

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**

**March 2015**

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### INTRODUCTORY PREFACE

This is not your Economics 101 overview – but 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 aptly entitled report:

### “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 an exchange rate actually is, 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 performing compared to its trading partners
- ❖ How to analyze the South African 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
- ❖ ...AND how **you** in future can benefit and profit by knowing this

Why is this a **FREE REPORT**?

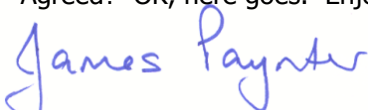
Perhaps it will not be in future, but for now we want to ensure that this gets to as many persons as possible that are affected by the South African economy, and especially the Rand's volatile movements. We want to help educate you as to why we are where we are, and what you can expect going forward.

And, of course, if you have found value in this valuable information, we trust you will make use of our paid products and services that will help you optimize the timing of your foreign exchange transactions, and be able to take advantage of the Rand's movements – instead of being at its mercy – time and time again.

**AND (this is important)...we want YOU to please do your bit.**

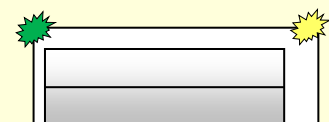
If you find value in this FREE report, you owe it to others around you who are also affected by the Rand's movements to share this with them as well – so they see things as you will after reading this – and so that also they don't get hurt again.

Agreed? OK, here goes. 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](http://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 pretty 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 economists and "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 2004, we have had another 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.

Since then, of course, the rollercoaster has continued with a period of sustained Rand weakening (which again caught many that were not in the know unawares). 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 R1200 to produce here, and costs \$100 to produce in the US, the exchange rate based on these costs is  $R1200 / \$100 = R12.00$  per 1 US Dollar.

### 2) WHY SHOULD AN EXCHANGE RATE ADJUST?

Now, this rate of R12.00 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 1 200	Domestic Price	\$100
= Exchange Rate of R12.00/\$		
5.0%	Change in Product Cost	3.0%
New Domestic Price		
R 1 260	adjusted change in costs	\$103
= New Exchange Rate of R12.23/\$		

So to use the example above, if there is a 5% increase in the cost of a widget domestically (from R1200 to R1260), 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 R12.00 to R12.23 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.

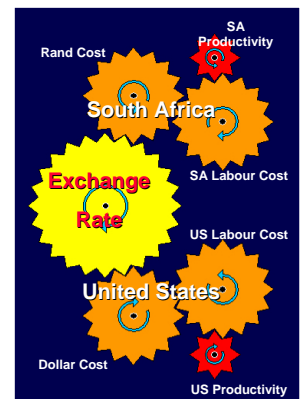
International trade succeeds through this essential gear working efficiently, or fails if interfered with!

### 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 1 200	Domestic Price	\$100
= Exchange Rate of R12.00/\$		
106%	Labour Cost Index	103%
+		
101%	Productivity Index	100%
=		
5.0%	Change in Product Cost	3.0%
R 1 260	Local Price	\$103
= New Exchange Rate of R12.23/\$		

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.

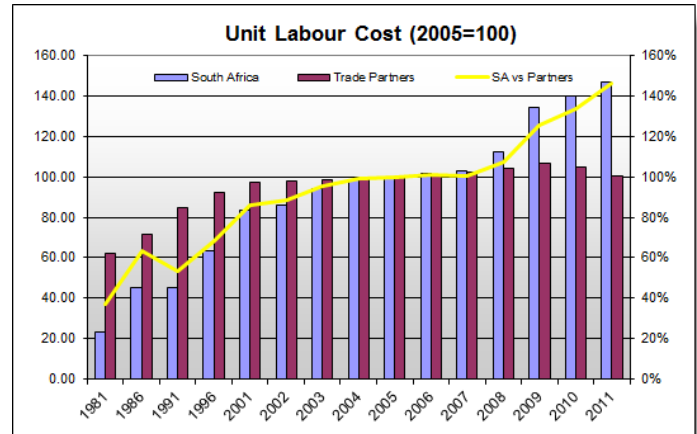
So, to summarize:

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.

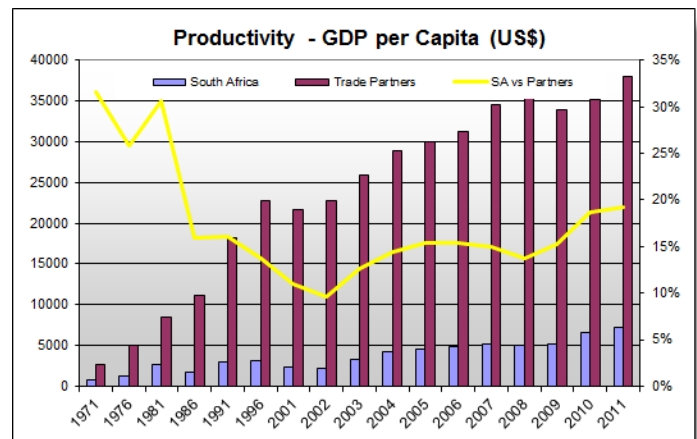


So having the necessary understanding, we now need to apply this to the Rand and the South African economy, through answering the following questions:

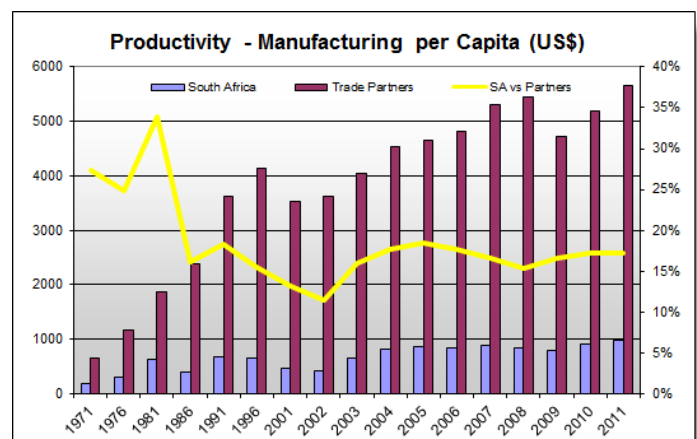
- What are the **product cost** and **competitiveness differentials** between South Africa and its trading partners?
- **How have these factors changed** over the past years, especially since the opening up of the South African economy to the global market from 1990?
- **What is their historical effect** on the Rand?
- How has the Rand **actually moved by comparison**?
- What should be **expected for the future** based on these fundamentals?

### Productivity Adjustment since 1981

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 above.

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.

### 3) INTERNATIONAL COMPETITIVENESS

Recognizing the above, let's start by looking at the adjustment that would needed to have been made to the Rand over time in order to compensate for change in labour cost and productivity.

It is necessary, however to dig a bit deeper into what feeds into the changes in local pricing which, as we mentioned earlier, is primarily a change in **Labour Cost** and **Productivity**.

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

#### Labour Cost Adjustment Since 1981

Firstly, the next 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.

