

# An Evaluation of fiscal policy between 2008 and 2011

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With focus on Investment, wages and efficiency

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This investigation looks at the successes of Treasury's fiscal management following the recent recession, and how pursuit of supply-side reforms can optimize counter-cyclical policy. Importantly so that it yields results in terms of investment and labour efficiency.

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## Contents

Introduction.....	2
Caveat: It is not a silver bullet .....	2
The Side effects: Supply-side distortion.....	3
An appraisal of fiscal management: The South African case .....	4
The case for wage-setting moderation .....	6
Policy recommendations .....	8
A twin goal of wage moderation and civil service efficiency .....	8
Thumbs for the cautious approach.....	9
Necessary supply side reforms.....	9
Political risk arising .....	10
Conclusion .....	11

# An evaluation of fiscal policy between 2008 and 2011

## With focus on investment, wages, efficiency and political risk

### Introduction

For the past 80 years, economies around the globe have experimented with Keynesian fiscal management with mixed success. While its great achievement was putting an end to the great depression, its shortcomings were demonstrated in the 1970s when it achieved little more than spiralling inflation and currency devaluations, with no jobs or growth to accompany it.

The South African experience between 2008 and 2011 is reflective of how poorly understood the policy is. The Keynesian counter-cyclical fiscal policy has led to a quick emergence from recession, but has seemingly fallen short of bringing unemployment down to its natural rate and has certainly not spurred the rise in investment associated with such recoveries. In this essay it is shown that the very reason investment growth has been so muted in South is a direct consequence of the rise in public sector wages, and that for infrastructure investment to rise, government needs to free resources by reducing its own wage bill and redirect purchases towards investment goods. Further, a case is made for strengthening institutions which promote product and labour market competition, to spur the growth in investment required to build capacity in the economy. The theoretical groundwork: understand countercyclical policy

Braun & Di Gresia (2003) conclude that countercyclical fiscal policy is “transferring incomes from good states to bad ones”, that is, in an effort to smooth the business cycle, government cuts spending when aggregate demand growth is positive, and increases when aggregate demand falls. The saving accrued in the first instance, are utilised to smooth consumption in the recessionary period. Similarly Taylor (2000) concludes that a government must act to achieve the twin goals of keeping inflation on target and real output equal to its potential level, by increasing the deficit (reducing the surplus) during a recession and reducing it during a recovery. That countercyclical policy implies a negative response to the business cycle is not a particularly contentious definition of policy.

### Caveat: It is not a silver bullet

Theory suggests then, that during a recessionary period a fiscal expansion should dampen the fall in output and quickly lead to rise in investment and output. Certainly this was the expectation during the failed period of the 70s, and more recently (though with more success) following the credit crisis. Bernanke (1983) argues however, that investment is also determined by uncertainty, what he terms “The Uncertainty principle”.

Magud (2007) comes to a similar conclusion, noting that in a recessionary environment there is a minimum level of government expenditure ( $q$ ) on investment goods where firms expect there to be sustainable growth, if this minimum level is not met, firms and private investors postpone investment decisions on the assumption that aggregate demand will then fall once the stimulus ends .

The Magud study also points out that counter-cyclical is a failure if the real interest rate increases because of a rise in expenditure. The basis of this argument is that a recession (expected or unexpected), leads to a fall in tax revenues of the government. For a sufficiently low government debt level, a fiscal expansion has little effect on the interest rate( the real cost of capital) hence output and capital formation will steadily increase as a result of the fiscal stance. On the other hand, if debt levels are high, the crowding out effect tends to dominate, because the fiscal stance is viewed as unsustainable, and will lead to a higher risk premium as the likelihood of a sovereign debt default increases. In this case the expansion, is associated with a rise in the real cost of capital increases, and expectedly gross capital formation falls. A multiplier effect then arises with the “Uncertainty principle” coming into effect, as private investors (and lenders) receive a “surprise” in the form of a deeper and longer than expected recession, leading to further deference of investment decisions. In this case a pro-cyclical fiscal response is more effective as it would lower the cost of borrowing. (Magud, 2007)

## **The Side effects: Supply-side distortion**

A failing of counter-cyclical policy often ignored by policy makers, is the composition of the stimulus spending. As the study by Finn (1998) points out, the extra spending implies increased government purchases on consumption goods (grants), investment goods(infrastructure spending) as well as an increase in the civil service wage bill. She contends that, it is this rise in the employment share of public expenditure that leads to a fall in investment with a weakly competitive labour market.

