

## ABSTRACTS – SECOND ERSА PUBLIC ECONOMICS WORKSHOP

### RESEARCH AREA: GROWTH, DEBT AND FISCAL POLICY

#### A) Fiscal sustainability and targets

##### **Will the South African fiscus weather the financial crisis?**

*By Ian C. Stuart (National Treasury), Charl Jooste (National Treasury) and Alfredo Cuevas (IMF)*

After significantly reducing its debt over the past 13 years, the South African government faces sharply rising national debt levels in the years ahead, largely as a result of reduced tax revenues brought on by the financial crisis. We estimate a fiscal reaction function for South Africa and argue that, in addition to prudent policy decision-making, the historical debt reduction reflected the strength of the economic cycle. Combining the fiscal reaction function with a VAR of the South African economy, we generate an asymmetric fan-chart of possible paths for the national debt-GDP ratio, and provide examples of the policy applications of this model. The model suggests that the debt level will remain sustainable over the medium term, although there is a high probability that it will continue to rise over the longer term.

##### **Fiscal sustainability and the case for fiscal rules: Comparing South Africa and selected OECD countries**

*By Philippe Burger (University of the Free State)*

How do governments react to changes in their debt positions? This is a rather pertinent question given that in OECD countries the 2008/9 financial and economic crisis resulted in the highest peacetime public debt/GDP ratios since WWII. Once the question on how *do* governments react has been answered, the next question is how *should* they react? This paper explores answers to both questions. The focus is on OECD countries with sufficient debt and deficit data, as well as South Africa. South Africa has 'Enhanced Engagement Status' with the OECD, which holds the potential of OECD membership in future. To investigate how governments react to changes in their debt positions, the paper estimates fiscal reaction functions for nine OECD countries and South Africa, using GMM, nonlinear Smooth Transition Regressions (STR) as well as State-Space modelling. To estimate the regressions, the paper uses OECD time series for gross and net government liabilities, as well as cyclically adjusted and non-adjusted primary balances. For South Africa, the paper uses public debt data as well as primary balance data constructed from national accounts. Following the estimations, the paper investigates the form that a policy rule could take. The paper argues the case for a policy of 'anchored flexibility' in the form of a flexible fiscal rule that allows for the pursuit of economic stability, but anchors that pursuit always in fiscal sustainability.

## **B) Local government performance**

### **Fiscal performance of local government in South Africa – an empirical analysis**

*By Niek Schoeman (University of Pretoria)*

In this paper the fiscal performance of local municipalities in South Africa is analysed starting with a brief outlay of modern thought on fiscal decentralisation (“second generation thought”) and the conclusion is that in many instances local governments are least equipped to perform the duties delegated to them mainly because of a lack of skills and managerial capabilities, finances as well political factors. In view of the lack of data on performance by local authorities a few criteria have been selected to use as proxies of performance such as debtors outstanding, the ageing of the debt, the revenue collected compared to economic growth in the area, dependency on grants and priorities in terms of expenditure as well as the fiscal sustainability of local governments. An attempt has also been made to rank municipalities according to their performance in terms of the criteria defined. The findings indicate that one should be careful not to stereotype/categorise municipalities simply based on size and expenditure priorities such as the amount spent on salaries and wages compared to capital expenditure.

### **The role of revenue enhancement programs in addressing municipal fiscal stress**

*By Eddie Rakabe (Financial and Fiscal Commission)*

Most South African municipalities are purported to be suffering from fiscal stress which ordinarily triggers revenue enhancement initiatives. The reasons underlying the existence of fiscal stress among municipalities are however less certain thereby implying a weak justification base for revenue enhancement programs. For this reason this study investigates whether there is evidence of fiscal stress within local government. Selected indicators of fiscal stress lead to the conclusion that municipalities are fiscally stressed. Next we investigate the underlying causes of fiscal stress followed by an analysis of how municipalities respond to fiscal stress both locally and internationally. The effectiveness of local revenue enhancement programs is analyzed with a finding that municipalities are making false claims about the performance of their programs. Given the scanty evidence about the performance of revenue enhancement programs we then evaluate if there is additional scope for municipalities to increase their revenue bases and if there is such a scope what are the potential revenue sources.

### **Is South Africa becoming fiscally more centralised?**

*By Estian Calitz (University of Stellenbosch) and Hassan Essop (University of Stellenbosch)*

Recently the issue of the appropriate measure of fiscal centralisation or decentralisation received attention in industrial and developing countries, for reasons of better service delivery and Pareto efficiency. Indeed, multilateral institutions such as the World Bank, United Nations and OECD actively support fiscal decentralisation in developing countries and East European transformation countries to promote economic and social development and efficiency and transparency in the public sector (Stegarescu, 2004).