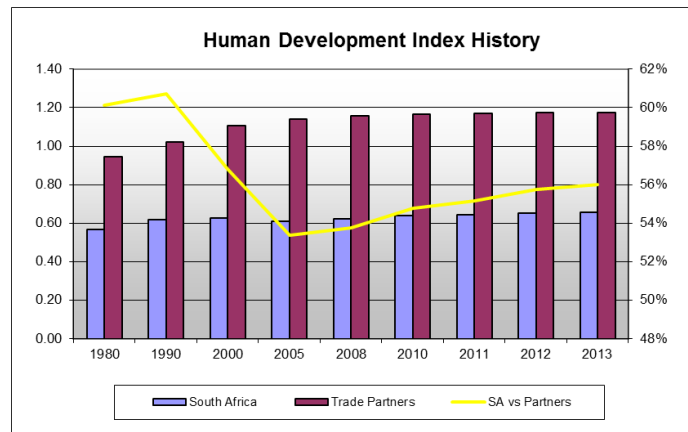
Compared with its trading partners on a GDP per Capita (US\$) or Manufacturing per Capita (US\$) basis, South Africa's productivity is between **17% and 19% of its trading partners** – with a sharp drop from 1981 levels but showing an improvement since 2002

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

### Human Development Index Comparison since 1980

An overall comparison would be to use the data as provided by the United Nations Development Program ([www.undp.org](http://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. And here's the shocker:

In 2013, South Africa's Human Development Index was 0.658 – ranking **118 out of 187 countries**.

More significantly, South Africa **dropped 42 places** between 1990 and 2007 and has recovered marginally

From the chart it can be seen that to 1990, South Africa was at 61% of its trading in terms of Human Development.

But from 1990, it fell away sharply to 53% of the HDI of its trading partners by 2005, improving slightly to 56% by 2013.

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

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

Has this affected South Africa competing with its trading partners?

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

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

- **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 recovered marginally since.

Of note, the following 3 factors have had a significant effect:

### HIV/AIDS Pandemic

- The [United Nations](http://www.un.org) estimated in 2013 that there was a **19.1%** prevalence of HIV/AIDS in South Africa in persons aged 15 to 49.
- This equates to 6.3 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/BBBEE)

- 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 (and are



being) lost due to unqualified management, bad planning, a lack of foresight and preventative maintenance?

- The enforced policing of this immoral 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 2006 said that one million white people had left the country in the previous 10 years. This number has increased by at least another two hundred thousand the past 10 years, according to Statistics SA.
- 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:

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 can produce 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
<b>Primary Factors (Quantifiable Effects)</b>	<b>21.4%</b>	<b>2.9%</b>	<b>3.4%</b>
Labour Cost	15.9%	9.0%	8.0%
Productivity	5.6%	-6.1%	-4.6%
<b>Secondary Factors (Semi-definable Effects)</b>	<b>2.0%</b>	<b>2.0%</b>	<b>3.0%</b>
AIDS Pandemic			↑
Black Economic Empowerment			↑
Emigration of Skilled Labour/Professionals			↑
<b>Structural Factors (Indefinable Effects)</b>	<b>1.0%</b>	<b>1.5%</b>	
Infrastructure Inefficiencies (Transportation/Energy/Fuel)			↑
Crime and Security Factors			↑
Immigration Burden Costs			↑
Illiteracy/Education Levels			↓?
Unemployment Burden Costs			↑
Delivery Costs (remoteness from major markets)			→
<b>Total</b>	<b>5.9%</b>	<b>7.9%</b>	

Based on the above facts and assumptions, we have the following result:

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 and what we can expect for the future.

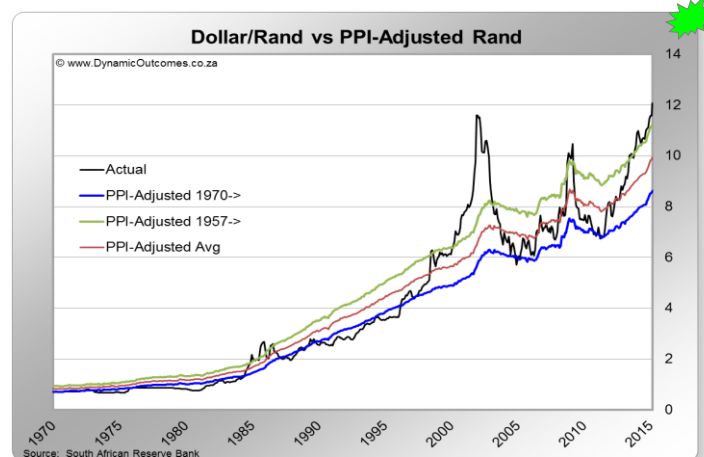
### 4) WHAT IS THE RAND'S INFLATION-ADJUSTED VALUE?

Now, let's look at how this has actually impacted on the Rand historically based on the changes in producer price inflation (using the Producer Price Index) between South Africa and the United States.

The next Chart shows the Dollar/Rand performance since 1970, which is when the Rand was no longer fixed at 71 cents to the Dollar (\$1 = R0.71), against which we have computed 3 lines:

#### PPI-Adjusted Rand Value from Jan 1970 (Blue)

The first lower Blue line is the adjustment required in the Dollar/Rand to compensate for the changes in Producer Price Index since 1970.



- This computed trendline has an average annual depreciation of **5.7%** and indicates the PPI-adjusted Rand value at present is **R8.60/\$**.

We can see how this line tracked the actual Rand value closely until the late 1990s, and since has provided a baseline support at times of extreme Rand strength in 2005 and 2011.

#### PPI-Adjusted Rand Value from Jan 1957 (Green)

Prior to 1970, the Rand value was fixed against the Dollar at around 0.71/\$. However, there was a buildup of inflation differentials prior to this, which must be taken into consideration.

We have therefore computed another line using all the historical data available to us (back to 1957).

- This computed trendline has an average annual depreciation of **4.8%** and indicates the PPI-adjusted Rand value at present is **R11.25/\$**.

As can be seen, this line has been close to providing an upper band of resistance, except for the blow off in 2001.

## Average PPI-Adjusted Rand Value (Brown)

Computing a mean of the above lines gives us an indication of the middle-road Rand value.

- This computed line has an average annual depreciation of **5.7%** and indicates the PPI-adjusted Rand value at present is **R9.95/\$**.

Putting this together, we have the following:

58+ Yr History	(Jan 1957–Mar 2015)	Value	Depr p.a.
PPI Adjusted Rand	From 1970	8.60	5.7%
	From 1957	11.25	4.8%
	Average	9.95	5.7%

The Rand at current values is just above the upper end of this band, which corresponds with the trendline analysis.