The Finn study argues that because in a recession incomes and revenues are arrested, a growth in government compensation spending, has negative wealth effects for firms as a larger share of (the declining) income is dedicated to compensation(both private and public). For firms, if this form of increased spending is sustained, it leads to a rise in the labour market real wage, and a fall in the profitability of investments made (wealth effect).

Certainly this was the finding of Silvia (2001) in a study of OECD countries, as well as the Talvi & Vegh ( 2004) in a comparative study of fiscal policy stances of the G7 nations<sup>1</sup> and developing nations<sup>2</sup>. They find that volatility in the Latin American markets lead to governments underestimating revenue to ease wage demand pressure and restore stability in these economies.

The above discussion is not to argue that for counter-cyclical policy to be successful, wages need to remain fixed. Fatas & Mihov( 2001) demonstrate , for example, using a VAR model of US manufacturing that the forecast wage rises in the period following a fiscal shock. Importantly in their study, however, is the identification that this forecast

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<sup>1</sup> US, UK, France, Japan, Italy, Australia, Canada and Germany

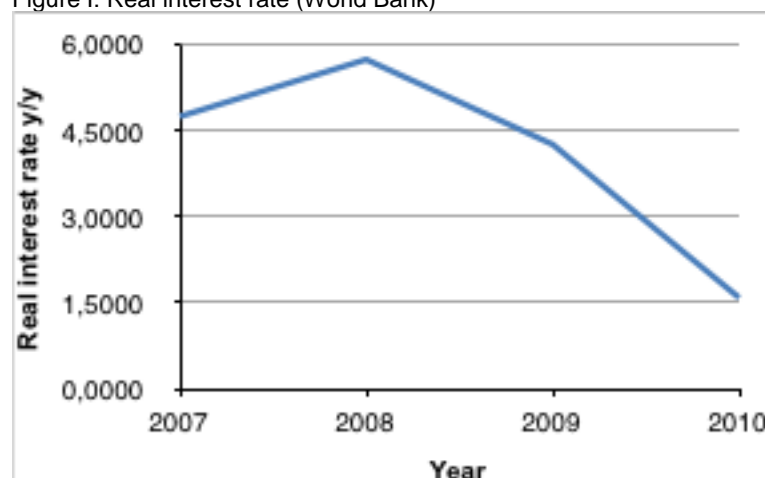
<sup>2</sup> Latin American countries

wage growth is as a result of feedback from rising private investment, which itself is reacting to the fiscal shock. Importantly, they identify that for the wage increases to be sustainable (that is achieve a sustained rise in employment and capital formation) causality needs to run from private investment and consumption to wages and employment, and not stem directly from the fiscal shock.

## **An appraisal of fiscal management: The South African case**

The South African economy entered recession in the final quarter of 2008 with an output contraction of -6.4% and entered positive GDP growth territory in the final quarter of 2009. In his final budget in 2009, Trevor Manuel announced an extra 161 billion rand in spending, with government spending rising to 33.6% of GDP, and increasing the primary deficit to 4.2% of GDP (revised upwards from 3.8%) (National Treasury, 2010). The first two figures, below show the combined effect of this fall in output and the growth in public non-interest expenditure. Figure 1, the path of the real interest rate, shows the cost of capital in South Africa during the period, while the yield on Credit default swaps (CDS) in figure II (Which is inversely proportional to the default risk of a country.) shows the riskiness of the South Africa's sovereign debt, a benchmark for risk of all investment opportunities in the country.

Figure I: Real interest rate (World Bank)



The real interest rate measure captures the inflation impact on the nominal cost of capital<sup>3</sup>. There is still a significant risk premium component (World Bank Group, 2011) to this rate, which further determines the cost of capital. The South African Reserve bank uses the yield on Credit Default Swaps to measure for the risk premium, from the above discussion; this measure is relevant, because it is a measure of how sustainable a fiscal expansion is. As the figure shows, this yield peaked in 2008. This was approximately

<sup>3</sup> Real interest rate = nominal rate - inflation

the same time as the trough in output contraction and has come down substantially in the period of increased public expenditure.