Current events in South Africa have led to a similar debate regarding the most appropriate division of responsibility between different government spheres. With reference to various actions which reduced the powers of sub-national governments, some argue that government has *de facto* become more centralized than indicated by the Constitution,

thereby increasing the distance between national government decision-making and the needs of the poor. Proponents of more centralisation argue that this will improve service delivery given the lack of capacity and unsustainable fiscal positions of some local governments (see, for example, Schoeman 2004).

Little systematic analysis of SA trends of on these issues has been undertaken. Against the backdrop of the literature on fiscal federalism, the key question addressed in this paper is whether South Africa has been veering towards centralisation or decentralisation. Evidence from financial measures, such as distribution and sources of revenue at local and provincial government level, as well as non-financial measures such as *de facto* implementation of legislation will be considered.

#### Bibliography

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Schoeman, N. 2006. "Rethinking fiscal decentralisation in South Africa". *Journal of Public Administration* 41(2): 110-127.

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### **C) Institutional issues**

#### **Reviewing the role of the FFC for the future**

*By TG Rusike (Western Cape Provincial Treasury)*

Since democratization process in 1994, the Financial and Fiscal Commission (FFC) has become an integral part of the South African fiscal system through the provision of advice and recommendations to Government on various fiscal issues. However, as the fiscal system continues to evolve, there have been debates on the continued existence and or the review of the role played by the FFC in the intergovernmental fiscal relations system. The paper seeks to review the role of the FFC in the fiscal affairs of South Africa. The analysis makes use of past recommendations by the FFC, previous discussions on the subject and possible alternative fiscal arrangements in the absence of FFC. The general theme emerging from the paper is that, rather than abolishing the institution, there is need to collectively fine tune the mandate of the FFC periodically to reflect the needs of all the three spheres of Government.

#### **Nonlinear tax elasticities and their implications for the structural budget balance**

*By Charl Jooste (National Treasury) and Ruthira Naraidoo (University of Pretoria)*

Coordinated efforts from countries around the world have managed to lift the world economy from its deepest recessions since the 1930's. Large bailout packages have been announced which subsequently have led to large budget deficits. To measure the pure discretionary element of fiscal policy, we extend the structural budget balance literature by estimating and testing for possible nonlinear tax elasticities for the South African economy. The 2007-2009 financial crisis witnessed a shift from achieving the budget tax collection during the expansionary phase to under-collecting taxes from the budget by approximately R70bn during the downward phase. Previous research on tax elasticities in South Africa has

mainly employed linear models and shows that taxes evolve symmetrically irrespective of the economic cycle. This study extends this research to show that taxes behave asymmetrically during booms and recessions. The linear elasticities imply that a one percent expansion in the cycle increases personal income tax, corporate income tax and value added tax by 0.97, 2.17 and 1.22 percent, respectively. However, the nonlinear elasticities are significantly different. During an expansion phase, the above elasticities increase by 1.87, 2.77 and 2.18 percent, respectively. This finding of low tax collection during downward phases of the economy has important implications for fiscal sustainability and overall fiscal prudence.

## **RESEARCH AREA: SOCIAL SECURITY AND RETIREMENT REFORM, HEALTH INSURANCE, WAGES SUBSIDIES**

### **A) Grants**

#### **The Disability Grant: Obstacle or Enabler to Effective Antiretroviral Treatment?**

*By Frikkie Booysen (University of the Free State)*

In 2009/10, approximately 1.3 million South Africans received a disability grant, this at a cost of some R17 billion to the fiscus. Since the launch of South Africa's public sector antiretroviral treatment programme in 2003, a debate has raged on whether the disability grant will result in sub-optimal adherence because of a health-income trade-off (Nattrass, 2005), thus compromising the effectiveness and sustainability of the antiretroviral treatment programme. This paper employs data from two recent longitudinal cohort studies of ART clients enrolled in the Free State province's public sector treatment programme to investigate the following: access and transitions in access to the disability grant among ART clients, the contribution of the disability grant to individual and/or household income, and the observed impact of disability grant access and income on various subjective and objective measures of treatment adherence and treatment success.

### **B) National Health Insurance (NHI)**

#### **National Health Insurance versus the need for health reform, a financial and economic assessment**

*By Alex van den Heever (Council for Medical Schemes)*

Various proposals for National Health Insurance (NHI) have been tabled over the past 16 years within the context of strategic health systems reform. There have at the same time been formal proposals, and action taken to implement health reforms through the public health system to achieve universal access to health care together with proposals to maximise risk pooling within a contributory system for health insurance. Recent proposals regarding NHI have however sought to replace the public service with an insurance-based approach to which all income earners would be required to contribute, and the entire population would be compelled to use. Although such proposals are unlikely to be implemented it is worth evaluating the premises underlying the proposals, and how they relate to existing strategies. This presentation will seek to provide an overview of the proposals with a feasibility assessment, examining both the institutional and financial issues involved.

