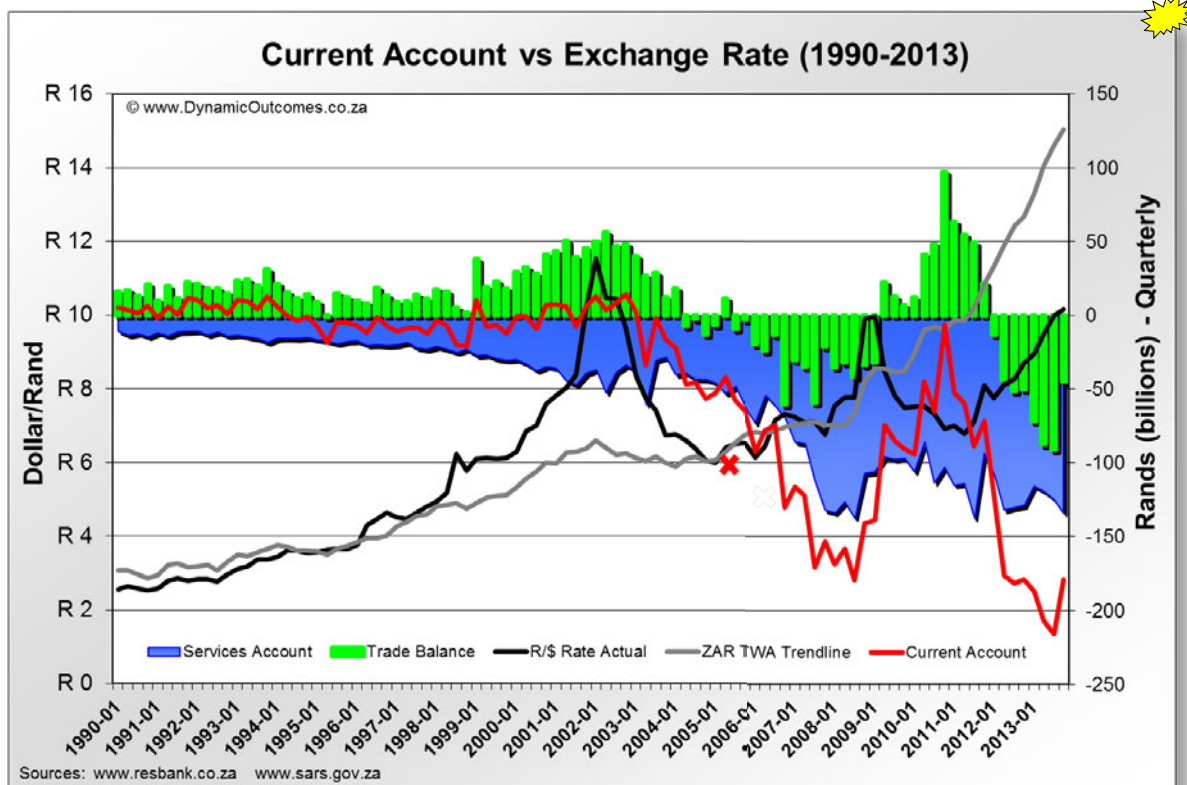
But this trend changed once the Rand (**Black** line) strengthened (moved below its trade-weighted fair-value **Grey** line) (marked **X**).

The effects of an overvalued Rand on our Trade Account are quite clear to see from 2005 to 2009, with it 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 good.

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

This critical economic aspect of the economy remained in deficit



import of the same (Services Account – **Blue** area).

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

(running at a loss) right through until late 2009, when it pushed back into positive territory for the next 11 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.

But since then, the situation has deteriorated significantly each quarter, with 3Q2013 registering a record **R91bn** Trade Deficit, before “recovering” to a **R45bn** deficit in the last quarter, with a net deficit of **R74bn** for the year.

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 2003, and thus has not attracted concern.

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 2Q2009, the Trade Account once again turned positive until 4Q2011, while the Services Account deficit (while reducing somewhat), remained at more than double pre-2003 levels, before returning back in 3Q2011 to register a record \$138bn (q.a.) deficit. After two improved quarters, it has again deteriorated to close to record deficit levels in 2012/2013.

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 in fact 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 ...

...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 –

What is the effect on the Current Account (Net Profit/Loss)?

Well, 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 bottoming in 3Q2008, 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 4Q2010 and 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 3Q2013 to a **record R216bn** (q.a)!

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?