Source: World Bank group

Figure II: Yield on Credit default swaps (South African Reserve Bank)

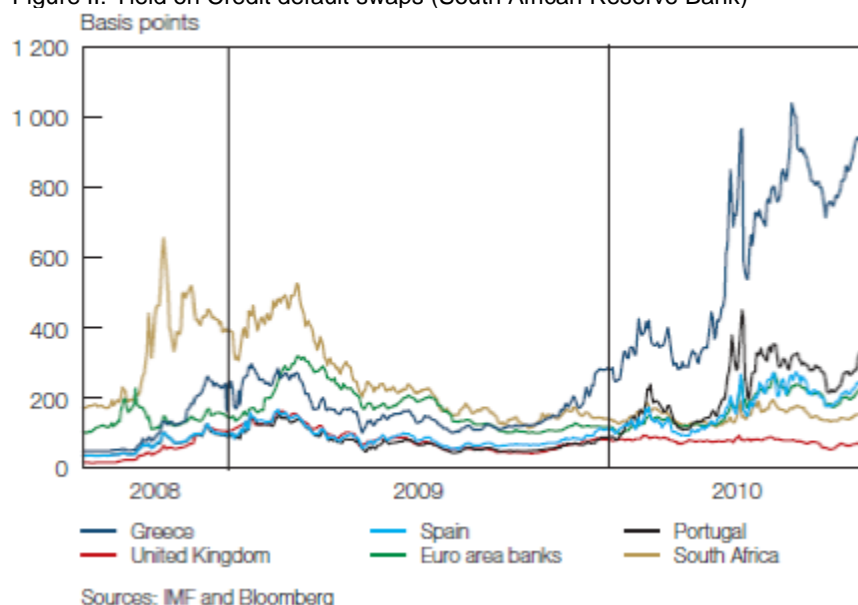


Figure 3 below shows the path of private and public investment expenditure<sup>4</sup>, in the same period as figure 1 and more importantly, the period of fiscal expenditure increase. The figure serves importantly to illustrate that while the declining real rate and risk premium demonstrates that the South African government's countercyclical fiscal policy was sustainable in that it did not crowd out the private sector investment, it was not successful. As the table shows that gross fixed formation has remained well below its peak of 14.1%, post the recession peaking at 3.1%. If depreciation is accounted for, net capital formation is a negative indicating disinvestment. This point then serves to demonstrate the key shortcoming of a purely Keynesian approach; it assumes that wages are fixed and hence assumes the effect on the labour market to be inconsequential<sup>5</sup>.

<sup>4</sup> Public capital formation after depreciation

<sup>5</sup> Rather, there to be no short-run labour market adjustments.

Figure III: Private and Public capital formation growth (World Bank)

