

The Weak Currency Economic Growth Fallacy and Failure of the High Wage Doctrine¹

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Introduction

There are very often articles in newspapers that refer to or comments made by various people that the current level of the South African currency is a constraint for economic growth and employment creation. This line of thought is based on the idea or theory that a depreciating or weak currency will stimulate foreign demand and exports thereby increasing aggregate demand and output in the economy. This line of thought is very similar to the high wage doctrine that states that paying high wages (wages above efficiency wages) will stimulate domestic demand and thus increase aggregate demand and output in the economy.

The weak currency argument and the high wage doctrine seem plausible and intuitively can increase aggregate demand and output in the economy. Economic policy therefore should be to weaken the currency or to ensure a weak currency and to support high wage demands in the economy. A weak currency and high wages therefore will significantly boost aggregate demand in the economy and this will be conducive for economic growth and employment creation.

The weak currency argument and high wage doctrine however is based on two very important assumptions. The first assumption is that the aggregate supply curve in the economy is perfectly elastic (horizontal), i.e., there is no scarcity or supply constraints in the economy. The second assumption is that the marginal propensity to import is zero, i.e., any increase in demand is fully met by domestic supply. It should however be fairly obvious that both the assumptions are neither realistic nor sustainable, especially over the medium to long term.

This is not an academic paper nor has a comprehensive literature review occurred. However some previous studies have been reviewed in order to intuitively get a sense of the general thinking and empirical results of the weak currency argument and high wage doctrine. In general the results seem fairly varied with some studies in support of the argument and doctrine and vice versa. The literature, however, overwhelmingly suggests that both the argument and doctrine have their origins from before the great depression.

Provisional Empirical Evidence

Comparing the economic performance and behaviour of a number of economic indicators of South Africa with a sample of emerging economies shows some very interesting results. It must however be noted that the sample of countries might not be fully representative of all emerging economies as per the DOW Jones classification because of data constraints. It must also be stated that the study only includes three years, i.e., 2008, 2009 and 2010. Again this is because of data constraints. I also want to make it clear that the results are only provisional at this stage, i.e., further tests for example to test for the robustness of the results is still required.

The first step was to identify the comparative emerging market economies to be included in the analysis and secondly to ensure the data availability of the identified economies. The data itself was then interrogated to ensure consistency in the data across the included economies. An excel spreadsheet based database was thereafter constructed in which the statistical analysis was performed in. It must be stated that the statistical analysis was fairly elementary only incorporating basic descriptive and correlation statistics. Detailed panel data analysis was not performed, although recommended.

The table below (table 1) supplies the 3 year average value for each economic indicator per emerging economy.

Table 1: Three Year Average, 2008 to 2010

	GDP Per Capita, US\$	GDP Growth	Interest Rate	Inflation Rate	Jobless Rate	Industrial Production	Current Account , % of GDP US\$	Exchange Rate
South Africa	5,820	1.21	8.80	7.67	24.53	-2.90	-6.70	8.58
Brazil	8,148	4.39	10.77	5.20	7.48	2.66	-0.22	2.03
India	1,108	6.89	4.51	10.63	8.75	7.59	-0.66	47.70
Turkey	8,796	4.36	10.57	8.43	13.08	1.30	-0.45	1.54
Poland	12,156	3.48	4.32	3.40	11.47	3.78	-0.14	2.85
Mexico	8,662	0.22	5.97	4.86	5.49	-0.40	-0.24	12.43

Czech Republic	19,505	0.02	1.97	2.94	8.57	-1.47	-0.31	18.40
Malaysia	7,031	0.38	2.67	2.59	3.56	0.54	4.19	3.35
Peru	4,579	6.55	3.74	3.43	8.18	5.03	-0.43	3.06
Hungary	14,620	-0.48	7.59	5.06	10.49	-2.57	-0.43	204.67
China	3,575	9.40	5.94	2.81	4.23	13.23	4.39	6.85
Russia	9,959	0.52	10.07	10.84	7.99	0.05	1.37	29.95

