

Chapter

8

FISCAL CHALLENGES

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INTRODUCTION

The 2010 Budget is striking in its acknowledgement that the Singapore economy has to be restructured “towards higher-valued activities and exit from less efficient ones”¹. Yet the Budget Statement also acknowledged that “the government cannot decide which enterprises should succeed or phase out...We must rely on the market to achieve this restructuring.”

Although the budget was deemed to have a near neutral fiscal impulse², it was intended to have a positive productivity impulse on the economy over the longer term. The key goal, as stated by the Finance Minister, was to “grow our productivity by 2% and 3% per year over the next decade, more than double the 1% achieved over the last decade”. On the one hand, the market will call the shots and yet it is presumed that the government can influence it in the direction of higher productivity. A major instrument of the government is the budget as it accounts for 15% of national economic activity. This is the first time that productivity has been openly acknowledged as the priority goal of national economic policy. In the past economic growth has been the acknowledged as the primary goal from year to year, including recovery from recessions.

The 2009 budget had been focused on recovery from an impending recession through the saving of jobs. The latter was accomplished by a Resilience Package comprising a Jobs Credit Scheme and a Skills Programme for Upgrading and Resilience (SPUR). The former was accomplished by allowing a continued inflow of foreign workers. The Minister admitted that the 8% growth in GDP in 2004 to 2007 was achieved because “companies could obtain the workers they needed to seize opportunities to expand while the environment was favourable.” The

¹ The 2010 Budget Speech is found at http://www.mof.gov.sg/budget_2010. All quotations from the Budget Speech in this article are from this source.

² The fiscal impulse is defined as the first-order stimulus to aggregate demand arising from fiscal policy during a given period. It focuses on the change in fiscal stance from year to year. In FY (fiscal year) 2009 and FY2008, the fiscal impulse was positive at about 4% of GDP while in FY2007 it was negative.

workforce grew rapidly over those four years by 5% annually with foreigners accounting for about half the growth.

Now, however, with a focus on raising productivity, the supply of foreign workers had to be managed. To quote: “reducing our dependence on foreign workers will pay off in higher productivity over the long term, but there are real trade-offs in growth and incomes over the shorter term.” Dependence on foreign workers will be reduced by raising the foreign worker levy. The intention is to keep the figure for foreign workers constant at about 1 million a year. The Minister stated:

....“if we make low cost foreign workers too readily available, employers will not have sufficient incentive to upgrade their operations and upskill their workers. But if we cut too sharply on the supply of foreign workers, then despite companies’ best efforts to raise productivity, they may not be able to compete with other Asian players, and in many industries they will not find enough local workers to grow”.

Consequently, the 2010 budget was intended to give strong support for individual industries and enterprises to upgrade:

“We will give significant tax benefits to businesses that invest in skills and innovation, thereby lowering their effective tax rates. We will also provide grants for customized, industry-based initiatives.”

The aggregate of tax benefits and grants constitute a fiscal challenge in view of the restructuring of the economy envisaged in the Report of the Economic Strategies Committee published a month earlier than the release of the budget in March 2010. The ESC stated that skills, innovation and productivity were to be the basis of sustaining the economic growth of Singapore. Furthermore, Singapore must be a vibrant and distinctive global city.³

THE 2010 BUDGET

Tax benefits

The 2010 budget introduced a “Productivity and Innovation Credit” scheme. Tax deductions were provided for investments in a broad range of activities along the innovation value chain. Six activities were identified, namely research and development; registration of intellectual property (including patents, trademarks and designs); acquisition of intellectual property, for example when a company buys a patent or copyright for use in its business; design activities; automation through technology or software and training of employees.

Under this scheme, businesses can deduct 250% of their expenditures on each of these activities from their taxable income, up to S\$300,000 for each activity so as to focus the benefits on small and medium enterprises. Giving an example, it was stated that a business can get back one quarter of its investment assuming a marginal tax rate of 17%. As currently only the first category (research and development) qualifies for tax deductions up to 150% of expenditure, the new scheme was expected to spur a broader range of innovative activities.

³ For more details on the recommendations of the ESC, see Chapter 1.

Grants for Retraining

As for the last category (the training of employees), the Minister introduced a Workfare Training Scheme (WTS) to complement the existing Workfare Income Supplement (WIS) which had been designed to help older low-wage workers to stay in the workforce. The WTS is not only open to all current recipients under the WIS but was also to be made open to younger WIS recipients from age 35 years.⁴ Under the WTS, employers will be provided with 90% to 95% funding for absentee payroll and course fee outlays. Furthermore, cash grants will be given to the workers on completion of their training, capped at S\$400 a year. The WTS will include a structured training programme for those with very low skills, including those who may be out of a job.

