EXAMINATION

23 May 2011

Subject A302
Communications

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1. *Enter all the candidate and examination details at the beginning of each question.*
2. *You have 15 minutes at the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.*
3. *You must not start typing your answers until instructed to do so by the supervisor.*
4. *Mark allocations are shown in brackets.*
5. *Attempt both questions, beginning your answer to each question on a new page*
6. *Candidates should show calculations where this is appropriate.*

AT THE END OF THE EXAMINATION

Save your answers with the password provided and hand in your question paper.

In addition to this paper you should have available the 2002 edition of the Formulae

Question 1

The government of Notsofaraway is proposing introducing a National Insurance Fund. This fund will provide death benefits of 2 times salary to all working citizens on their salaries up to a maximum benefit of $R100 000 per annum.

In this country, half the citizens work, and half of the working citizens belong to their company group life plans that supply death benefits. The cost of these plans varies per industry as follows:

- Deep Sea diamond mining — 10 cents per mille
- Manufacturing — 5 cents per mille
- Financial Services — 1 cent per mille

These are the only industries in the country, and all working citizens fall into one of these categories.

A consultant has calculated that the national scheme will cost 4 cents per mille. You do not have access to the salary and mortality information behind these calculations.

The government of the country has asked its Actuarial Society for assistance in understanding at a high level the likely impact the proposed National Insurance Fund will have on the private insurance industry, the population and employers. They also want to understand what sort of return on contributions the citizens of the country will get in the system.

As a newly appointed actuary on a committee of the Actuarial Society, you have been asked to draft a letter to the Director General of National Treasury in response to these queries. Your letter should be 450 words in length.

Notes:

- Membership of the National Insurance Fund is compulsory for working citizens – there is no opt out option

- The calculation of an annual cost per mille would be performed as follows:

  $$\text{Cost per mille per annum} = \frac{\text{Annual premium}}{\text{Sum assured}} \times 1\,000$$

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PLEASE TURN OVER

Question 2

You work as a trainee investment analyst in the research department of a South African bank. Your team focuses on monitoring the macroeconomic environment of the country.

The Minister of Finance has recently presented the budget for the 2011 fiscal year. You have been provided with a commentary article on the budget from one of the business papers, and tasked with presenting a summary of the article to your team.

Draft a presentation of 8 to 10 slides summarising the key messages from the attached article.

Notes

1. Your team comprises a variety of investment professionals, economists, accountants, statisticians and actuaries.

2. Your presentation must only include material from the article. Knowledge of the full budget is not required.

PLEASE TURN OVER

Budget 2011 – Economic Overview

The budget is a serious attempt to kick-start SA onto a new growth path that involves faster and more labour-absorbing economic expansion. In total, it devotes R150bn over three years to promoting jobs and skills development.

This balancing act comes at a cost, however. Finance minister Pravin Gordhan, though sticking to his commitment to reduce the deficit gradually over the next three years, is now aiming for a deficit of 5,3% of GDP again in 2011/2012 as opposed to the 4,6% originally budgeted for.

Not only is the budget deficit estimate for the current fiscal year unchanged, but the deficit in the years ahead will narrow far more gradually than had been planned last October.

The key will be whether SA actually succeeds in driving faster growth through its fiscal stance. SA's chief problem is that on the present GDP trajectory, private sector employment will recover to pre-crisis levels only by 2014. Government's new growth path aims to sustain GDP growth at 7% a year so as to double national income and create 5 m new jobs over the next 10 years.

Thanks mainly to improved Vat and customs duties, the 2010/2011 budget deficit is R26,2bn smaller than treasury thought it would be this time last year. It is expected to come in at 5,3% of GDP as opposed to the 7,2% originally budgeted for.

The aim is still to bring the deficit down to between 3% and 4% over the medium term, through a combination of improving revenue and expenditure restraint.

"What's important is that we're sticking to our [deficit reduction] path," says head of the budget office Matthew Simmonds.

Real non interest spending per person has doubled over the past eight years, thanks to buoyant growth and revenue. But those days are over; Gordhan aims to reduce annual real spending growth to just under 3% over the next three years.