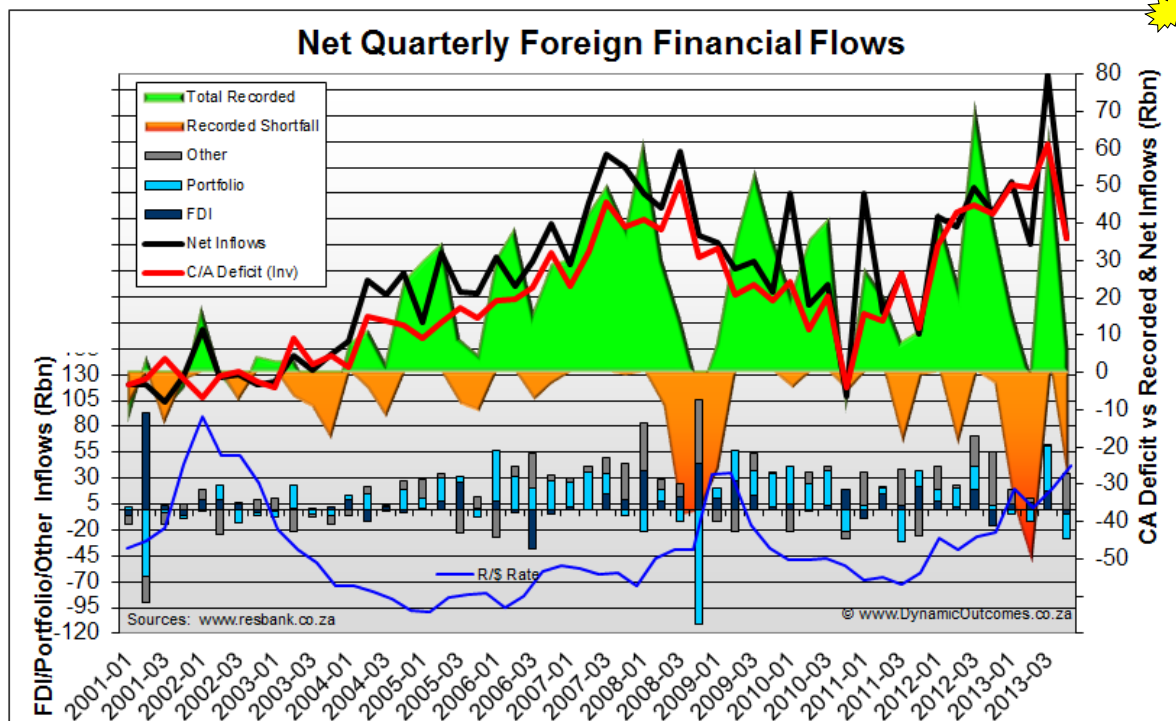
In order to determine this, we provide herewith a Chart which analyzes the financial flows as reported by the Reserve Bank.

The next chart shows 3 sets of data:

- The bottom section (Bar Chart) shows the 3 recorded foreign investment transactions types (LHS scale), being

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



- Foreign Direct Investment (**Navy** portion of bar),
- Portfolio Investment (**Aqua** portion of bar) and
- Other Investment (**Grey** portion of bar).

4Q2008 a mind-numbing **R112bn!**

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

- And the overlay on the bottom section shows the average Dollar/Rand movement for this period (**Blue** line).

Firstly, of interest, you will notice that it is mostly 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).

- The top section (Line & Area Chart) [RHS scale] is:

- Current Account Deficit per Quarter (**Red** line) [*scale inverted*].
- Net Inflows including Unrecorded Transactions (**Black** line)
- Total Recorded Transactions (**Green** area), being a sum of Foreign Inflows in the Bar Chart below.
- Total Recorded Shortfall (**Orange** area), where Total Recorded Transactions has been insufficient to fund the Current Account Deficit.

But as can be seen, even with these inflows, there was a gaping hole between the Current Account Deficit (**Red** line) and Total Recorded Inflows (**Green** area) as shown by the massive Total Recorded Shortfall (**Orange** area)...

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

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

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

Does this sound like a good picture? Certainly not.

- From the time the Current Account (**Red** line) went into Deficit in 2003, Total Recorded Transactions (Net Foreign Inflows (**Green** area) were on average sufficient to fund this deficit.
- 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 (**Aqua** bar) were robust for several years but

10) TWIN DEFICITS – DOUBLE DANGER RISK

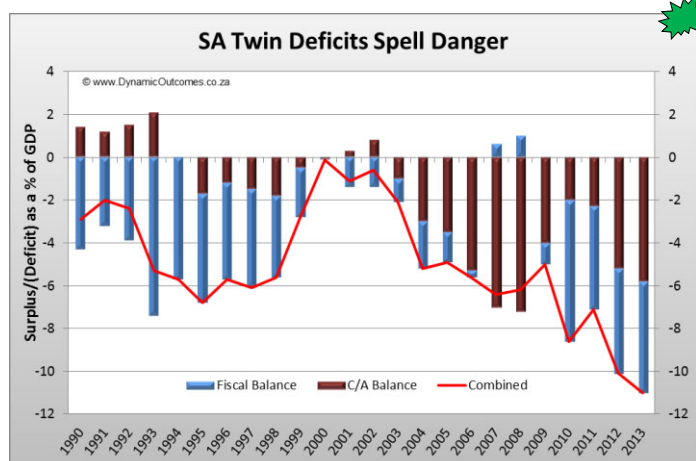
Up to this issue of the Exposé, what we have focused on has

been the trade and services element of the economy, and how **this has (or hasn't)** fared.

But it is opportune to bring in another element which has grown in magnitude – **the government's Fiscal (Budget) Deficit** (what the government earns in taxes, less what it spends).

The extent to which this has grown resulted in Morgan Stanley coining **the phrase the "Fragile Five,"** lumping South Africa together with India, Brazil, Indonesia and Turkey as being the countries that were most at risk when the Federal Reserve started tapering off its Quantitative Easing program.

(Which in the *Central Banking for Dummies Handbook* means 'buy more debt to solve an already insurmountable debt problem').



The chart shows a history of the Current Account (what the country receives from trade of goods, services and investments offshore, less what it spends) as well as the Fiscal (Budget) Account (what the government earns in taxes, less what it spends), both reflected as a percentage of GDP.

As you can clearly see, in 2000 there was a zero Combined deficit, but since then the situation has steadily deteriorated to the point where 2013 recorded a Combined deficit of 11% of GDP!

And the problem with that?

Well, if you spend 11% more than you earn, you need to borrow to make up the shortfall.

Fortunately, because of low interest rates overseas, foreigners have been happy to bring their money into our markets (to earn a premium return through higher relative interest rates).

But, 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 domestic political event that would cause investor uncertainty...

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

And that is just what we saw in 2008.