Grants in Lieu of Tax Credits

As small but growing businesses could be cash-constrained, businesses were given the option of converting up to S\$300,000 of their Productivity and Innovation Credit a year into a cash grant of up to S\$21,000⁵. This was intended to help businesses starting off with low taxable income but want to grow by investing in technology or upgrading their operations.

Grants for Setting up New Funds

The biggest new grant in the 2010 budget was in the form of a S\$1 billion injection in 2010 into a National Productivity Fund, followed by another S\$1 billion, making a total of S\$2 billion. A new National Productivity and Continuing Education Council will establish the priorities and programmes of this new fund which will provide grants to help enterprises in all sectors, with special emphasis initially on areas where there is a potential for large gains in productivity. The Fund can also be used to develop centres of expertise for a range of industries, which will grow a knowledge base for enterprises to tap on to develop productivity solutions.

The 2010 budget also stated that around S\$250 million out of the first S\$1 billion of funding for the National Productivity Fund will be dedicated to raising productivity in the construction sector with three areas singled out: initiatives to help local contractors develop capabilities in areas such as complex civil engineering and building projects, investment in new technologies and upgrading to a higher quality workforce. There will also be a grant of S\$1.5 billion for the National Research Fund which had already received S\$0.4 billion in 2009.

THE BUDGET IN BASIC DEFICIT

⁴ The WIS scheme was itself modified in the Budget Statement, with the maximum payout increasing by between S\$150 and S\$400 and more going to older workers to encourage them to stay in the workforce. The WIS was also extended to workers earning up to S\$1,700, up from the current limit of S\$1,500. These enhancements would cost S\$100 million annually as they benefited 400,000 low wage workers.

⁵ The cash grant option in the Productivity and Innovation Credit scheme will be reviewed after three years.

For the second year in a row, the budget would be in deficit (Table 1). The Primary Budget had a deficit of S\$5,645 million, and if special transfers are added, the Basic Deficit is increased to S\$7,204 million. If we add top-ups to endowment and trust funds, such as the S\$1.5 billion to the National Research Fund and S\$1 billion to the National Productivity Fund, the overall budget deficit would be S\$10,795 million, about 4% of GDP. However Net Investment Returns (NIR) gives a figure of S\$7,835 million, therefore making the overall budget deficit S\$2,960 million.

The 2010 budget deficit is consequently about the same as the deficit in the revised 2009 budget i.e. S\$2,877 million or 1.1% of GDP. The original 2009 budget had anticipated a basic deficit of S\$14.9 billion, but the contraction in the economy turned out to be at the top end of the 2.0-5.0% projected at the beginning of that year. The Singapore economy had thus turned out better than expected in 2009 as the Resilience Package, plus stimulus measures by the major industrialized countries, had a positive effect on the economy.

Although some jobs were lost, more job losses occurred amongst foreigners and the workforce as a whole contracted. With an expectation of continued recovery in 2010, the 2010 budget no longer sought to save jobs through the Resilience Package which was to be phased out by mid-year and the budget sought instead to enhance Singapore's growth potential by increasing productivity and enabling local companies to take advantage of the opportunities in the new landscape after the economic crisis.

The main thrusts of the 2010 budget were that of growing incomes through skills and innovation, growing globally competitive companies and including everyone in growth. To accomplish that, the 2010 budget had to be in deficit, even after taking into account Net Investment Income and Net Investment Returns from Singapore's accumulated surpluses. Prior to FY2009, up to 50% of Net Investment Income (NII) was included in the annual budget for spending. With effect from FY2009, however, the framework changed to that of Net Investment Returns (NIR) which is the expected long term real returns on relevant assets as specified in the Constitution. Up to half of NIR could be taken for spending. As can be seen from Table 1, the amounts taken from NIR for FY2009 and FY2010 were much larger than the NII for previous years.

The NII figures tend to be volatile and it was deemed more appropriate to use NIR instead. What this means is that if actual income from overseas assets in any year is below the long term expected real return, actual income in the following years has to compensate for this, otherwise the NIR figure will need to be adjusted downwards. The budget for 2010 put NIR at S\$7,835 million, slightly higher than the NIR in the revised FY2009, which was S\$7,033 million. If NIR is not taken into account the overall budget deficit for 2010 would be S\$10,796 million, or about 4% of GDP, no small fraction as compared to previous years and even decades.