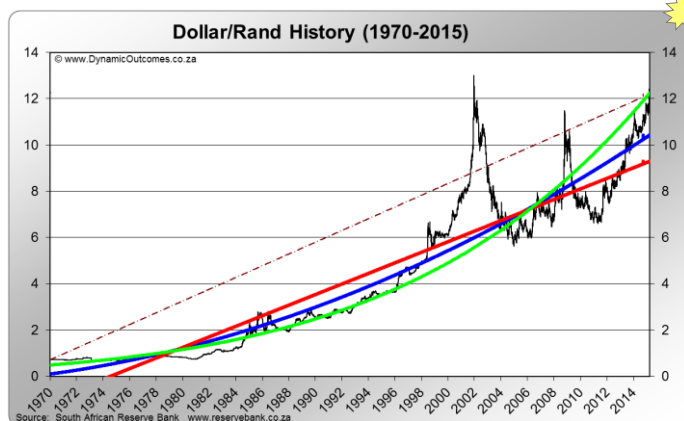
The above is a good indication of how this adjusting mechanism has worked over time, but it also does not explain the large swings in value that we have since the late 1990s.

## 5) WHAT IS THE TRENDLINE VALUE OF THE RAND?

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

### Dollar/Rand Trendline Value since 1970

For a start, let's take a look at the long term historical performance of the Rand from 1970.



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 2015 of **R12.20/\$** [Mar'14=R10.60], the average historical trendline depreciation has been **6.5%** [Mar'14=6.3%] 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 Trendline from January 1970 to date.

- This linear trendline has an annual depreciation of **5.8%** [Mar'14=5.9%] and indicates the Rand should at present be **R9.30/\$** [Mar'14=R8.90].

### 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'14=6.1%] and indicates that the Rand's fair value is **R10.45** [Mar'14=R9.88] to the Dollar at present.

### Exponential Trendline C (Green)

We have also included an Exponential Trendline for this period.

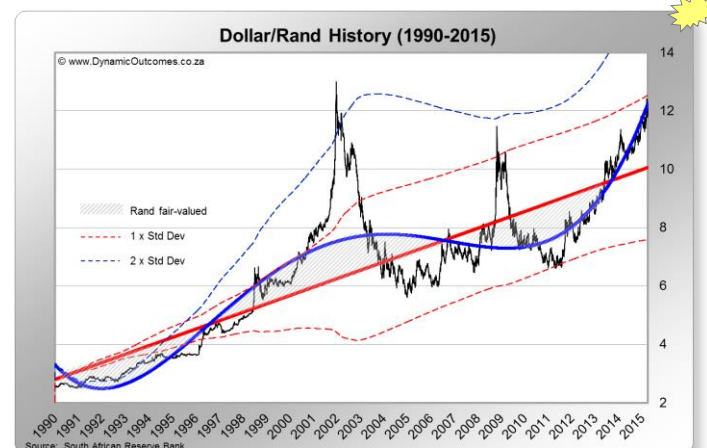
- This line indicates that the Rand's fair value is around **R12.25/\$** [Mar'14=R11.75] which equates to an annual depreciation of **6.5%** [Mar'14=6.5%] since 1970.

So, based on a long term historical trend since 1970, the Rand's present true trendline value is between **R9.30 and R12.25 (mean of R10.45)** and should be expected to depreciate between **5.8% and 6.5%**

However, when we look at this this period (1970 to present) it could 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

### Dollar/Rand Trendline Value since 1990



The above Graph shows the Rand movement (**Black** line) since January 1990 to date, reflecting the daily average rate since

that date. Off this data, we have two computed trendlines:

**Linear 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 **5.2%** and indicates that fair-value for the Rand at present is **R10.02/\$** [Mar'14=R9.51].
- Overlaid on this, we have added the historical 1x standard deviation as an offset from the above linear trendline (**Red dashed** line). Note how this has proved a level of support (lower) and resistance (upper), except in 2001. The current value of this upper resistance line is **R12.54**.

**Polynomial Trendline B (Blue)**

The second is a curve-fitting polynomial tendline, which oscillates about Trendline A (**Red** line).

- This "curve-fitting" trendline has an annual depreciation of **6.5%** and indicates that fair-value for the Rand at present is **R12.35** [Mar'14=R10.67] to the Dollar at present.
- Overlaid on this, we have added the historical 2x standard deviation as an offset from the above curve-fitting trendline (**Blue dashed** line). Note how this has proved a level of resistance in both 2001 and 2008.

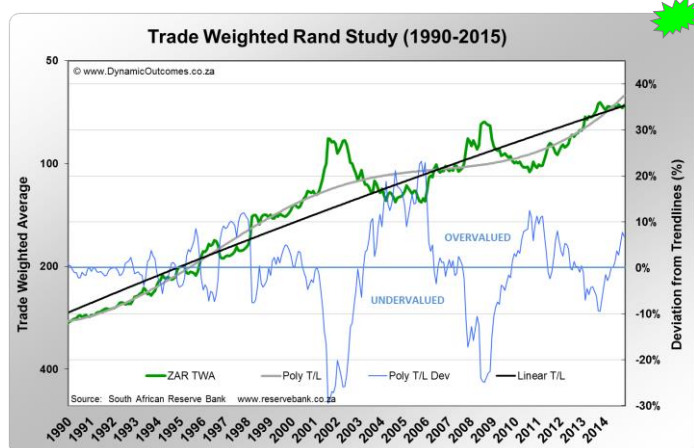
Based on the above data, the Rand is at the upper end of fair-value and we can expect strong resistance around R12.54.

**6) TRADE WEIGHTED RAND TRENDLINE VALUE**

Now, the above is looking at the Rand against the US Dollar, and while by far the majority of our foreign exchange transactions are against the Dollar, this is not a complete picture, as it can be skewed in times of extreme Dollar weakness or strength.

We therefore need to take a look at the **Trade Weighted Value** of the Rand – how it measures up against a trade-related basket of currencies, not just the Dollar.

**Trade Weighted Trendline Value Since 1990**



The above Graph shows the monthly Trade Weighted (Nominal Effective Exchange Rate) value of the Rand (**Green** Line) from 1990, March 2015 being **67.40** (note this is plotted inverted and in log scale).

Based on the actual present nominal exchange rate of **67.40** (base being 100 in year 2000) the average historical depreciation has been **6.2%** against a trade-weighted basket of currencies per annum since January 1990.

Based off this data, we have two computed trendlines:

**Jan 1990 – Mar 2015 Linear Trendline A (Black)**

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

- This linear trendline has an annual depreciation of **6.2%** indicates that fair-value for the Trade Weighted Rand is **67.40** at present.

**Jan 1990 – Mar 2015 Polynomial Trendline B (Grey)**

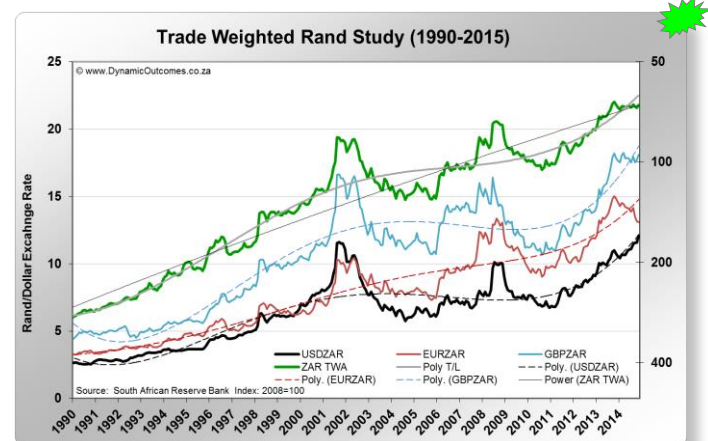
Then, as before, we have generated a curve-fitting polynomial tendline, which also oscillates about Trendline A (**Black** line).