And it again we have seen again in 2013, with large portfolio outflows resulting in a depreciation of the Rand to multi-year lows as a result, and leaving a gaping hole in traditional funding of the Current Account Deficit.

This once again highlights the extremely fragile nature of our funding.

Running a significant Current Account Deficit is serious enough.

Adding an increasing Fiscal Deficit to this is not only more serious, but reckless.

But far more reckless, short-sighted and damaging to the stability of the currency and economy is the reliance on (and encouragement of) short-term capital to shore up this total deficit.

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?**

11) HAS RECENT GDP GROWTH BEEN HEALTHY?

Now, a question will no doubt arise, being:

"What about the amazing growth of around 5% that was experienced for years just prior to the global financial crisis? And what about the recovery in GDP the past couple of years?"

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.

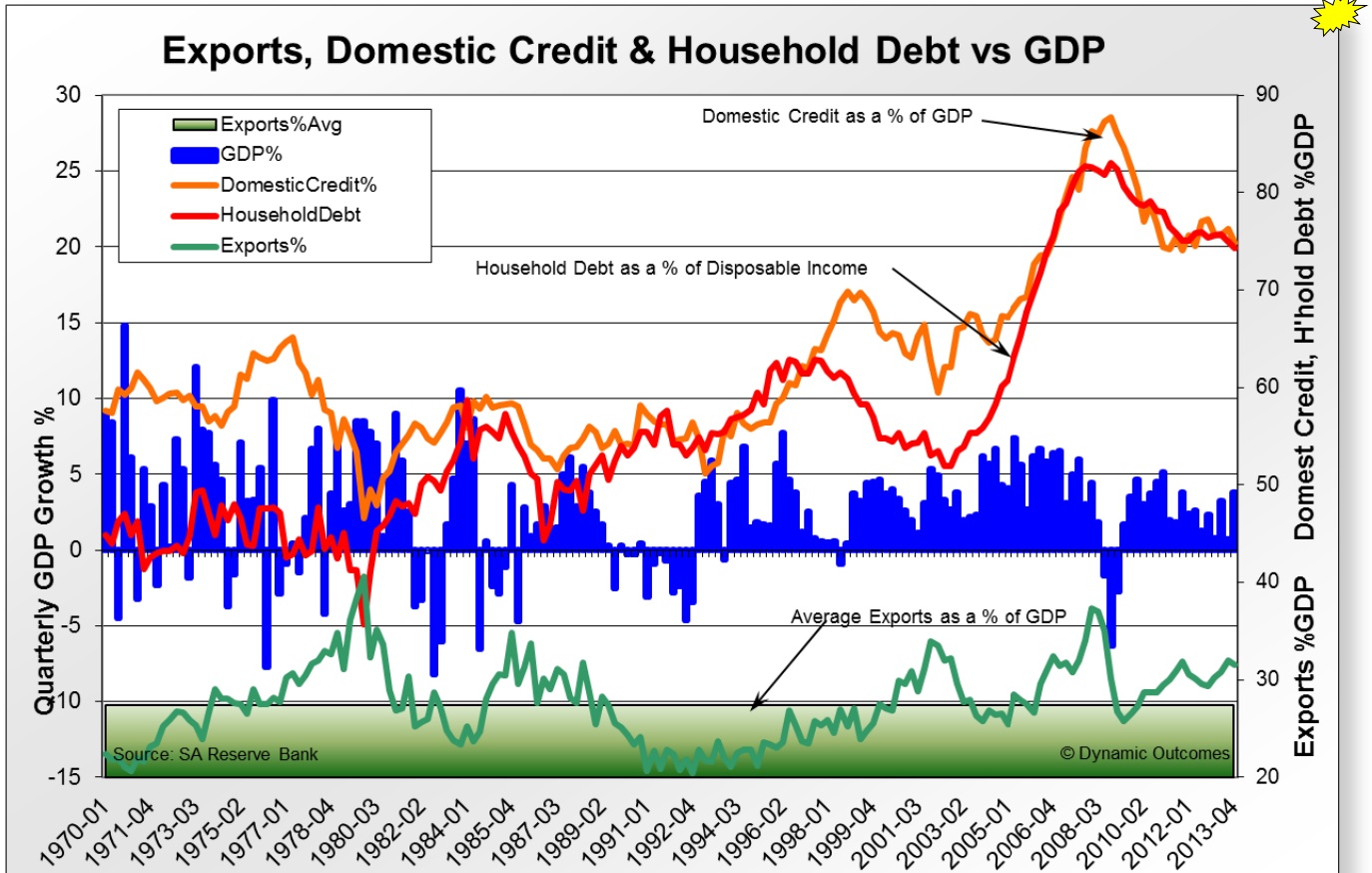
A. Exports, GDP Growth and Domestic Debt

The next chart (overleaf) 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 (**Orange line**).
- **Household Debt** as a percentage of Disposable Income (**Red line**).

As can be seen from this chart:

- Historically, when Exports as a percent 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 saw a reversal of this, with Exports as a percentage of GDP dropping off sharply, while GDP has turned positive and Credit/Debt has reduced.
- Since then, Exports have recovered to above 30% while GDP has also turned positive, while Credit/Debt has reduced slightly.

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 88% of GDP in 2008 from 56% in 1993 – mostly since 2002 when it was 65%. The credit crisis has seen this reduce to around 75% in 2013Q4.
- **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 74% by 2013Q4.

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!**

B. External Debt – the Bigger Picture

But then, that is not the whole picture – the chart above only shows Household Debt and Domestic Credit – what about the Total External Debt as a result of this ongoing foreign borrowing to shore up our shortfalls?