FY2007 was exceptional in that an expected deficit turned out to be a large basic surplus, but all other years in the last decade saw a basic budget deficit. What this means is that fiscal policy is in for a long period of deficits, if grants and tax benefits have to be given continually to drive productivity increases, if not offset by positive NIR. As can be seen from Table 1, the incoming stream of NII from FY2001 to FY2008 was followed by a much higher stream of NIR for FY2009 and FY2010.

As currency is issued by the currency board system, the government has, at present, no recourse to deficit financing from the monetary authority as would be the case in many other countries. The government has in its foreign exchange reserves the equivalent of the natural resources which Singapore is short of, but the government cannot increase this pool of reserves much from year to year if half of the returns from its financial investments has to be allocated to

the budget, which seems to be the case for FY2009 and FY2010. The actual wording used is “up to half” but since the base figure is not income but expected returns, it may very well be half or more of actual income earned from the accumulated surpluses of the government. 2009 was generally a bad year for investment in capital markets around the world and actual income may well have been much less than the figure for NIR credited to the FY2010 budget.

FINANCIAL ASSETS OF THE GOVERNMENT AND BUDGET DEFICITS

An interesting page in the 2010 budget reveals the assets and liabilities of the government which in historical accounting (not market value) terms amounted to S\$615.8 million as at the end of March 2009. Funds set aside for specific purposes, such as the Development Fund and the Government Securities Fund, totaled S\$432.4 million. Presumably these are funds to meet certain obligations and liabilities. Some of these funds are for continued growth and care of the economy through the help it gives to persons, such as the ElderCare Fund, Edusave Endowment Fund and Lifelong Learning Fund. Besides deposit accounts, the other entry on the liabilities side of the government balance sheet is the consolidated fund which, at the end of March 2009, totaled S\$178.2 million. It is this which is drawn upon in the budget exercise.

What the earnings are for the assets side of the balance sheet is not shown, but we do know that such investments totaled S\$497.6 million, the market value of which is surely far more than that. Of the S\$497.6 million, quoted investments are stated as S\$237.9 million and unquoted investments are S\$179.7 million, all presumably measured at historical cost rather than at current value.

The NIR figures in Table 1 come from such investments. Rather than speculate as to what percentage that is of the market value of quoted and unquoted investments, this page in the budget shows that the government is still able, for many more years or even decades to come, to finance its budget deficit from its financial assets. Nevertheless the shift from the NII framework to the NIR framework may indicate that the returns from portfolio investments abroad are lower than in the past. This means that the budget now needs to be viewed as a medium or long-term annual exercise rather than as an annual one.

As can be seen from Table 1, operating revenue in FY2001 at S\$28.5 billion was more than total expenditure of S\$27.3 billion. In FY2010, it is the other way around, with total expenditure at S\$46.4 billion being more than operating revenue of S\$40.7 billion. Such deficits can be expected to continue in the future as expenditure on health care is likely to be significantly higher than at present as the population ages. Defense expenditure may also increase as the government switches to a more capital intensive defense strategy to substitute for a diminishing supply of National Servicemen. In FY2001, defense accounted for S\$7.1 billion while in FY2010 it is S\$11 billion. Special transfers to the poor and old can also be expected to increase. In FY2001, social transfers came to S\$394 million but in FY2010 they were S\$1.6 billion.

A large proportion of the present lower income workforce will constitute the group of retired poor in the future. They will have little savings, whether through the Central Provident Fund or voluntary. If they already need assistance now, as through the Workfare Income Supplement scheme or the proposed complementary Workfare Training Scheme, they will definitely need much more assistance in the future.

Thus far, income tax (both corporate and personal) is by far the most important component of tax revenue which is, in turn, the most important source of government revenue. By 2030, a

smaller percentage of the population will be working because the population will be older which means that government revenue as a share of GDP will decline. Tax rates have fallen in order to keep Singapore competitive with competing countries' tax regimes. This could be offset by an increase in the goods and services tax, but this is a sensitive political issue.

MEDIUM-TERM FOCUS OF THE 2010 BUDGET

The FY2010 budget departs from the traditional emphasis on expenditure and revenue (taxation) measures i.e. aggregate demand effects, and emphasizes instead more supply-side initiatives for businesses to operate more efficiently. Incentives to promote investment will lower the relative cost of capital, while policies to reduce the reliance of companies on foreign workers will raise the cost of labour. It is hoped that these measures will encourage producers to re-optimize their capital and labour mix.

A recent Monetary Model of Singapore (MMS) simulation⁶ shows that the local unemployment rate steadily declines relative to the baseline before hitting 3.5% in 2012. This means that the potential gains for the local labour force may be limited due to the degree of substitution being constrained by structural rigidities (such as job-worker mismatches) which can be exacerbated by downturns, changes in product lines or changes in job preferences among workers. Thereafter, a tighter local labour market, and consequently higher wages, should encourage firms to pursue productivity-driven growth.