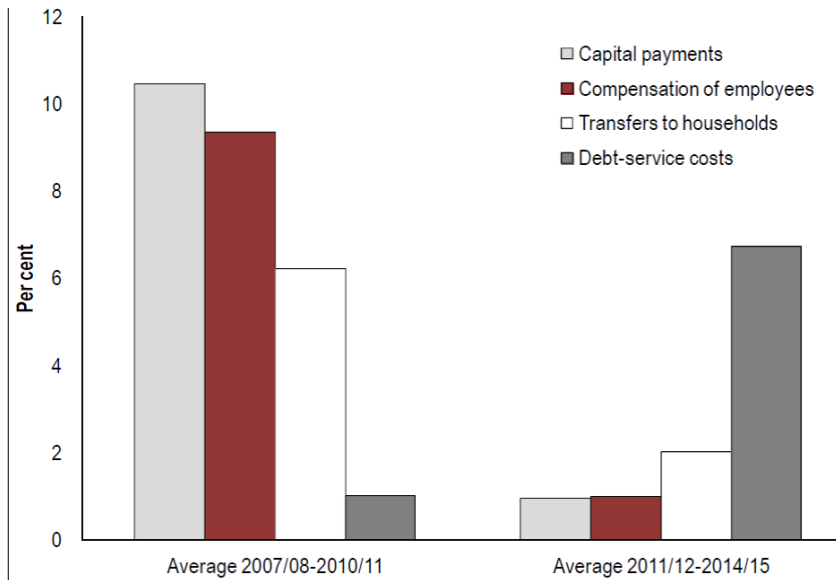
<b>Gross domestic expenditure growth by component, 2007–II Q1</b>									
Component	2007	2008	2009	2010	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1
Total final consumption									
Household	5.5	2.2	-2.0	4.4	5.5	4.4	5.7	4.8	5.2
Durables	1.9	-9.4	-9.6	24.0	39.2	45.4	13.4	5.0	21.5
Semidurables	11.3	4.2	-1.8	6.5	30.2	9.8	-4.8	4.6	8.6
Nondurables	5.0	0.8	-2.7	2.1	12.1	-2.3	2.9	0.2	3.4
Government	4.1	4.7	4.8	4.6	7.1	7.1	-0.8	3.9	9.5
Gross fixed capital formation	14.0	14.1	-2.2	-3.7	-2.8	1.2	1.0	1.5	3.1
Private	8.9	9.2	-8.9	-4.4	-2.9	2.2	2.0	1.6	2.7
Government	22.2	16.1	-4.0	-10.9	-10.3	-5.3	-3.0	-1.9	-0.5
Public corporations	34.8	36.2	26.1	3.5	2.6	2.9	0.7	3.3	6.6
Change in inventories (billions of rands)	19.8	-12.4	-34.5	-3.8	-7.9	-7.6	-0.9	1.1	9.3
Gross domestic expenditure	6.3	3.4	-1.7	4.2	10.9	3.2	6.6	2.4	8.3

Source: South African Reserve Bank.

## The case for wage-setting moderation

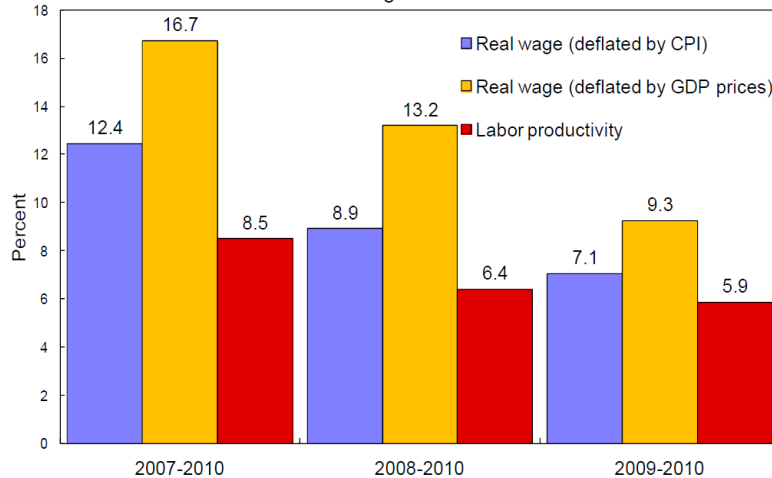
To complete this appraisal of fiscal it is important to examine if the wage effect discussed above was a significant determinant of capital formation. Figure IV from the Treasury's own calculation implies this is true ; the wage bill was the second fastest growing expenditure item in the period under study (National Treasury, 2012), and consumed 42% of government revenues. This growth is largely explained by the growth in labour complement as part of the expanded public work programme (which was a part of the fiscal expansion under study), which saw the civil service grow by 1,6 million workers. (National Treasury, 2010)

Figure IV: itemised government expenditure growth (National Treasury)



As the following figure demonstrates, the overall growth in unit labour cost in South Africa, during the period 2008-2010 has outpaced growth in labour productivity (Klein, 2012); in line with the findings of Silvia (2001) of the contractionary outcome of expansionary fiscal policy if it is associated with a growth in expenditure on wages. This holds true even for a country like South Africa, with sustainable debt levels. This is because it leads to a growth in the unit costs of labour which outpaces the growth in productivity. Further, this growth then leads to a decline in current and expected profits.