Source, Tradingeconomics.com, own calculations

Table 2: Descriptive Statistics and SA Comparative Performance

	GDP Per Capita	GDP Growth	Interest Rate	Inflation Rate	Jobless Rate	Industrial Production	Current Account, % of GDP US\$	Exchange Rate
Average	8,663	3.08	6.41	5.66	9.48	2.24	0.03	28.45
Median	8,405	2.34	5.96	4.96	8.38	0.92	-0.28	7.72
St Dev	5,024	3.27	3.10	3.01	5.49	4.66	2.78	57.21
Upper Limit	13,687	6.35	9.51	8.66	14.98	6.90	2.81	85.66
Lower Limit	3,640	-0.19	3.30	2.65	3.99	-2.42	-2.75	-28.76
SA	5,820	1.21	8.80	7.67	24.53	-2.90	-6.70	8.58
Yes/No	Yes	Yes	Yes	Yes	No	No	No	Yes

Source, Tradingeconomics.com, own calculations

Upper Limit = Average + 1 Standard Deviation

Lower Limit = Average - 1 Standard Deviation

Yes/No indicates whether or not the SA is lying within one standard deviation of the average

The above two tables (table 1 and 2) indicate that SA's macroeconomic behaviour and performance are to a greater degree on par with the other economies. However the table very clearly indicates that the unemployment situation in SA is significantly different to the other economies, intuitively suggesting that the unemployment situation in SA is not just a function of the economic fundamentals of SA, i.e., there seems to be some other explanation for the high unemployment situation in SA. SA's current account deficit also seems to be out of sync suggesting that our marginal propensity to import is significantly high. The high joblessness and high current account deficit in SA definitely seems unique to SA. The tables also seem to indicate that industrial production in SA is below its potential and its peers.

The below correlation matrix (table 3) indicates that there is a weak to moderate negative correlation (-0.311) or relationship between the value of the exchange rate

and the economic growth rate whilst there is a fairly weak positive relationship (0.039) between unemployment and the value of the exchange rate. The results also indicate that there is a positive, although very weak, relationship (0.099) between the value of the exchange rate and the inflation rate indicative of a currency inflation relationship. The weak to moderate exchange rate industrial production relationship (-0.292) is also significant supporting a stronger rather than a weaker currency.

The results in general seem to suggest that for this sample of emerging economies a strong currency is supportive of economic growth, high industrial production, low inflation and low joblessness rather than a weak currency.

Table 3: Correlation Matrix

r value	GDP Growth	Interest Rate	Inflation Rate	Jobless Rate	Industrial Production	Current Account, % of GDP US\$	Exchange Rate
GDP Growth	1.000	-0.021	-0.007	-0.179	0.927	0.237	-0.330
Interest Rate	-0.021	1.000	0.575	0.368	-0.189	-0.294	0.092
Inflation Rate	-0.007	0.575	1.000	0.366	-0.121	-0.367	0.099
Jobless Rate	-0.179	0.368	0.366	1.000	-0.431	-0.896	0.039
Industrial Production	0.927	-0.189	-0.121	-0.431	1.000	0.505	-0.292
Current Account, % of GDP US\$	0.237	-0.294	-0.367	-0.896	0.505	1.000	-0.065
Exchange Rate	-0.330	0.092	0.099	0.039	-0.292	-0.065	1.000

Source: Tradingeconomics.com, own calculations

The data was also analysed in ranked format in order to eliminate the size effects of some of the currencies included in the sample. Table 4 shows the ranked performance of the selected economies in each of the economic indicators for example SA recorded the largest jobless number (12) and lowest industrial production number (1). SA also recorded the largest current account deficit (1)

The results in table 5 are similar to the results in table 2 suggesting that SA joblessness, industrial production and current account deficit falls outside one

standard deviation of the sample average, i.e., SA performed relatively worse than the selected emerging market economies.