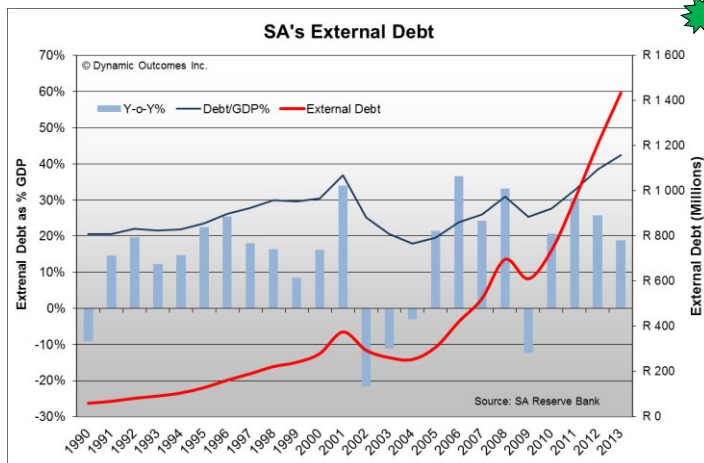
The next chart shows South Africa's External Debt (**Red** line),

What does this tell us?

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

Private consumption.

together with External Debt as a Percentage of GDP (Navy line), as well as the Growth Year-on Year in External Debt (Pale Blue bar)



This paints an alarming picture if ever there was one, with External Debt reaching **R1.44 trillion** in December 2013.

To put this in perspective:

- It has increased by 24 times (2405%) the 1990 levels of just R59.6bn (average growth of 15% p.a. y-o-y).
- Since 2004, it has increased by 5.7 times (at 21% p.a. y-o-y) and more than doubled since 2008.
- External Debt now represents 42% of GDP compared with 18% in 2004 and 21% in 1990.

Admittedly, this increase in debt has not been to the same extent that has been seen in the US and some other countries.

But nevertheless, this is a very precarious situation and is **exactly the recipe that caused the Financial Crisis and global meltdown in 2008/2009.**

The fact is that the past decade have seen an increase in local asset prices (stocks and property notably), but all backed by a massive increase in domestic and external debt.

C. What Will Burst the Bubble?

In simple terms, this is a bubble waiting to burst – it is not a question of **if**, but **when**.

What will cause it?

In simple terms: The inability to service debt.

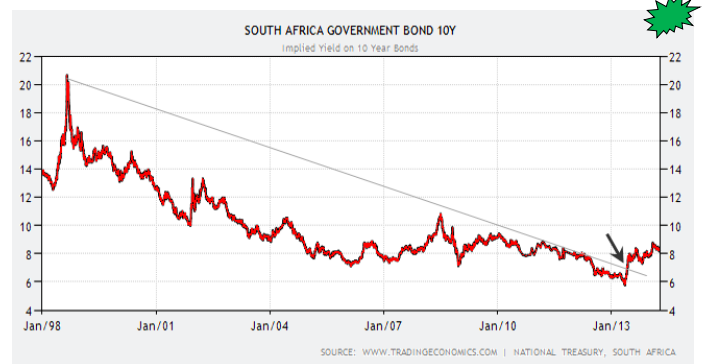
The repaying of debt is difficult enough when interest rates are at historical lows (as they have been), but when they start increasing, that is when the pain really starts, and defaults occur, debt is written off and asset prices fall.

And why would interest rates increase?

It all starts with *confidence* in this country and its ability to pay, measured in terms of what foreigners are prepared to lend the government.

- The more confidence investors have in their capital being safe, the less return/yield they are willing to ask.
- The less confidence investors have, the more return/yield they will demand.

A fair measurement of this confidence would be the yield on the 10 Year Government Bond.



Above is the yield on the 10 Year Bond since 1998. As can be seen, yields have trended lower since the late 1990 high of over 20% to reach an all-time low of 5.77% in May 2013.

But since then, yields have jumped over 8%, and in so doing, have clearly broken the (grey) long term trendline resistance, clearly signaling a change in long term trend on interest rates.

This is an early sign that trouble is on the (not-too-distant) horizon, with the bubble bursting and a credit crisis resulting.

12) 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.**

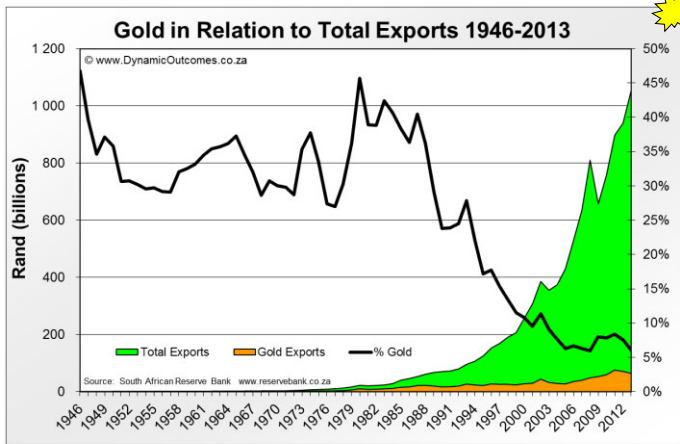
And, more importantly, will this not support the Exchange Rate and the economy going forward, recognizing that South Africa has been largest producer globally of gold and of some other major commodities?

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** historic foreign exchange earner!

The above Chart tells us the following:

- From 1946 to 1950, Gold exports decreased from 47% to around 30% of Total Exports.
- From 1950 to early 1970s, Gold Exports represented around 30-35% of Total Exports.



fact that South Africa has always been, still is, and will always be the largest, or at least one of the largest, gold producers internationally.