Figure V: Growth of unit labour cost (IMF)



Source: StatSA and IMF staff's calculations.

This review hence demonstrates that counter-cyclical has had the intended effect on output in that it is now positive and growing, and it is to the credit of the government that the primary deficit and secondary deficit remain low and are projected to fall further.



Output is expected to grow and the real interest rate and risk premium have remained relatively low. The key shortcoming of the policy has been its disturbing impact on the labour market equilibrium and the effect on investment.

The conclusion arising from this discussion and the theoretical work presented before it, is that the growth in civil service compensation during the 2008 to 2011, has accelerated the growth in labour costs, above trend( productivity growth). As the literature demonstrates, this then leads to fall in the real rate of return from investment which most likely resulted in investment failing to pick up even though spending grew substantially during the period.

## **Policy recommendations**

### **A twin goal of wage moderation and civil service efficiency**

From the above discussion then, a trade-off between public service wage growth and investment in the economy occurs. Wakeford (2004) in a study of the South African labour market, argues that the tendency of wage growth to outpace productivity, lead to firms substituting labour for capital. This is to say then, that what is an investment problem in the medium run (as the above analysis has shown) transforms into an employment problem in the long run.

On the basis of the above arguments, the public sector must enact measures to restrain and shrink its own wage bill to counteract the wealth effect that stunts investment in the medium run and employment(through capital substitution) in the long run. Of course, such a policy would have its own consequences. Chiefly, it removes incentive for quality service on the part of civil service and limits government's ability to compete in the labour market.

There are merits however to calls for shrinkage of the civil service. In a study of the civil service in Botswana Hope (1995) finds that over the period 1979 to 1993, the civil service in Botswana grew from 28000 to 94000. Yet this period was also associated with rapid decline in productivity and increased corrupt activity. Similarly, Sarker (2006) finds that much of the retardation in growth of Asian economies can be explained by a bloated civil service, which ostensibly accounted for a large portion of expenditures (further evidence of the wealth effect). A common thread in these two arguments is that both point to a lack of monitoring of the civil service as cause of their respective failure. Plainly, they both conclude that, a large civil service is difficult to manage.

Consequently, both authors in their policy recommendations for a developmental state like South Africa looking to maximise the productivity of its civil service is primarily to aim for accountability, where the activities of the civil servants on the ground can be monitored effectively by the policy-maker. Which requires a more wieldy civil service. Similarly it is the contention of the World Bank ( 2011) that central to successful implementation of the Batho Pele<sup>6</sup> (People first) principles of public service there are 4

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<sup>6</sup> The Batho Pele principles are Consultation and choice, precise service standards, increased access, courtesy, transparency, redress and value for money

requirements that South Africa has to fulfill: 1) political commitment 2) resource and capacity building 3) continuous skills building and training 4) close proximity between policy makers and civil service on the ground

Importantly for the purposes of this essay, the decisive factor in the case of the Asian and Australasian civil service in the Sarker study was policy measure to link wage increases to inflation, importantly, freeing up government revenues to be spent on state capacity-building initiatives, such as automation of certain functions or elimination and addition of certain processes.

## **Thumbs for the cautious approach**

to the credit of National Treasury's fiscal management, it has been seen that pursuit of a low (and shrinking) primary deficit over the past 5 years has resulted in low lending rates, and a low risk premium indicating that financial markets perceive our debt levels sustainable. Importantly, expansionary fiscal policy has not crowded out private sector investment. Over the 2014/2015 Budget period it has been announced, the budget deficit is expected to fall to 3.7% of GDP and public infrastructure investment is expected to rise by 300 billion rand in 2015 (and further to 3.2 trillion by 2019). This is probably the best policy response as the size of the proposed long-term expenditure will boost output, thereby stimulating investment( well above the minimum  $q$  value required to overcome uncertainty discussed above), at the same time the falling deficit will ensure that debt remains sustainable and cost of capital low, hence not crowding out investment.

## **Necessary supply side reforms**

It is obvious then that reform is required for investment to take place in the economy. Above strong theoretical<sup>7</sup> and empirical arguments<sup>8</sup> have been laid for government to reduce the civil service wage bill from the basis that it reduces wage pressure demands on firms, which leads to increased profit and profit expectations. Certainly, government needs to reduce the wage bill to use more revenue on investment expenditure.