For calendar year 2010, the MMS estimates the fiscal impulse as slightly contractionary at minus 0.1% of GDP. In the first quarter of 2010 the economic recovery caused an upswing in tax revenue, accompanied by the withdrawal of the earlier stimulus measures of the FY2009 Resilience Package. The impact of the policies designed to encourage capital deepening and enhance innovation only become apparent in later years. Only by 2014 will private non-residential investment be higher than the baseline, by 4.6%. By then, labour productivity is forecast to be 1.7% above the baseline of 2010 and is expected to grow by 0.4% on average per year, just reaching the 2-3% productivity growth envisaged by the Economic Strategies Committee. In addition, nominal wage increases are expected to outpace consumer price inflation resulting in a real wage increase of almost 2% above the baseline by 2014.

CHALLENGES

Sustaining Productivity Growth

The fiscal policy of tax benefits and grants has to be pursued for the long-term for positive productivity growth to offset the past trend of very slow productivity growth. This can only mean a continuing fiscal challenge for the government. Reliance on NIR will thus increase. In FY2010 NIR amounted to almost 15% of total budget expenditure, a threefold increase from the 5% in FY2001. In 2000-2009, labour productivity growth was only 1.1% annually. One source of this slow growth was the decline in the incremental capital to output ratio (ICOR) of 0.5% per year. The MMS in projecting average labour productivity growth to be 2-3% for 2010-2019 assumes

⁶ Monetary Authority of Singapore (2010).

an increase in ICOR of about 0.2-0.4% annually, a reverse of what happened in the previous decade. This means an increase in the level of investment in the economy.

Increasing Domestic Investment

After about 1983, the Singapore economy ceased to have domestic saving lagging behind domestic investment. In fact the opposite was true with domestic investment now in excess of domestic saving. In the last decade, domestic saving is almost double that of domestic investment. No wonder productivity has been falling! Whatever the capital to output ratio is now for the Singapore economy, an increase in ICOR of 0.2-0.4% annually, as simulated by the MMS, means that there has to be gross domestic capital formation of at least S\$50 to S\$100 billion. The average for 2001-2008 as given in Table 2 is only S\$44 billion annually.

The large amount of saving in the economy is, in turn, due to the low share of wages which is less than 50% of gross national income. Singapore is highly corporatized. Labour is organized not so much by individual trade unions but by the National Trade Union Congress, which is the umbrella body for organized labour. A National Wages Council made up of representatives from organized labour, business and government sets guidelines for wages from year to year. Singapore business itself is dominated by large multinational corporations (MNCs) and gross domestic product (GDP) is much larger than gross national product (GNP) or gross National income (GNI), more so when comparison is made with indigenous GDP which subtracts from GDP the wages and salaries of foreign workers working in Singapore and the profits of foreign companies (Table 3). The production frontier in Singapore seems to have been reached so that domestic saving can only find new frontiers in other countries where labour and land is cheaper. Were it not for factor income from abroad, per capita national income would be much lower than per capita domestic income. As it is, indigenous GNI is only about 70% that of gross domestic product.

The foreign element in Singapore is apparent not only in its large number of MNCs but also in its reliance on foreign labour, which accounts for about a third of the labour force. The productivity challenge in Singapore is consequently multi-faceted. On the one hand, it is acknowledged that MNCs do bring in new technology which enhances productivity but this depends on what MNCs are producing in Singapore and whether they respond to the tax benefits and tailored infrastructure offered to them. Tax benefits, grants and expenditure on infrastructure deepen the fiscal challenge of raising productivity.

National firms are also offered tax benefits, grants and infrastructure but foreign workers are not targeted for assistance in raising labour productivity, though they can get this through the firms which employ them. It is Singaporeans and Permanent Residents who are eligible for special transfers found in the budget, and for many of the specific productivity schemes. The challenge for the future is that the budget will tend to grow, continue to be in deficit, and will be financed by drawing on past reserves, due to the need to restructure the economy and raise productivity. This fiscal challenge should hopefully bear fruit in capital deepening in the face of rising labour costs so that there will be average labour productivity growth of 2-3% in 2010-19, assuming total factor productivity growth of around 0.4-0.7% annually over the same time period⁷.

⁷ See Table 4 in Monetary Authority of Singapore (2010).

END NOTES

Monetary Authority of Singapore (2010). *Macroeconomic Review*, Singapore: Monetary Authority of Singapore, April.