This is ambitious, given government's commitment to progressively expand social grants, fund R808bn worth of infrastructure, increase industrial and job- creation incentives, and, ultimately, roll out a National Health Insurance system (NHI).

One of the most shocking revelations is that the public service salary bill has doubled over the past five years, from R156bn to R314bn. It now constitutes 40% of consolidated non interest expenditure.

Treasury director-general Lesetja Kganyago concedes it's going to be "a tall order" to keep the average annual growth in government's compensation bill (which includes the cost of new workers) down to the 6,3% budgeted for over the next three years.

"We must face the fact that for the past two years we have given civil servants very generous increases, way above inflation," he says. "If we're not careful we'll end up with well-paid doctors and nurses with no medicine to dispense and well-paid teachers with no teaching materials."

What treasury is not prepared to allow is excessive wage demands that derail efforts to reduce the budget deficit. Kganyago is emphatic: "If compensation growth goes above 6,3% we will have to cut elsewhere."

Wage pressures, higher interest payments and social grants are together growing so fast that they are crowding out government's ability to maintain the pace of capital spending, according to the Budget Review.

In fact, debt service costs have become the fastest growing item of state expenditure at around 16,5% year-on-year.

The expected rise in state debt costs reverses the favourable trend of the past decade, when lower debt servicing costs freed up resources for expenditure elsewhere.

Treasury understands that while the higher fiscal deficit was the appropriate response during the downturn, it must reduce the level of borrowing as the economy recovers.

National government's net loan debt is set to top the R1trillion mark next year — up from R526bn two years ago. By 2013/2014 it is expected to reach around 40% of GDP which, though not high by Western standards, does not compare favourably with many other developing countries.

Treasury knows that sustainable government debt levels are a condition for creating a growth-friendly environment marked by low inflation, a low cost of capital and a competitive real exchange rate. It is also well aware that any deterioration in the growth outlook, interest rates or the budget balance will slow the fiscal recovery.

Several commentators were disappointed that no further measures to weaken the rand were announced. But given the extent to which foreign exchange controls were relaxed in October and the fact the rand has depreciated by 10% against the US dollar since December, treasury has decided to wait and see.

Its view is that stepped up foreign exchange purchases by the Reserve Bank — which totalled a staggering R53bn during 2010 — have partially offset upward pressure on the rand, though it is debatable whether the real driver has been the outflow of capital since December in line with a weakening in global risk appetite.

Government will continue to assist the Bank to accumulate foreign reserves when conditions are favourable and engage in currency swaps to moderate the effect of capital flows on the exchange rate, but it has not taken the controversial step of introducing capital controls as some other emerging markets have done.

Reserve Bank governor Gill Marcus expects that capital flows into emerging markets will continue during 2011/2012 and that the issue will remain a problem for some time.

Though the Bank's policy of foreign exchange intervention would continue, Marcus said this was aimed at smoothing volatility in the exchange rate rather than the targeting of any particular level for the rand. "Given the contrast with what the market might have been positioned for, it is not surprising that the rand strengthened further with the announcement of the budget," says Khan.

Treasury has left its macroeconomic projections largely unchanged from its October estimates. Consumer inflation has been revised up slightly for 2011 from 4,7% to 4,9% but treasury (which appears sanguine about rising international food prices) still expects CPI to remain within the 3%-6% target band over the medium term.

After averaging 2,8% last year, real GDP growth is now expected to average 3,4% in 2011 (previously 3,5%). Treasury still expects the economy to be growing by 4,1% next year and 4,4% in 2013, supported by improving household consumption and accelerating investment.

Over the longer term, tax revenue has to keep rising to finance government's spending commitments. Gordhan is relying on the tax base to keep growing, driven by economic growth, higher employment and improved compliance.

The 2011 budget tax proposals are intended to broaden the tax base, close various loopholes and improve tax equity. Personal income tax relief of R8,1bn has been granted for bracket creep while businesses will receive tax breaks to support skills development and job creation, particularly for young workers.

However, budget documents make it clear that if the current mix of tax instruments cannot provide sufficient resources, changes to tax policy, including higher taxes, will need to be considered.

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