With this in mind, government in the short run, needs to cut income tax to reduce upward pressure on gross income (reduce the tax wedge) and compensate for the discrepancy between wage and productivity growth. The benefit of such a cut would be it eases wage demands for private sector firms, increasing profit which increases investment in the medium run (Alesina et al, 2002).The simultaneous decrease, such a fiscal contraction would have expansionary effects (Finn, 1998)

Of course civil service rationalization and reform, though necessary, does take time Wescott(1999), estimates this period to be between 10-15 years. The South African experience with the implementation Batho Pele principles shows that this is a path fraught with challenges.

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<sup>7</sup> (Klein, 2012) (Magud, 2007) and (Finn, 1998)

<sup>8</sup> (Sarker, 2006) (Hope, 1995) and (The World Bank Group, 2011)

The rise in civil service compensation has not only been the direct result of the fiscal stance pursued following the credit crisis. An important driver of this growth has been wage agitation by public sector and municipal workers unions. As government attempts to moderate the growth in civil service compensation it needs to strengthen institutions which could restrain future wage demands such as Nedlac and the competition commission.

The above recommendation is informed by the seminal Calmfors and Driffill study, in it they perform country analysis on 17 OECD with varying rates of unemployment, and attempt to associate the employment level with the wage bargaining and the strength of the labour unions. They conclude that unions are more cognizant of the macroeconomic effects of their if wage bargaining as done by one highly centralised union as is the case in the Scandinavian countries or if it is undertaken by firm unions. It is precisely because unions fail to take the impact of their wage demands in the intermediate case of industry-level bargaining that it leads to wage growth outpacing productivity growth( Calmors & Drifill, 1988). Importantly, this study identifies that if wage bargaining happens at the firm-level, unions are likely to restrain their wage demands so as not to jeopardize firm investment decisions, further because they are cognizant of the high substitutability of products at this level of bargaining, especially if there is a large price pass-through as a result of wage increase.

This then raises the possibility that government could enact legislation to eliminate employer contributions to unions, as well as eliminate collective bargaining rights for public sector employers. Importantly through Nedlac, implement a wage accord, which will act to retard future wage settlements such that they are in line with productivity growth. According to the authors, this was true of the Netherlands during its period of industrialisation in 1970s.

In attempting to moderate wage growth, it is important also government work to pursue policy to ensure that the value of the real consumption wage is preserved (Woodford, 1989). This would imply devolving further power and resources to an institution such as the competition commission and the National energy regulator to police product market price-setting. Admittedly the commission already has much power to break-up price fixing cartels and other oversight duty, what is more important is increasing the capacity of the commission to investigate cases of price-manipulation.

## **Political risk arising**

The issue of decentralised union power, also highlights the key political risk in attempting to rebalance output towards investment, what Moody's ratings services has described as increased 'populist pressure driving macro policy' (Moody's Investors Services, 2012). The dangers arising are a debt downgrade in the very short term, resulting in higher interest rates and further choking investment, to the very long term where infrastructure maintenance and upgrades cannot be done due to the funding constraints arising from capitulation on policy decisions such as urban tolling. Critically, attempting to moderate wages by removing bargaining rights and union protection is a

policy decision likely to be met with resistance, as the experience of the UK in the 1980s demonstrates (Calmfors & Driffill, 1988).

Of course, this risk section would be incomplete without at least highlighting the forthcoming 53rd African National Congress policy conference, in as far as generating uncertainty, its impact on private capital formation necessarily follows. Capital-intensive firms will delay investment decisions for at least this period until there is clarity on the policy direction of the country. This for example is being observed in the mining industry (Gleason, 2012).