- This trendline has an annual depreciation of **6.3%** and indicates that fair-value for the Rand against a basket of currencies is **63.09** at present.
- Off this, we have produced a Deviation (**Blue** line) between the Actual Trade Weighted Value (**Green** line) from the Polynomial Trendline Trade Weighted Value over the same period (**Grey** line).

This analysis indicates that as at March 2015, the Rand is currently **6.8% overvalued** compared with its trade related basket of currencies.

So against the Dollar, the Rand is weak, but against a basket of currencies, the Rand is relatively strong...

**Rand vs Dollar, Euro and Pound Trendline Value**



This is shown very graphically by adding the Rand's movements against the 3 majors – the US Dollar, the Euro and the Pound.

As can be seen the past year or so:

- Against the Dollar (**Black** line), the Rand has weakened considerably, and in so doing has tracked its curve-fitting trendline.
- Against the Pound (**Aqua** line), the Rand has tracked sideways and is well below its curve-fitting trendline.
- Against the Euro (**Brown** line), the Rand has strengthened significantly and is substantially below its curve-fitting trendline.

To summarise then, the Rand is actually relatively strong at present against a basket of currencies, but is weak against the Dollar, which has been rampant the past year plus.

Based on the above, we have the following indication of where the Rand's present value lies based on trendline analysis:

45+ Yr History	(Jan 1970–Mar 2015)	Value	Depr p.a.
Dollar/Rand	Actual	12.20	6.5%
	Linear Trendline	9.30	5.8%
	Curve-fitting Trendline	10.45	6.1%
	Exponential Trendline	12.25	6.5%

25+ Yr History	(Jan 1990–Mar 2015)	Value	Depr p.a.
Dollar/Rand	Actual	12.20	6.4%
	Linear Trendline	10.05	5.2%
	Curve-fitting T/L	12.25	6.4%
Euro/Rand	Actual	13.07	5.8%
	Linear Trendline	13.05	6.5%
	Curve-fitting T/L	14.75	6.3%
Pound/Rand	Actual	18.08	5.6%
	Linear Trendline	16.60	5.2%
	Curve-fitting T/L	19.75	5.6%
Trade-weight Rand	Actual	67.40	6.2%
	Linear Trendline	68.00	5.3%
	Curve-fitting T/L	63.09	6.3%

So to summarize what we have learned so far:

- 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.
- Using actual inflation data, as well as historical trendlines against the Dollar and a basket of currencies, we have an indication of the Rand's true value at present.

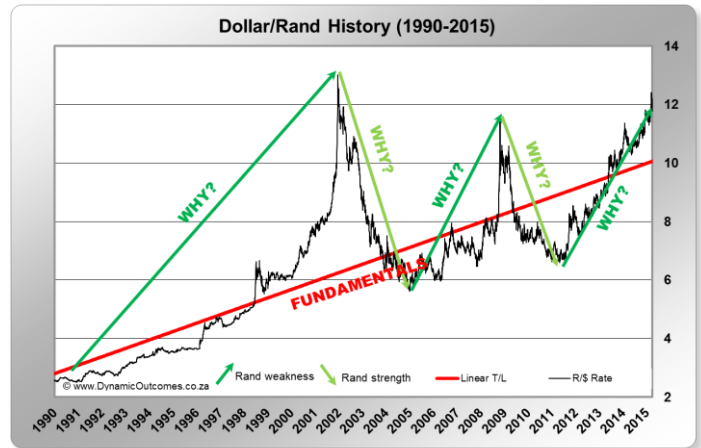
But that still leaves us with a big question...

## 7) WHAT ACTUALLY MOVES THE RAND?

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), which is line with the adjustment needed due to the underlying international competitive fundamentals.

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 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.

This determines the long term value of the Rand

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*.

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.

## 8) THE GLOBAL & RAND FOREX MARKETS

### Global Foreign Exchange 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!**

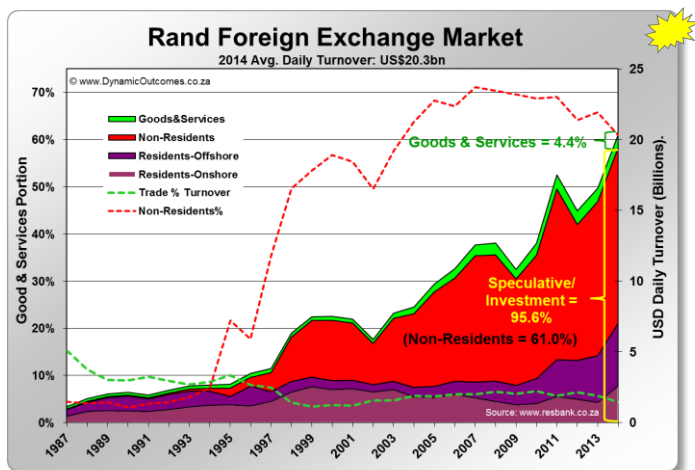
To put this in perspective, the United States GDP (total output of the economy) for 2013 was \$15.7 trillion...

...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 2014 was \$20.3 billion, compared with \$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 **Mauve** areas).

As can be seen from the Chart, of a total turnover of US\$20.3 billion in 2014...

**Goods and Services** account for a mere **4.4%** of Rand Forex turnover...

**95.6%** of total Rand Forex turnover is based on **Investment and Speculation!**

This is probably the most important fact to understand about the Rand!

And of this 95.6% that is non-trade related, the breakdown is:

- **12.7%** 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.
- **21.8%** are by SA residents living overseas (SA Residents Offshore) – down from 50% in 1990, but up from 7.6% in 2003.
- **61% are transactions by foreigners** (Non-Resident Investors/Speculators).

As can be seen from the **Red** dotted line, this grew exponentially from 1990 (when it was just 3.2% of turnover) as a result of the opening up local markets and the abolishment of the Financial Rand in March 1995.

Now to ask some important questions:

- 1) Do traders/speculators (especially foreigners) care where the Rand is pegged?
  - **NO**, as long as they can make some profit on its movement, either way (e.g. buy at R10.50/\$ and sell at R12.00/\$, or sell at R12.00 and cover at R10.50)
- 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 R11.50/\$ 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 R12.00 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 is these investors and speculators who are the drivers of the Rand's short-term and medium-term price movements.**

It can therefore easily be understood why the Rand has moved as it has, when its movements are 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 (as a tradable or an investment commodity).