Table 4: Ranked Data

Ranking	GDP Growth	Interest Rate	Inflation Rate	Jobless Rate	Industrial Production	Current Account, % of GDP US\$	Exchange Rate
Turkey	8.00	11.00	10.00	11.00	7.00	3.00	1.00
Brazil	9.00	12.00	8.00	4.00	8.00	8.00	2.00
Poland	7.00	4.00	4.00	10.00	9.00	9.00	3.00
Peru	10.00	3.00	5.00	6.00	10.00	5.00	4.00
Malaysia	4.00	2.00	1.00	1.00	6.00	11.00	5.00
China	12.00	6.00	2.00	2.00	12.00	12.00	6.00
South Africa	6.00	9.00	9.00	12.00	1.00	1.00	7.00
Mexico	3.00	7.00	6.00	3.00	4.00	7.00	8.00
Czech Republic	2.00	1.00	3.00	7.00	3.00	6.00	9.00
Russia	5.00	10.00	12.00	5.00	5.00	10.00	10.00
India	11.00	5.00	11.00	8.00	11.00	2.00	11.00
Hungary	1.00	8.00	7.00	9.00	2.00	4.00	12.00

Source: Tradingeconomics.com, own calculations

Smallest value = 1

Largest value = 12

Table 5: Descriptive Statistics and SA Comparative Performance in Ranked Format

	GDP Per Capita	GDP Growth	Interest Rate	Inflation Rate	Jobless Rate	Industrial Production	Current Account, % of GDP US\$	Exchange Rate
Average	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Median	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
St Dev	3.61	3.61	3.61	3.61	3.61	3.61	3.61	3.61
Upper Limit	10.11	10.11	10.11	10.11	10.11	10.11	10.11	10.11
Lower Limit	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
SA	4.00	6.00	9.00	9.00	12.00	1.00	1.00	7.00
Yes/No	Yes	Yes	Yes	Yes	No	No	No	Yes

Source, Tradingeconomics.com, own calculations

Upper Limit = Average + 1 Standard Deviation

Lower Limit = Average - 1 Standard Deviation

Yes/No indicates whether or not the SA is lying within one standard deviation of the average

The below correlation matrix (table 6) indicates that there is a moderate negative correlation (-0.427) or relationship between the value of the exchange rate and the economic growth rate whilst there is a neutral relationship (0.000) between unemployment and the value of the exchange rate. The results also indicate that there is a positive, although weak, relationship (0.217) between the value of the exchange rate and the inflation rate. The moderate exchange rate industrial production relationship (-0.378) is also significant supporting a stronger rather than a weaker currency.

The results of the ranked correlation (table 6) are very similar to the results of the level data correlation (table 3) supporting the argument that for this sample of emerging economies a strong currency is supportive of economic growth, high industrial production, low inflation and low joblessness rather than a weak currency.

Table 6: Correlation Matrix in Ranked Format

r value	GDP Growth	Interest Rate	Inflation Rate	Jobless Rate	Industrial Production	Current Account, % of GDP US\$	Exchange Rate
GDP Growth	1.000	0.119	0.119	-0.056	0.867	0.035	-0.427
Interest Rate	0.119	1.000	0.706	0.224	-0.161	-0.189	-0.161
Inflation Rate	0.119	0.706	1.000	0.476	-0.140	-0.545	0.217
Jobless Rate	-0.056	0.224	0.476	1.000	-0.294	-0.769	0.000
Industrial Production	0.867	-0.161	-0.140	-0.294	1.000	0.322	-0.378
Current Account, % of GDP US\$	0.035	-0.189	-0.545	-0.769	0.322	1.000	-0.189
Exchange Rate	-0.427	-0.161	0.217	0.000	-0.378	-0.189	1.000

Source: Tradingeconomics.com, own calculations

The results seem to contradict the weak currency economic growth argument, instead suggesting that a stronger or appreciating currency is in fact conducive for economic growth and job creation. The results suggest that a stronger or appreciating currency supports a low interest rate, low inflation, high industrial production environment which seems to be the economic growth and job creation transmission mechanism. Economic policy therefore should be focused to maintain

a relatively strong or appreciating currency with a low inflation and high industrial production environment.