## Conclusion

In this essay a comprehensive attempt has been made to evaluate fiscal policy as it has been applied in South Africa over the past 5 years. There is sound theoretical evidence that counter-cyclical approach is the best approach to macro management as opposed to the alternatives. Empirically it has been demonstrated that it has led to a lower real interest rate and risk premium while shortening the length and depth of the recession. The fiscal policy stance has failed, however, to bring about the investment necessary for sustained and balanced economic growth. That is to say, it has led to a state of affairs where any future capital formation will only arise due to substitution of labour for capital inputs. The evidence shows that this arises in large part due to growth in the wage bill of the civil service, and as treasury's own documents confirm that this has been a fast growing expenditure item of government. The significant argument of this essay is that Government should continue with its current fiscal stance but do it in conjunction with the following set of reforms that need to be undertaken which will achieve the tasks of increased investment and an efficient civil service. These reforms include i) controlling the growth of the civil service wage bill<sup>9</sup> ii) reducing the size of the civil service<sup>10</sup> and iii) decentralization of wage bargaining<sup>11</sup>. The key benefit arising in future is that fiscal expansions will result in a rise in a rise of government consumption and investment expenditure, instead of growth in employee compensation in both government and the labour force employed by private firms.

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<sup>9</sup> Finn(1998)

<sup>10</sup> Hope(1995)

<sup>11</sup> Calmfors&Driffill(1988)

## Bibliography

- Alesina, A., Ardagna, S., Perotti, R., & Schianterelli, F. (2002). Fiscal Policy, profits and Investment. *American Economic Review*, 571-592.
- Bernanke, B. (1983). Irreversibility, uncertainty and cyclical investment. *Quarterly Journal of Economics*, 85-106.
- Braun, M., & Di Gresia, L. (2003). Towards Effective Social Insurance: The Importance of Counter-cyclical fiscal policy. "Dealing with Risk: Implementing Employment Policies Under Fiscal Constraints". Milan: Inter-American Development Bank.
- Calmors, L., & Drifill, J. (1988). Bargaining Structure, Corporatism and Macroeconomic Performance. *Economic policy*, 13-50.
- Fatas, A., & Mihov, I. (2001). *The effects of fiscal policy on consumption and empirical evidence*. Singapore: INSEAD.
- Finn, M. (1998). Cyclical effect of government employment and goods purchases. *International Economic Review*, 635-657.
- Gleason, D. (2012, May 8). The Mining industry must be rescued. *The Business day*.
- Hope, K. R. (1995). Managing the public sector in Botswana: Some emerging constraints and the administrative reform responses. *International Journal of Public Sector Management*, 51-62.
- Klein, N. (2012). *Real Wage, Labor Productivity, and Employment trends South Africa*. Washington D.C: IMF Africa Department.
- Magud, N. (2007). On asymmetric business cycles and the effectiveness of counter-cyclical fiscal policy. *Journal of Macroeconomics*, 885-905.
- Moody's Investors Services. (2012). *Credit Opinion: The South African Roads Agency Limited*. Pretoria: Moody's Ratings.
- National Treasury. (2010). *National Budget Review*. Pretoria: Government Communication and Information Services.
- National Treasury. (2012). *National Budget review 2012*. Pretoria: Government Communication and Information services.
- Sarker, A. E. (2006). New public management in developing countries: An analysis of success and failure with particular reference to Singapore and Bangladesh. *International Journal of Public Sector Management*, 108-203.
- Silvia, A. (2001). *Fiscal policy in unionized labour markets*. Wellsely College.
- Talvi, E., & Vegh, C. (2004). Tax base variability and procyclical fiscal policy in developing countries. 156-190.
- Taylor, J. (2000). Reassessing the role of discretionary fiscal policy. *Journal of Economic perspectives*.
- The World Bank Group. (2011). *Accountability in Public Services in South Africa*. Washington D.C.
- Wakeford, J. (2004). The Productivity-wage relationship in South Africa: An Empirical Investigation. In J. Wakeford, *Development South Africa* (pp. 109-132).
- Wescott, C. (1999). Guiding principles on civil service reform in Africa: an empirical review. *International Journal of Public Management*, 145-170.
- Woodford, M. (1989, December). OLIGOPOLISTIC PRICING AND THE EFFECTS OF AGGREGATE DEMAND ON ECONOMIC ACTIVITY. *Nber Working Paper Series*.
- World Bank Group. (2011). *South Africa Economic Update: Focus on Savings, Investment and Inclusive growth*. Washington D.C: Communications Development Incorporated.