### Rand's Major Driving Forces

So, in summary, since the opening up of our economy to global markets, we have these two driving forces:

The true **long term** value of the Rand is determined by trade of **goods and services**, whether exported or imported, and economic forces will ensure that over time a currency adjusts back to its true trendline level, based on *fundamental trade competitiveness*.

The **short and medium term** value of the Rand is determined by **speculators and investors**, who are not primarily concerned whether the Rand is competitively priced for trade.

As a result, there have been huge imbalances in the interim

period and considerable diversion from this trendline until economic forces bring the currency back into line.

As an aside, 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 foreign inflows is the carry-trade, whereby speculators can take advantage of the interest rate differential between South Africa where interest returns are higher 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 (now at R10m per individual), 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.

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, short-term speculative capital is costing the country a packet in interest, and when speculators have made their pound of flesh, they'll 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.

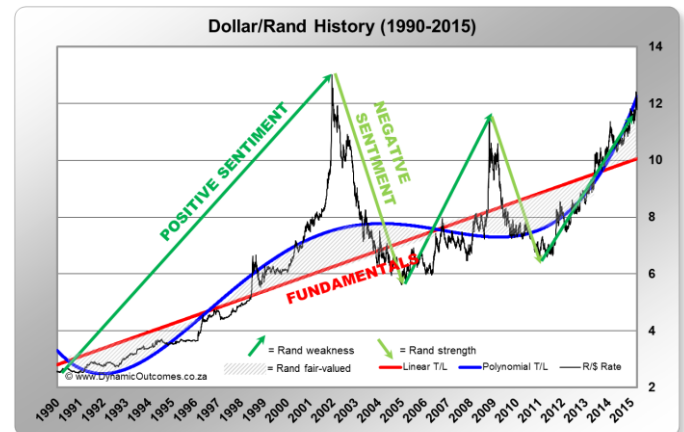
BUT, to come back to these primary drivers of the Rand – speculators and investors – what is it that actually dictates these persons decisions?

The answer is **Emotion. Sentiment.**

When investor sentiment is positive, the Rand strengthens. When it is negative, the Rand weakens.

This is what has caused these massive swings either side of fair value – and will continue to do so as long as the Rand is being

primarily being used as a financial instrument instead of an economic one.



More on this a bit later in this report, but before we do so, it will be good for us to get a simple yet holistic view of the current health of this economy.

### 9) 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 Inc.**, and:

- All SA's workforce are employees of RSA Inc.
- There are various departments in RSA Inc. 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 Inc.

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 overleaf (data in Rand billions).

As can be seen, the last profitable year that RSA Inc. had was in 2002, recording a *Gross Profit* (Trade Surplus) of R50bn and a *Net Profit* (Current Account Surplus) of R11bn.

From 2004, *Gross Profit/Loss* (trade surplus/deficit) performance turned negative until 2009, which saw a healthy turnaround for 3 years. But this reversed sharply in 2012 with the next years registering increasing losses, with 2014 at a record R69 billion!

Income Statement for RSA Inc.														
Ordinary Description	Technical Description	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Sales	Exports	333	291	311	358	450	553	729	589	669	795	825	933	1004
Cost of Sales	Imports	-283	-265	-312	-360	-474	-572	-743	-561	-609	-744	-857	-1001	-1072
Gross Profit/Loss	Trade Balance	50	27	-1	-2	-24	-18	-15	28	60	51	-32	-68	-69
Other Revenue	Offshore Services	58	70	71	84	99	118	133	128	134	146	167	190	213
	Offshore Investment	20	18	18	26	37	43	42	27	26	30	40	55	72
Expenditures	Foreign-sourced Services	-70	-75	-85	-104	-125	-147	-179	-171	-179	-187	-211	-234	-251
	Foreign Investment	-47	-51	-43	-54	-69	-109	-113	-81	-83	-105	-126	-146	-172
Net Other Revenue	Services Account	-39	-38	-40	-49	-58	-95	-117	-97	-101	-116	-130	-135	-138
<b>Total Net Income</b>	<b>Current Account</b>	<b>11</b>	<b>-11</b>	<b>-41</b>	<b>-51</b>	<b>-82</b>	<b>-114</b>	<b>-131</b>	<b>-68</b>	<b>-41</b>	<b>-65</b>	<b>-162</b>	<b>-204</b>	<b>-207</b>
	<b>% of GDP</b>	<b>0.9%</b>	<b>-0.8%</b>	<b>-2.8%</b>	<b>-3.1%</b>	<b>-4.5%</b>	<b>-5.4%</b>	<b>-5.5%</b>	<b>-2.7%</b>	<b>-1.5%</b>	<b>-2.2%</b>	<b>-5.0%</b>	<b>-5.8%</b>	<b>-5.4%</b>
<b>Cash outflow requiring short-term funding:</b>														
Bank Overdraft/Loans	Foreign-sourced Loans	0	-11	-41	-51	-82	-114	-131	-68	-41	-65	-162	-204	-207

Net Other Revenue (Services Account) stayed at constant loss levels until 2005, and since then (apart from a slight reprieve in 2009/2010), has continued to deteriorate, with 2014 registering a record R138bn loss (deficit).

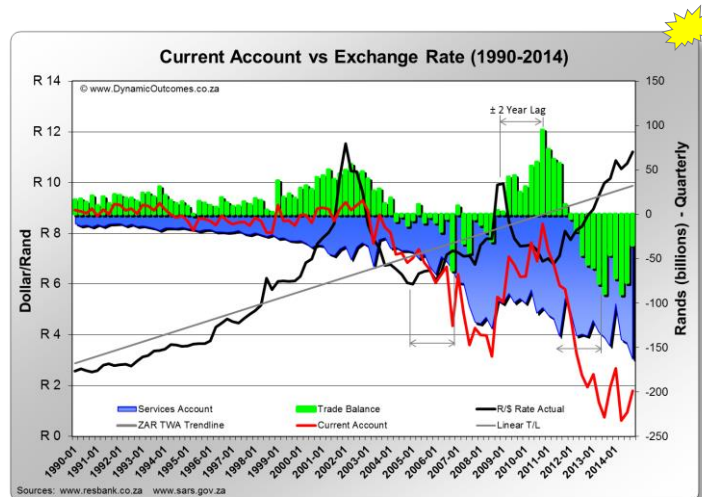
As a result, Total Net Income (Current Account) has been in negative territory since 2003, and while this loss reduced during 2009 to 2011, it has since fallen to record levels, with 2014 registering R207bn loss (deficit). While this is slightly less than 2013 as a percentage of GDP, it is nevertheless at critical levels.

## 10) THE CURRENT ACCOUNT & ITS COMPONENTS

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

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 import of the same (Services Account – Blue area)
- Combined, these make up the Current Account (Red line).



We comment on the various elements of this Chart:

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.

### 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, with the Rand weakness clearly benefitting exports.

But this trend changed once the Rand (Black line) started strengthening, and turned negative once the Rand fell below its trendline value (Grey line).