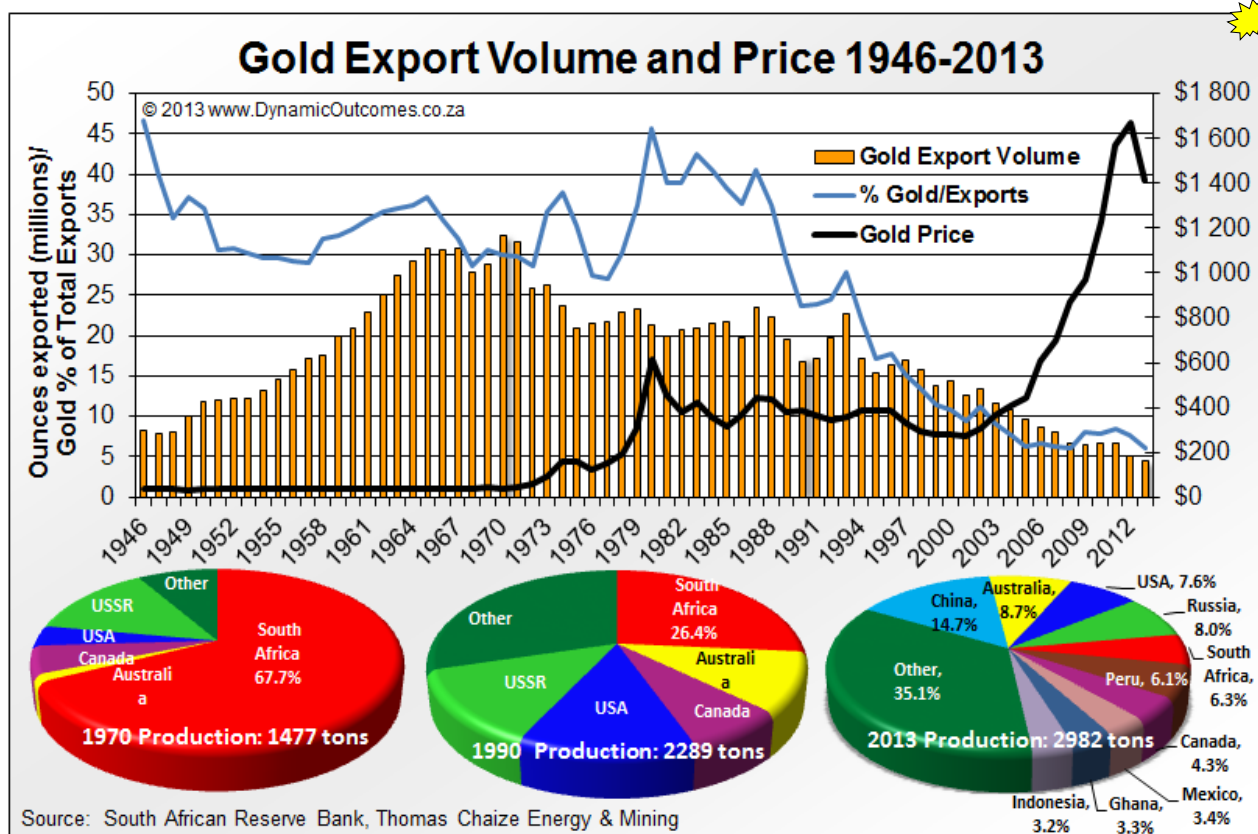
However, the next Chart, which shows the actual volume (not value) of Gold exported by year, together with 3 pie-charts reflecting world Gold production for 1970, 1990 and 2013, tells a very different story:

- From the mid-1940s, South Africa gold exports expanded consistently for a quarter century, peaking in 1970 at 32.6 million ounces (1047 tons). Over this time, gold exports represented around 35% of total exports – a significant proportion.
 - And in terms of global presence, South Africa was by far the largest gold producer, with 67.7% of total global production.
- But from 1971 (when the US abandoned the Gold standard), South African gold output declined by a third even as the Gold price rose dramatically to hit \$850 in early 1980. Thanks to the price increase, gold exports increased in value to 46% of total exports.
- While annual gold output remained pretty steady for the balance of the decade, the reduction in Gold price and increased exports started seeing gold share of total exports fall down to 24% by 1990.
 - By this stage, while still the largest producer of gold, South Africa's share of global production had dropped to 26.4%.

- 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 with a dip during 2009/2010 due to 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 next 2 years saw this figure claw back to 8% of Total Exports, but since then we have seen it decline back to near record lows, with 2013 recording just 6.1% Gold Exports.

Until recent years, we had all probably taken it as an accepted

- Apart from a short recovery in the early 1990s, things have



steadily deteriorated since. Despite the Gold price having more than quintupled since 2000, production has dropped to below 10 million Troy ounces the past 8 years, equating to just 6% of total exports in 2008.

- And then, the real shocker – 2012. Despite average Gold price at its best levels ever, and record global mining output of 2700 tons, South Africa managed to export its smallest volume in living memory – just 167 tons.
- But 2013 has gone one further – with a further 10% decline to a new record low, with just 151 tons being exported (equal to 33% of 2000 output, and just 14% of the record 1047 metric tons in 1970)!

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 2700 in 2012.

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

South Africa lost its long-held crown of **the World's largest Gold producer** to China in 2007, which now produces 14.7% of the **world's Gold**.

And not only that, but with just 6.3% of global output (from 11.1% in 2007), South Africa has also dropped below Australia, USA and Russia 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 South African mining industry casualties escaped the attention that they ought to be 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, labour unrest and crippling rationing of electricity supply...