Table 1: Budget Surpluses/Deficits FY2001-FY2010

S\$ million

| | Operating Revenue | Total Expenditure | Primary Surplus/Deficit | Basic Surplus/Deficit | NII/NIR Contribution * |
|---------|-------------------|-------------------|-------------------------|-----------------------|------------------------|
| FY 2001 | 28,496 | 27,305 | 1,190 | -2,273 | +1,375 |
| FY 2002 | 25,469 | 27,152 | -1,683 | -2,885 | +3,675 |
| FY 2003 | 25,315 | 28,499 | -3,184 | -3,788 | +1,900 |
| FY 2004 | 27,469 | 28,957 | -1,487 | -2,448 | +3,043 |
| FY 2005 | 28,171 | 28,634 | -463 | -1,041 | +2,777 |
| FY 2006 | 31,289 | 29,905 | +1,384 | -1,238 | +2,131 |
| FY 2007 | 40,375 | 32,982 | +7,393 | +6,051 | +2,405 |
| FY 2008 | 41,086 | 38,091 | +2,996 | -1,093 | +4,343 |
| FY 2009 | 38,566 | 42,881 | -4,315 | -8,500 | +7,033 |
| FY 2010 | 40,726 | 46,371 | -5,645 | -7,204 | -7,835 |

Notes: The Primary Surplus/Deficit is operating revenue minus total expenditure; the Basic Surplus/Deficit is the Primary Surplus/Deficit plus Special Transfers (excluding top-ups to endowment and trust funds); Special Transfers are social and financial in nature, such as those given to the poor and the elderly⁸.

* Net Investment Income from FY2001 to FY2008 and Net Investment Returns from 2009 to FY2010.

Source: http://www.mof.gov.sg/budget_2010.

Table 2: Gross Domestic Saving and Capital Formation 2001-2008

S\$ million

| Year | Gross Domestic Saving | Gross Domestic Capital Formation |
|------|-----------------------|----------------------------------|
| 2001 | 66,840 | 36,852 |
| 2002 | 69,621 | 32,103 |
| 2003 | 70,709 | 25,987 |

⁸ The basic Surplus/Deficit plus the NII/NIR contribution less top-ups to endowment and trust funds equals the Overall Budget Surplus which is not shown here.

| | | |
|------|---------|--------|
| 2004 | 87,299 | 40,344 |
| 2005 | 98,272 | 40,748 |
| 2006 | 111,263 | 44,420 |
| 2007 | 131,889 | 52,195 |
| 2008 | 128,617 | 79,520 |

Source: Yearbook of Statistics Singapore, 2003 and 2009.

Table 3: GDP and Indigenous GNI 2001-2008

SS\$ billion

| Year | GDP | Foreign Share ¹ | Indigenous GDP | Income from Abroad ² | Indigenous GNI |
|------|-----|----------------------------|----------------|---------------------------------|----------------|
| 2001 | 152 | 63 | 89 | 21 | 110 |
| 2002 | 156 | 63 | 93 | 20 | 113 |
| 2003 | 162 | 65 | 98 | 22 | 120 |
| 2004 | 185 | 75 | 110 | 25 | 135 |
| 2005 | 201 | 85 | 116 | 33 | 149 |
| 2006 | 221 | 100 | 121 | 36 | 157 |
| 2007 | 252 | 112 | 140 | 41 | 181 |
| 2008 | 258 | 118 | 140 | 42 | 182 |

Notes: ¹ Share of resident foreigners and resident foreign companies in GDP.

² Net factor receipts of Singaporeans from the rest of the world.

Source: Yearbook of Statistics Singapore, 2003 and 2009.

Table 4: Budget Expenditure, Investment and GDP 2001-2008

SS\$ billion

| Year | GDP | Budget Exp. | Budget Exp. as % of GDP | GDCF | GDCF as % GDP |
|------|-----|-------------|-------------------------|------|---------------|
| 2001 | 152 | 27 | 17.7 | 37 | 24.3 |
| 2002 | 156 | 27 | 17.3 | 32 | 20.5 |
| 2003 | 162 | 28 | 17.3 | 26 | 16.0 |
| 2004 | 185 | 29 | 15.7 | 40 | 21.6 |
| 2005 | 201 | 29 | 14.4 | 41 | 20.3 |
| 2006 | 221 | 30 | 13.6 | 44 | 19.9 |
| 2007 | 252 | 33 | 13.0 | 52 | 20.6 |
| 2008 | 258 | 38 | 14.7 | 79 | 30.6 |

Source: Table 1 for budget expenditure; Table 2 for GDCF; Table 3 for GDP.