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).

Only once the Rand broke back above its trendline value at the end of 2008 did the Trade Balance turn positive again, and while the Rand did not stay there long, the Trade Balance remained in positive territory for the next 11 quarters.

It can be noted that from 2005, there has been a lag between peaks and troughs of the Rand and the Trade Balance, as it understandably takes time for these effects to feed into actual trade flows.

The global recession also kept Trade Balance positive during this period, reducing volume of both Export and Import demands, but Imports to a greater extent than Exports.

But the effects of an overvalued Rand took their toll, with the Trade Balance turning negative once again in late 2011, and in the quarters following, the situation deteriorated significantly each quarter, with 2Q2014 registering a record R90bn Trade Deficit.

This was despite the Rand having risen above its trendline a year earlier and reaching multi-year record weakness, with its effects only starting to be felt in late 2014, with the last quarter

showing an “improved” deficit of **R35bn**, but with a record net deficit of **R69bn** 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 R129bn (q.a.) in 3<sup>rd</sup> Quarter 2008 and a record annual deficit of R117bn 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 R138bn (q.a.) deficit.

The overall deteriorating trend has continued since, with 4Q2014 registering a new record deficit of **R163bn** (q.a) with a record annual deficit of **R138bn!**

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

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 R114bn and R131bn respectively – both over 5.0% 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 plunged in 2Q2014 to a **record R232bn** before recovering slightly to R198bn (q.a) in the last quarter!

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.

**11) 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?

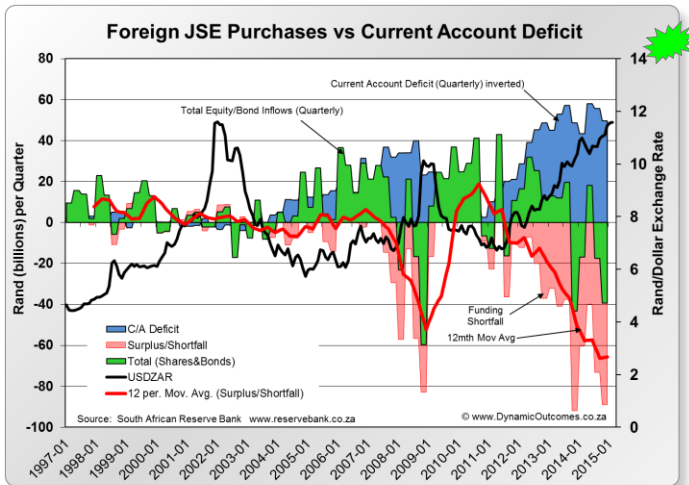
**Foreign JSE Purchases vs Current Account Deficit**

In previous Updates, we have focused on total financial flows which have been nurtured in order to make up these shortfalls, with Portfolio inflows (into the JSE Share and Bond markets)



being an essential element.

The below Chart focuses in on these foreign purchases more closely, with the following:



- Net Foreign Equity Flows into the JSE stock and bond markets (Green area) by Quarter.
- The Quarterly Current Account Deficit (Blue area) shown inverted.
- Surplus/Shortfall between Net Foreign Inflows and Current Account Deficit (Pink area) by Quarter.
- A 12 month moving average of this Surplus/Shortfall (Red dotted line)
- The Quarterly Dollar/Rand exchange rate (Black line)

This paints a very interesting (and telling) picture:

As can be seen, up to early 2007, these portfolio inflows were sufficient to fund the Current Account deficit, with only a couple of periods when there was a shortfall.

But since then, there have been three distinct periods.:

- Massive shortfalls up to the end of 2008.
- Sustained net surpluses up to 1Q2011 – apart from 2 small shortfalls.
- Since then, increasing shortfalls to levels worse than 2008.

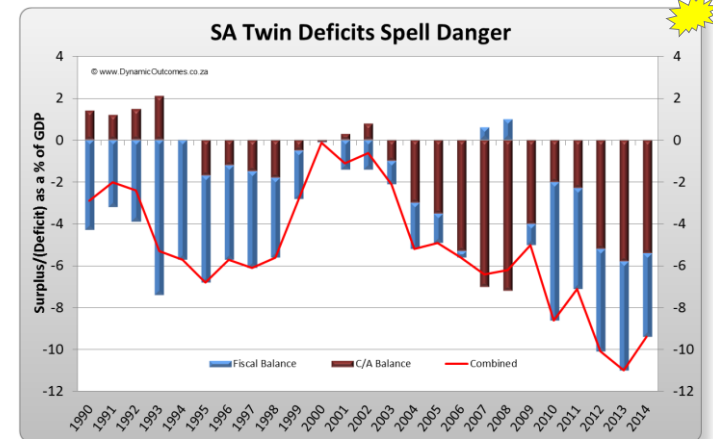
Smoothing out these surpluses and shortfalls with a 12 month moving average, and plotting against the Rand is an **eye-opener** – see how closely these two lines are (negatively) correlated since 2008 (-90% to be exact):

- When there was a funding surplus (Portfolio inflows were more than sufficient to fund the Current Account Deficit), the Rand strengthened (as it did between 2008 and 2011)
- When there have been shortfalls, the Rand has weakened, as we saw up to the peak in 2008, and again since 2011.

But that is not the only funding issue.

**12) TWIN DEFICITS – DOUBLE DANGER RISK**

Having such a deficit on the Current Account (and having to fund it) is bad enough, but there is another side that we need to highlight – and that is 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 (Q.E.) program.

(Q.E. definition 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 *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 deteriorated to the point where 2014 recorded a Combined deficit of 9.4% of GDP!

And the problem with that?

Well, if you spend 9.4% 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.

That is just what we saw in 2008...

...and as we have again seen the past couple of years, with large portfolio outflows resulting in a depreciation of the Rand

to multi-year lows, 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 even 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.

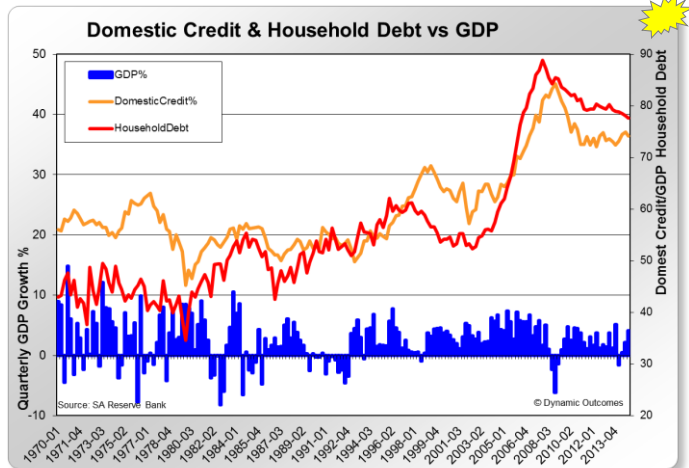
But let's look a bit deeper at this situation.