And then, the "kiss of death" –

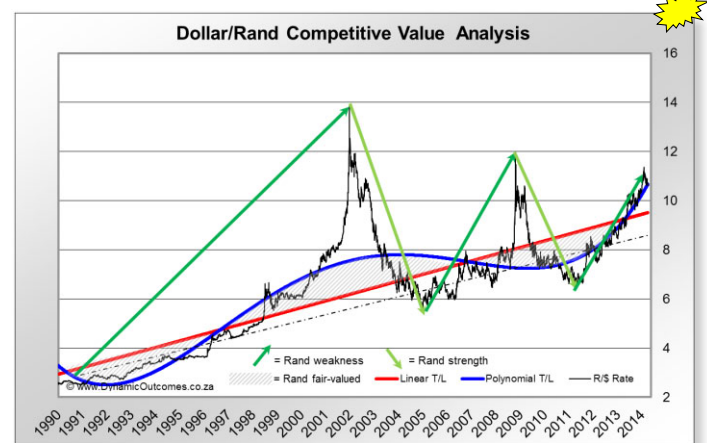
- The "call for nationalization of mines" spectre has loomed increasingly larger the past couple of years...

13) WHAT ACTUALLY MOVES EXCHANGE RATES?

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

- The exchange rate is an adjusting mechanism, and based on **South Africa's comparative change in labour cost and productivity**, there has needed to be an adjustment to the Rand 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 largely not been healthy growth but rather a growth of debt.

If we look at the Rand from 1990 (next Chart), we can see that there has been an overall gradual depreciation of 5.7% per annum (**Red** line).



However, while this has been so, there have been HUGE fluctuations from fair-value and long-term changes of trend, as shown by the green arrows.

That leaves us with a serious question:

Given that that an exchange rate is an adjusting mechanism for exports and imports, what has caused the Rand rate to experience these huge spikes and changes of trend?

The answer to this question is that there are **two drivers moving the Rand**.

The one is **fundamentals**, which we have covered up to now.

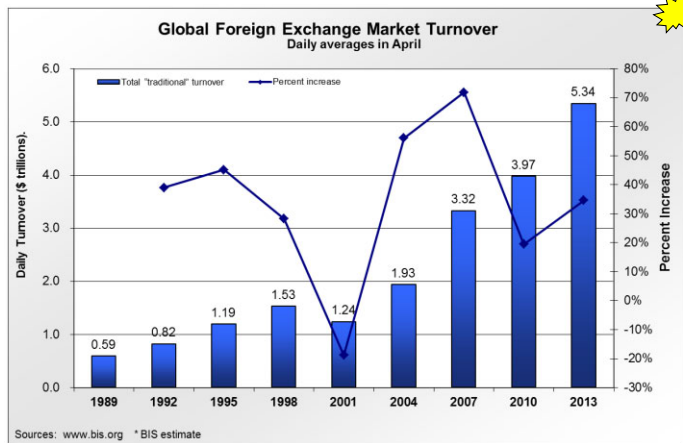
But as can be seen, if you look purely at fundamentals, and make your decisions based on these alone, you can (and will) be caught and suffer loss.

Because there is a **much larger driver** of the Rand that is not based on fundamentals or economics.

And to understand this, we need to look more closely at the global foreign exchange market and how the Rand fits into the whole global arena.

13) THE GLOBAL & RAND FOREIGN CURRENCY MARKET

The global foreign exchange market is by far the largest traded market globally, more than all the stock, bond and commodity markets put together.



The above chart shows the daily average turnover globally since 1989.

As can be seen, it has exploded as a financial tradable market in the past 10 years, reaching a **Daily** average turnover of **\$5.34 trillion in 2013**!

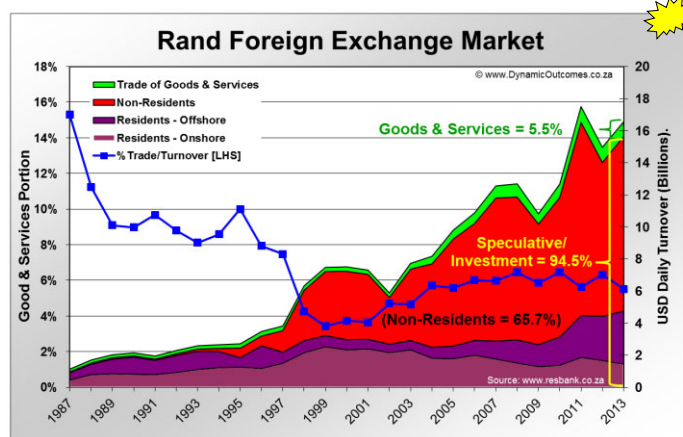
To put this in perspective, the United States GDP (total output of the economy) for 2013 was \$15.7 trillion...

...less than 3 days turnover on the global forex market!

Rand Foreign Exchange Market

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 2013 was \$16.6 billion, down from \$17.5 billion in 2011. By comparison, daily turnover was \$12.7 billion in 2008, \$6.3bn in 1998 and a mere \$2.3bn in 1992.



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

The above Chart shows these 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 **Maive** areas).

As can be seen from the Chart, of a total turnover of US\$16.6 billion in 2013...

Goods and Services account for a mere **5.5%** of Rand Forex turnover, the **94.5%** balance being **investment and speculative**!

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

And of this 94.5% that is non-trade related, the break down is:

- **65.7% are transactions by foreigners** (Non-Resident Investors/Speculators), having increased from a mere 4.3% in 1992 to 50% in 1998 to current levels, as a result of the opening up local markets and especially the abolishment of the Financial Rand in March 1995.
- **8.7%** are by residents living in South Africa or its neighbours, that is, in the Common Monetary Area (SA Residents Onshore) – down from 46% in 1995.
- **20%** are by SA residents living overseas (SA Residents Offshore) – down from 50% in 1990, but up from 7.6% in 2003.