There is unfortunately no data available for wage rate increases or wage levels thus it is difficult to empirically investigate the high wage doctrine. However, an appreciating or strong currency coupled with a low inflation high industrial production environment intuitively is not synonymous or cannot be associated with wages above the efficiency wage, i.e., the high wage doctrine. High wage increases (increases significantly above productivity) in general can be associated with a decrease in international competitiveness which in turn requires the currency to compensate for the loss of international competitiveness, i.e., to maintain competitiveness the local currency needs to depreciate. This is demonstrated by the purchase power parity (PPP) formula

$$p = p^* / e$$

Where p represents the domestic prices, p^* represents the foreign prices and e represents the exchange rate. The depreciation of the currency in turn is inflationary via its effect on imported prices and ultimately negative for economic growth and employment creation as indicated earlier (via the higher interest rate transmission mechanism). Thus, in order to maintain its international competitiveness in a high wage doctrine policy the currency has to continuously weaken.

The alternative to the above scenario, i.e., where high wages decrease the international competitiveness is for the shareholders to absorb the high wage increases. Thus, the high wage increases are not passed on to the consumers but rather profit margins are lowered. With the shareholders absorbing the high wage increases there ostensibly seems to be no need for the currency to depreciate, etc. However the lowering of the rate of return to shareholders will significantly negatively affect investment and thus capital formation. The lowering of the rate of return will significantly alter the risk return dynamics of investing thereby increasing the riskiness of investing in share capital. The loss or decrease in capital investment or formation will also significantly be negative for economic growth and employment creation.

The high wage doctrine therefore seems fundamentally flawed because of the above and is even more flawed in the SA case because of the high marginal propensity to import of the SA consumer, i.e., the additional aggregate demand created by the high wages will significantly increase imports and therefore the deficit on the current account of the balance of payments. This seems to explain why SA has such a large deficit on its current account compared to the other emerging market economies included in the study. The large deficit on the current account is not necessarily a problem especially if capital goods or the factors of production are primarily what are being imported. However, if consumer goods are what is primarily being imported then domestic production is being substituted by foreign production.

The issue of scarcity and supply constraints cannot be ignored either thus aggregate demand cannot indefinitely increase faster than aggregate supply. This has been clearly demonstrated by the Eskom debacle in SA. If demand increases faster than supply then at some stage scarcity will become a factor raising the costs of production and ultimately inflation will become a problem. Unfortunately whether or not one likes it or not scarcity and the existence of constraints are real, thus actual demand or output cannot indefinitely increase at a rate higher than what the economy can “afford” so to speak.

Conclusions

The results seem to indicate that SA’s unemployment, industrial production and current account deficit situation is uniquely South African compared to the emerging market economies included in the study.

The results suggest that the low economic growth and industrial production and high unemployment rate in SA cannot solely be explained by the strong exchange rate or other economic fundamentals. Emerging market economies with much stronger exchange rates have much lower unemployment than what is the case in SA for example. The unemployment situation in SA therefore cannot solely be explained by the economic fundamentals of the SA economy. This does for example suggest that there is something fundamentally inefficient with the SA labour market.

The results of the study suggest that a low or depreciating currency is not the answer to the economic growth, industrial production and unemployment situation in SA. The opposite in fact seems to be true. Pursuing a weak or depreciating exchange rate policy is therefore extremely counterproductive and especially if the intention is to use the currency to compensate for the loss of international competitiveness and the inefficiencies that exist in the SA economy.

The high income doctrine also seems fundamentally flawed. In fact much of the high current account deficit potentially can be explained by the fact that the unions in SA have been actively pursuing and advocating the high wage doctrine. The active pursuing of the high wage doctrine in SA has not delivered or achieved the economic performance and outcomes as suggested by its advocates. The fact of the matter is that most of the increase in aggregate demand has not increased industrial production and therefore aggregate demand. It seems that given SA's very high marginal propensity to import most of the additional aggregate demand has been satisfied by imports, thus the very high current account deficit.

Economic policy in SA should rather focus on maintaining a relatively strong currency that supports a low inflation and interest rate environment and on improving the industrial performance and output of the SA economy. Following the weak currency argument and the high wage doctrine seems fundamentally flawed and will not achieve high economic growth and low unemployment in the SA economy over the medium and long term.