### 13) DEBT BUBBLES WAITING TO BURST?

The global debt situation is a huge concern – how has South Africa been faring?

#### A. Domestic Growth and Debt

For a start, let's take a look at our economic growth over recent years, and its implications.



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

- **Domestic Credit** as a percentage of GDP (Orange line).
- **Household Debt** as a percentage of Disposable Income (Red line).

South Africa enjoyed impressive growth between the mid-1990s and 2008, especially from around 2004.

Where did this demand come from?

While exports played a part, what is the biggest component of our GDP 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...

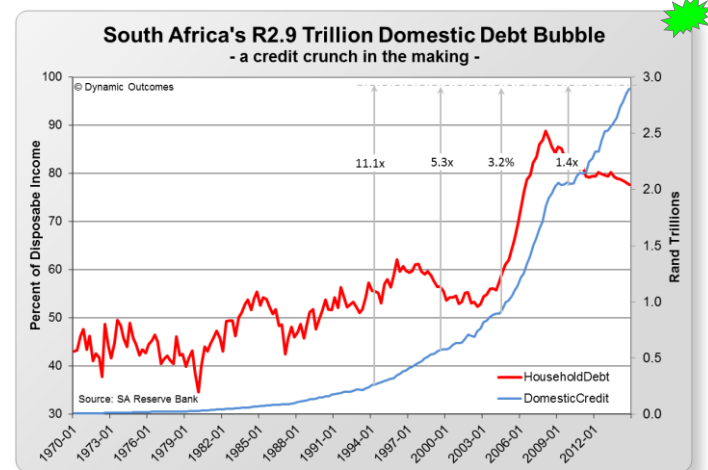
But has it been healthy demand? No, not all!

From the chart above, one can clearly see:

- **Domestic Credit** swelled to over 84% of GDP in 2008 from 56% in 1993 – mostly since 2002 when it was 65%. The credit crisis has seen this reduce to around 74% in 2014Q4.
- **Household Debt** as a Percentage of Disposable Income rose from just 52% in 2002 to an alarming 89% in 2008, and has since reduced gradually to 78% by 2014Q4.

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!** Not a good situation.

The below chart puts this into actual numbers.

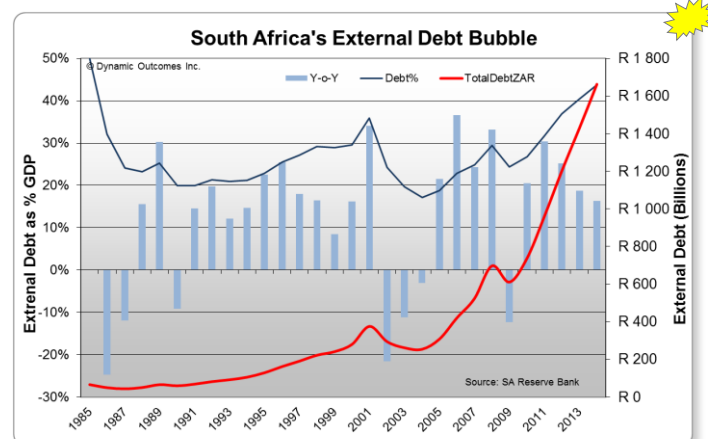


This is alarming stuff – the absolute explosion in domestic debt, which has increased over 11 times since 1995, by over 3 times since 2004 and by 40% since the Credit Crunch in 2008!

The net result – a domestic debt bubble of R2.9 trillion! And this despite the National Credit Act!

#### B. External Debt – the Bigger Picture

But then, that is only half the picture.



What about the Total External Debt as a result of this ongoing foreign borrowing to shore up our shortfalls?

The above chart shows South Africa's Total External Debt (**Red** line), 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 **R1.66 trillion** in December 2014.

To put this in perspective:

- It has increased by 28 times since 1990 levels of just R59.6bn (average growth of 15% p.a. y-o-y).
- Since 2004, it has increased by 6.5 times (at 21% p.a. y-o-y) and 2.7 times since 2008 (at 22% p.a. y-o-y).
- External Debt now represents 44% of GDP compared with 17% in 2004 and 24% in 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.

This is an extremely precarious situation and is **exactly the recipe that caused the Financial Crisis and global meltdown in 2008/2009.**

We clearly have **not learned** from very recent history – piling on more and more debt.

### C. When Will the Bubble Burst?

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?

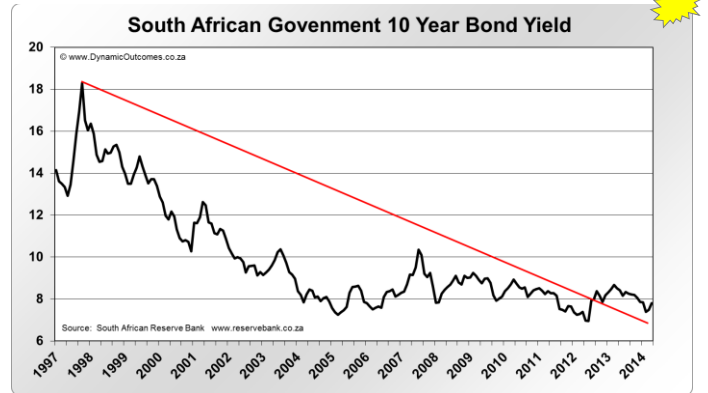
It all starts with *confidence* in this country and its ability to pay, measured in terms of what foreigners are prepared to lend the government.

- 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.  
Below 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 a low of 6.96% in May 2013.

But since then, yields have jumped over 8%, and in so doing, have clearly broken the (**red**) long term trendline resistance, clearly signaling a change in long term trend on cost of funding.



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

### 14) HAVE WE BENEFITTED FROM GOLD & WILL WE?

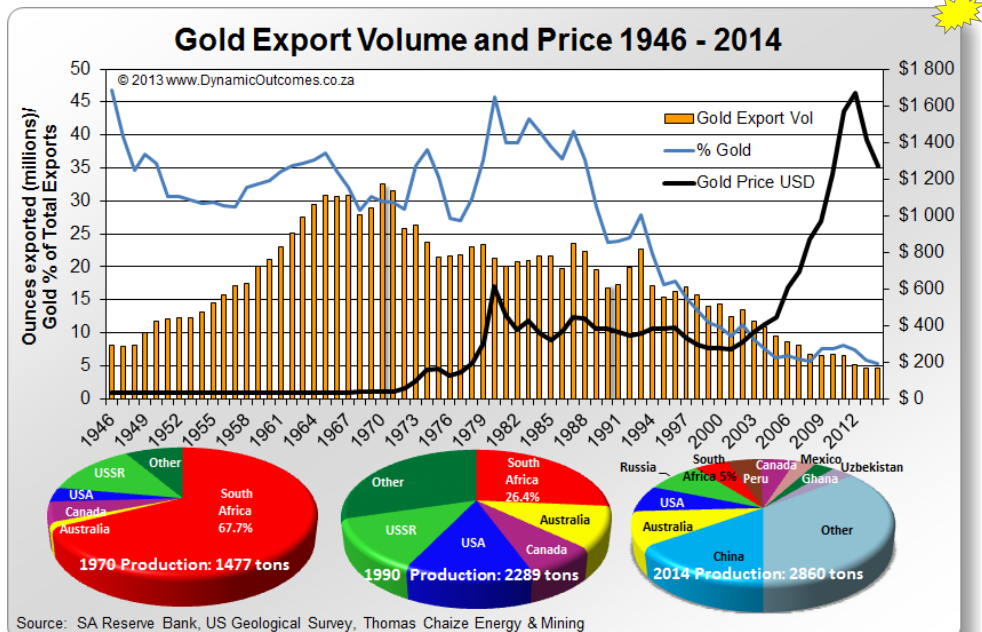
This study would not be complete without addressing Gold – historically the bright side and strength of this economy.