Now to ask the important questions:

1) Do foreign 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 R9.00/\$ and sell at R10.50/\$, or sell at \$10.50 and cover at \$9.00)

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 R8.00/\$ 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 R10.00 to the Dollar or R4.00 or even R50 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 *long term* 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* 6% effect that goods and services have on total forex turnover, 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 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 at 5% compared with the likes of the US, UK, Euroland and Japan, where central bank rates are close to zero.

We have discussed this previously, whereby short-term money is being attracted but because it can flow in and out so easily, it causes mayhem with the Rand and the economy.

There needs to be some limitation to these outflow of funds (and attraction of them in the first place)

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?!

Short-term foreign capital is the problem –

...not the country's hard-earned wealth!

This is a double-edged sword with devastating effects:

The **country's hard-earned wealth** is what creates business and employment, and once it has gone, it will likely be gone for good – not for good, but for ever – 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 as well...

...as we have seen several times already in past years!

Very shorted-sighted thinking, statements and action by our esteemed authorities.

14) ECONOMIC MARKETS vs FINANCIAL MARKETS

To further understand what this foreign exchange 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](http://elliottwaveinternational.com) 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:

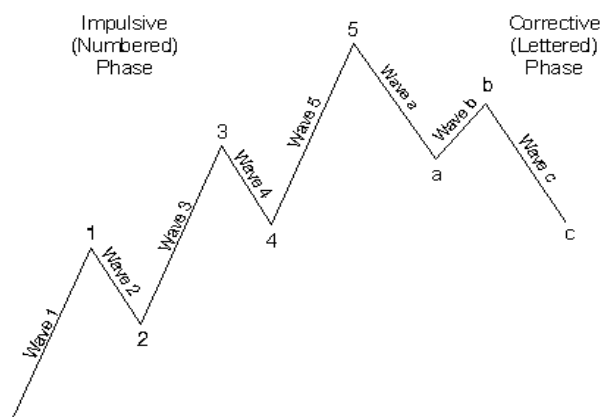
- All liquid financial markets move in definable patterns.
- This is the result of mass human emotion, flowing from hope and greed to fear and despair, and back again.
- Given a set of data, the majority of a crowd would react in the **same irrational but predictable way**.
- Not all, but most – like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

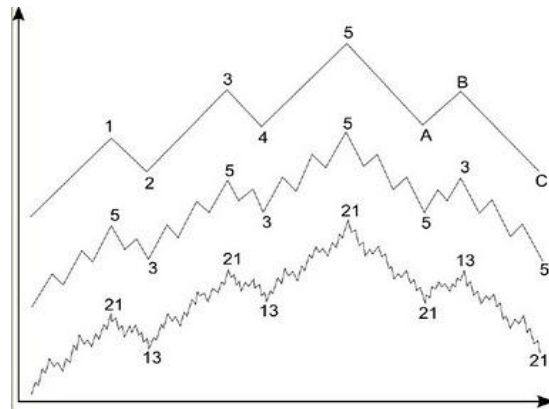
Basic Elliott Wave Structure

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.

The uniqueness of this forecasting technology is:

- Firstly, its database of a million+ unique historical market patterns which have been analyzed and catalogued according to the rules and guidelines of the Elliott Wave Principle.
- Secondly, its powerful pattern-matching engine, which compares a current market situation with these hundreds of thousands of actual historical market movements in similar markets and timeframes...

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

This means 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 human element was largely removed, but still required in order to synchronize the waves from the long term projection right down to the short term, applying the rules and guidelines of Elliott. This required an in-depth course in Elliott Wave Theory and application in real-time.

(Being from a mechanical engineering background and with analytical skills and an eye for precision, form and proportion, this was a strength, resulting in me becoming the top analyst in an international Elliott Wave forecasting service for the majors and S&P500)

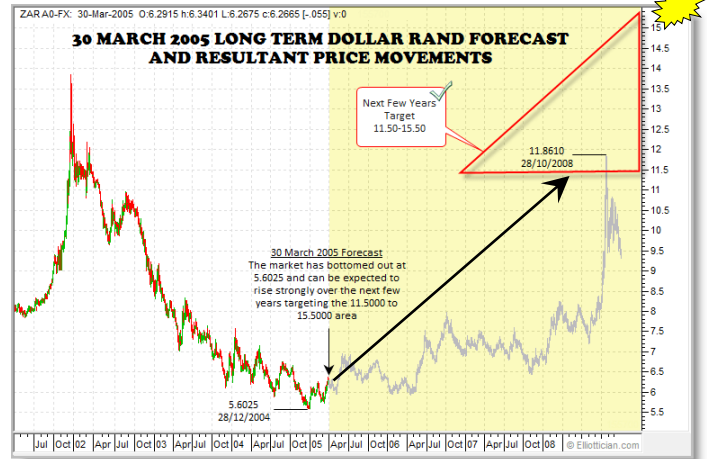
The big question we had of course: Could it work for the Rand?

Proof of the Pudding

This is what it told us as early as 30 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.