### **Estimating the demand for health care under NHI**

*By Ronelle Burger (University of Stellenbosch), Servaas van der Berg (University of Stellenbosch) and Nicola Theron (University of Stellenbosch)*

This research attempts to estimate the impact of the NHI on the demand for health. We compile a simple econometric model of health demand using pooled data from the GHSes (2002 – 2007). Based on the description of the plan detailed in the leaked ANC NHI proposal (dated February 2009) it is assumed that the main characteristics of the NHI are universal coverage, a comprehensive benefit package and zero co-payments.

The model anticipates that the introduction of the NHI will result in a dramatic shift away from low levels of care that do not provide access to doctors and a sharp rise in the demand for doctors and specialists. Given the high levels of current utilisation observed in South Africa, the simulations show that utilisation levels of low levels (primary) health services are unlikely to increase much under the NHI.

These simulations do not take supply constraints into account. Given the substantial anticipated increase in the demand for visits to doctors and specialists and the constraints relating to these resources (doctors and specialists), it is difficult to see how our system will be able to meet this increased demand. Unless the NHIA devises a careful and thorough strategy to ration and manage demand, the NHI is likely to increase the strain on the health system further, which could spark a plethora of perverse unintended consequences in terms of access and service delivery.

### **C) Social security reform**

#### **South African annuities - Value for money for the haves and have-nots?**

*By Alexander Pick*

Annuities are generally regarded as the most effective means of guaranteeing an income stream after retirement that lasts until the recipient's dying day. However, this does not mean that annuity products offered by the market represent good value of money. A mispriced annuities market might result either in annuitants receiving a lower income than they might have received had they pursued alternative investment strategies, or in those lower down the income spectrum being unable to afford these products. This paper finds that South Africa possesses a competitive insurance market which provides annuity products offering good value for money relative to its international counterparts. However, this paper also argues that these products are not feasible for the majority of South African workers, whose mortality experiences are very different from those of the existing annuitants. This latter issue is of particular importance to policy-makers as they plan a new social security system: if the mandatory fund employs individual accounts then it will be necessary to provide annuities that are universally affordable.

## **South African institutional investments – Whose money is it anyway?**

*By Rob Rusconi*

The paper asks whether institutional investment markets are operating efficiently and in the interests of the members of pension funds in the face of so much apparent evidence that they are not. Ten examples of this apparent evidence are cited and discussed at length in the full version and briefly set out in this summary. Five possible reasons for the problems are suggested: (1) a poor understanding of the distinction between the owners of capital and their agents, (2) an extraordinarily complex value chain, (3) the human failure to assess investment performance indifferently, (4) ubiquitous conflicts of interest, and (5) the information inequality. The intention of the author for this session is not so much to present the findings but to ask for thoughts on how these issues might be addressed.

## **RESEARCH AREA: INFRASTRUCTURE INVESTMENT AND FINANCE, UTILITY PRICING**

### **A) Pricing issues**

#### **An assessment of the mechanism and processes used in setting municipal water services tariffs**

*By Stephen Hosking (Nelson Mandela Metropolitan University)*

The water service provided and the tariffs set for this service are principally influenced by the quest by South African municipalities to comply with National Law and Policy and local water user political pressure. There are a number of influential national laws; arguably the most important being the Constitution (1996), Water Services Act (1997), Municipal Structures Act (1997), National Water Act (1998) and Local Government Municipal Systems Act (2000) and Municipal Financial Management Act (2003). The Water Services Act makes the provision of water services a municipal monopoly. The tariff policy that has emerged under this web of Law distinguishes three water service classes: water charged in increasing steps based on amount demanded, water charged a flat rate (average financial cost) and water not charged for (free or wasted). The indigent (very poor) receive water that is typically charged for and paid by government in the form of the equitable share grant. This paper assesses the economic role and rationale of the current tariff setting arrangement.

### **B) Value for money in PPPs**

#### **How to attain value for money: Comparing PPP and Traditional Infrastructure Public Procurement**

*By Philippe Burger (University of the Free State) and Ian Hawkesworth (OECD)*

As a matter of principle the choice between using a PPP or traditional procurement to procure infrastructure should be simple; government should prefer the method that creates the most value for money (VfM). However, in practice the VfM objective is very often blurred and the choice between using a PPP and traditional infrastructure procurement may be skewed by factors other than VfM. Some factors skew choice towards traditional procurement, while others skew it towards PPPs. Drawing on the results of an OECD questionnaire sent to all OECD countries (as well as South Africa as an OECD enhanced engagement country) in early 2010, this paper considers the various factors that may skew this choice and thereby undermine the pursuit of VfM. The results point especially to

differences in the range and complexity of the *ex ante* and *ex post* VfM tests that some governments apply to PPPs and traditionally procured infrastructure projects as factors that may skew the choice between the two procurement options. However, accounting standards, political preferences for or against PPPs, as well as the strength of public sector unions also play, among other, a role in skewing incentives and affecting choice in some countries. With the focus on the attainment of value for money and by exploring the issues raised in the responses to the questionnaire, this paper sets out some good practices that will align the requirements for these two types of procurement and remove possible perverse incentives that favour one over the other.