Will gold not support the Rand 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.

This next Chart shows the following:



- The Gold price (**black** line) in Dollars per ounce
- Gold Exports as a percent of Total Exports (**blue** line)
- The actual volume (not value) of Gold exported by year (**Gold bars**).
- 3 pie-charts reflecting world Gold production for 1970, 1990 and 2014.

This shows a very telling picture:

- 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%.
- 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 world production being at record levels, South Africa could only muster up 6.3% share in this cake, and exported its smallest volume in living memory – just 167 tons.
- But the past 2 years have gone even further, with 2014 production being just 5% of global output, and just 147 tons exported (equal to 27% of 1990 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 2860 in 2014.

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 15.1% of the world's Gold.

And not only that, but with just 5.0% of global output (from 11.1% in 2007), South Africa is now on a par with Peru, having dropped below Australia, Russia, USA and Canada in 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...

## **15) ECONOMIC MARKETS vs FINANCIAL MARKETS**

So we have learned that the primary driver of the Rand is financial instrument (speculative/investment) based, not economic market (trade) based.

That being so, we need appreciate the difference between how persons react in Economic and Financial Markets, and how this affects price.

### **Economic Market Behaviour**

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 Market Behaviour**

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, you can now see how difficult it is to export or import in goods or services in such an environment.

But fortunately, there is some predictability in this irrationality...

**16) 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 will react in the **same irrational but predictable way**.

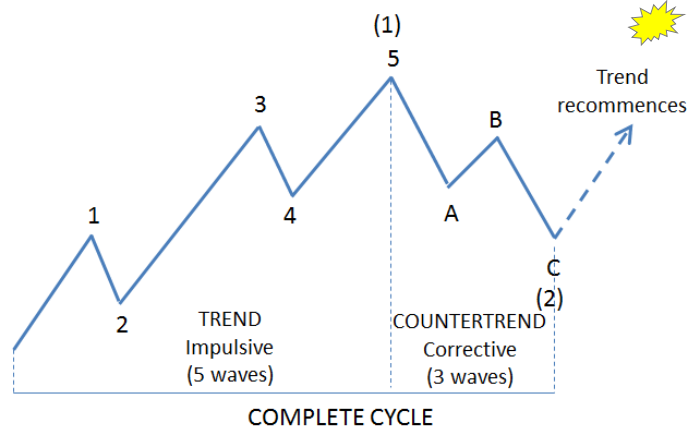
➤ Not all, but most – like a human HERD INSTINCT.

Elliott called his discovery "The Elliott Wave Principle," and its implications have been 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.

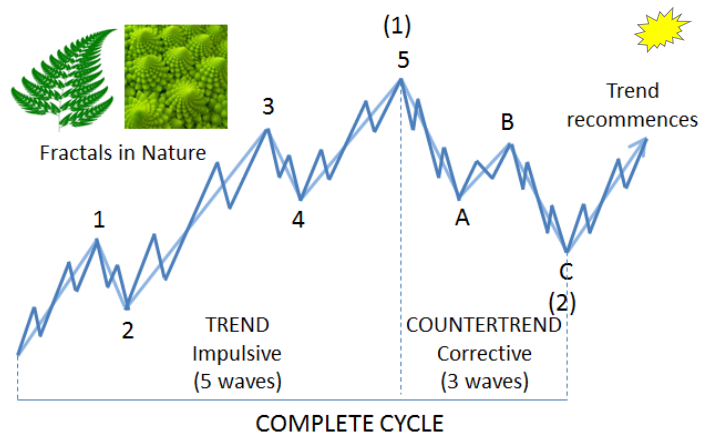
**Basic Elliott Wave Structure**

The basis of this pattern is an advance in 5 waves and a partial retracement in 3 waves (per illustration below)



**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 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!

## 17) PREDICTING FUTURE MARKET MOVEMENTS

As having being involved in the services export market since 1993 ([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.

(My coming 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) in 2005-2006.

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 (to whom 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 (sometimes with uncanny accuracy), as highlighted in the Dollar/Rand Chart (see overleaf).

For more details in this regard, see [www.forexforecasts.co.za/forecasting-track-record](http://www.forexforecasts.co.za/forecasting-track-record)

## 18) IN CONCLUSION

In essence, an overview of where the Rand should be from an historical and fundamental perspective, why it has moved as 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 against the Dollar but overvalued on a trade weighted basis.
4. Based on South Africa's deteriorating competitiveness compared with its trading partners, it needs to adjust (depreciate) over time to remain competitive.



So, how can you use this now to your advantage?

- Firstly, by realizing that we all are part of the crowd and that we tend to trade based on our emotions (or what most others are doing or telling us to do).
- And by realizing that this is exactly why most persons lose money in foreign exchange – because we all tend to do exactly the wrong thing at the wrong times.
- The only way to avoid doing so is by having an objective and scientific-based expectation of future Rand movements, which provides you with a roadmap of expected future movements...

...so instead of exchanging at the wrong time, and being unexpectedly caught by the Rand's movements, you are able to make educated and informed decisions...and take action – before it is too late to do so.

This is all available to you with our Rand forecast subscription service, which gives you an ongoing picture of where the Rand is headed over the next few days, weeks, month and years, updated at least twice a week.

Imagine what this can mean for you –

- Less doubt and uncertainty, less fear, anxiety and stress
- Easier decision-making, focus and ability to take action
- Increased savings & profits, more choices and peace of mind.
- More time, energy and money to spend on those people

and things most important to you.

Having made this life-changing discovery and having used it to optimize and simplify my own foreign exchange decisions, it is my passion to empower others to realize their personal and business goals and dreams through helping them take control of their foreign exchange.

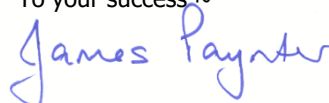
If you have significant Rand exposures, I would love you to join our insider circle of clients who are keeping one step ahead of the Rand, and living a more peaceful, stress-free and profitable life.

**[Try out our services risk-free NOW](#)**

You have everything to gain – and nothing to lose.

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

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

And if we can be of any assistance to you, please feel free to visit our [website](#) 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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