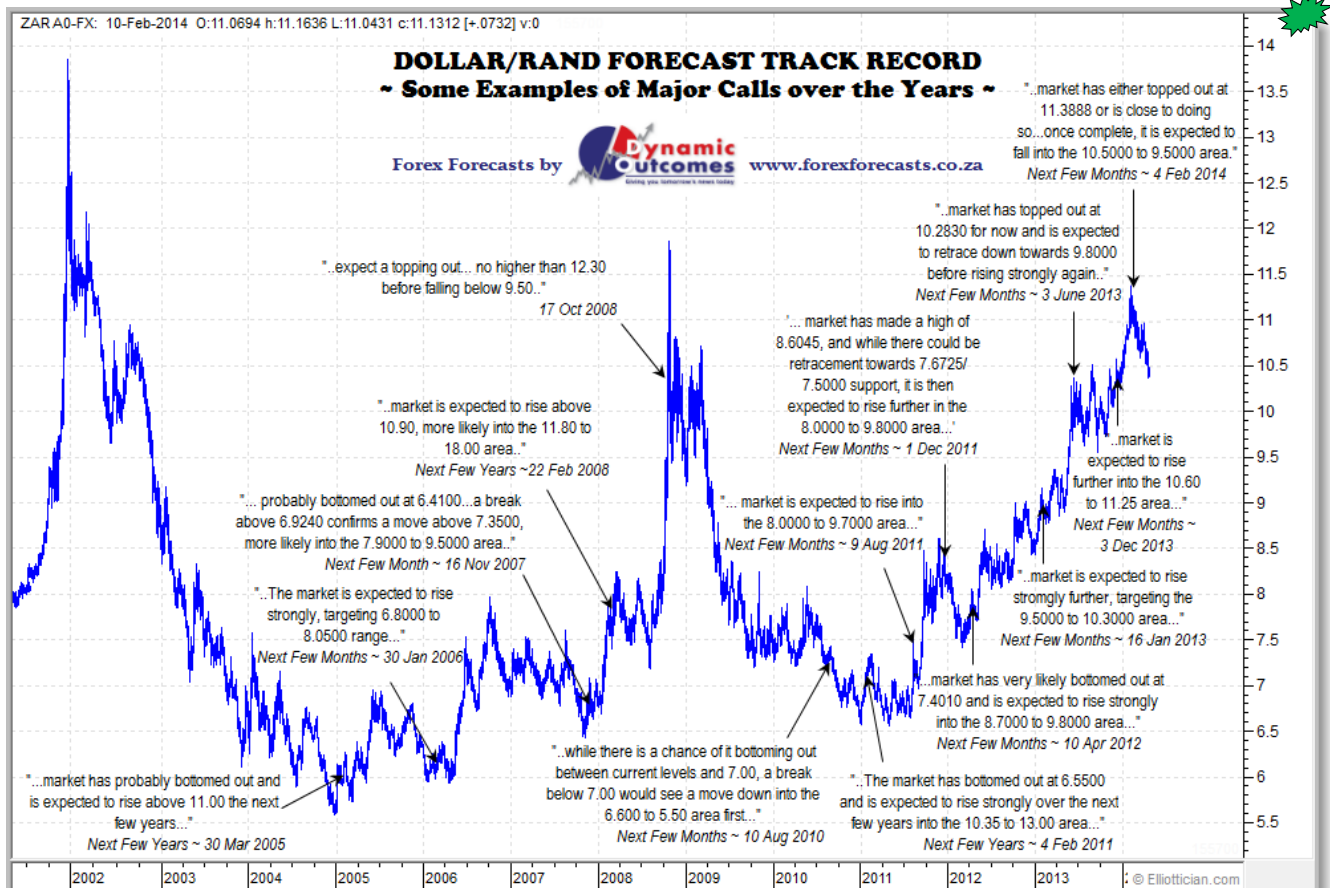
And as we now know, with the benefit of hindsight, that it was **correct on both aspects**.

Finding this of such value to ourselves and our trial clients (who we provided forecasts to for several months), in October 2005 we launched our forecast subscription service.

Initially for the Dollar/Rand, it has been expanded to both the Euro and Pound, and with an average historical accuracy of 80%+, has assisted many hundreds of clients all over the world in better managing their Rand forex exposure.

With this technology, we have predicted the major turning points in the market for the Rand against Dollar (sometimes with uncanny accuracy), as highlighted in the Chart below.

For more details, see www.forexforecasts.co.za/track-record



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 essence, an overview of where the Rand should be from an historical and fundamental perspective, why it has moved has it has, 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 slightly undervalued at present rate of R10.60. **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, contrarian, but 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 then, through having access to an objective and scientific-based expectation of future Rand movements, (based on actual historical patterns and track record), which provides you with a roadmap of expected future movements...

...you have both the framework and parameters to enable you to make educated and informed decisions...and to take action – with **the probabilities in your favour...and** before it is too late.

The result –

- Less doubt and uncertainty, less fear, anxiety and stress
- Easier decision-making, focus and ability to take action
- Increased savings & wealth preservation, more choices and peace of mind = more time, energy and money to spend on those people and things most important to you.

In short –

A Degree of Certainty ... Amidst Uncertainty.

And a Saving of Time, Stress and Money

Congratulations if you have got this far in this report.

Because, if you have taken the time to take this trip with us, you now have a far greater understanding of the Rand, the South African economy and the foreign exchange market than the vast majority out there – yes, including most economists, financial advisors, bankers and businessmen.

For more on the services we provide to help empower you to make objective, educated decisions, please visit us at

www.ForexForecasts.co.za

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

To your success ~



James Paynter
Director & Elliott Wave Market Analyst

We would appreciate your feedback and comments in this regard, by emailing us [here](mailto:info@forexforecasts.co.za).

And if we can be of any assistance to you, please feel free to visit our [website](http://www.forexforecasts.co.za) or contact us directly by phone, fax or email.

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- Knowing **WHERE** the Rand is likely to head over the next few days, weeks, months and years
- Knowing **WHEN** to exchange your funds at the optimum exchange rate
- Knowing **WHAT** exchange rate is being offered you by your bank compared with the market
- Knowing **WHERE** to get better rates and service for your foreign transfers & conversions

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