The Economic Impact of Guernsey's Tax Strategy

Paper Two

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Section 1 - Introduction

- 1.1 In March 2006 the Independent Working Group charged by the Treasury and Resources Department with examining the economic impact of changes to the Island's corporate tax regime submitted its first paper: 'The economic case for a 0%/10% corporate tax rate structure in Guernsey'^[11]. In that paper we concluded that the Bailiwick has no option but to respond to international pressure and reform its corporate tax base; we further concluded that, if its international competitiveness as a location for financial services businesses is to be maintained, there is no option but to adopt the '0%/10%' corporate tax structure. We noted that, whilst it is inevitable that there will, as a consequence, be a significant negative impact on public revenues in comparison with the existing situation (the 'Black Hole' problem'), we stated that this loss is likely to be significantly less than would be the effects on Guernsey of the decline in the financial services industry that would ensue if no changes are made to the tax structure.
- 1.2 We also noted that different approaches to addressing the problem of the 'Black Hole' in the public finances will have different economic consequences, and undertook to examine these in more detail in subsequent papers. This paper presents our analyses and conclusions on these matters. It is structured as follows:
 - In Section 2 we set out, by way of background, some general principles relating to public finance, and the practical issues that policy-makers need to bear in mind in arriving at their decisions in this key area of public policy.
 - In Section 3 we describe briefly how we have gone about our task; in this Section we also refer to the work done by economic consultants Oxera, who have undertaken much of the detailed analysis upon which we draw in subsequent

Sections of our paper. Oxera's technical report^[2], which describes their work in detail, is submitted in parallel with this paper.

- In Section 4 we look at the period up to 2011. The Policy Council has developed an economic and taxation strategy, set out in its document entitled "Future Fiscal and Economic Structure", in which a phased approach to the 'Black Hole' problem is advocated. The first phase, which covers the period to 2011, would see the implementation of some revenue raising-proposals, to take effect from 2008. We were asked to build the principles and policies set out in the Policy Council's document into our analysis and we have, therefore, used it to build a picture of the fiscal position of the Bailiwick after the proposals are implemented in 2008. Our key findings in this Section thus relate to the likely scale of the structural budget deficit after their introduction, under various assumptions.
- In Section 5 we look beyond 2011 to examine the various options open to the Bailiwick with regard to the management of the public finances, and consider the economic and distributional consequences of alternative courses of action.
- In Section 6 we summarise our key findings and conclusions.

Annexes A to D provide supporting information.

Section 2 - General principles and practical issues

2.1 There is, of course, a wealth of complex technical literature concerning the economics of public finance, and many studies have been undertaken of the effects of different strategies with regard to government revenue and expenditure in different economies. Wide variations in impacts can be found over time and as between economies of different sizes and structures and stages of development. Nevertheless, there are some general principles underlying these issues that are of relevance to policy-makers considering alternative strategies with regard to the public finances; there are also some practical issues that need to be borne in mind when evaluating options. Below in this Section we describe, in brief terms, some of those that are of most importance for the Bailiwick at this time and that we have had in mind in undertaking our analysis and arriving at our conclusions.

Government revenue and expenditure and the impact on the economy

2.2 We look first at how, in general terms, taxes and government spending impact on the economy. Different types of taxes have different effects on different groups of people. There is a welter of different types of tax (or charges) that take money out of the economy and put it into the hands of government but, in practical terms, they all get shifted to become **either** taxes on income **or** taxes on expenditure or some combination of the two, i.e. they reduce the disposable income of all or some individuals or groups and/or they increase the cost of goods and services to consumers. This is obviously true in the case of income tax, sales taxes, or customs duties on alcohol, tobacco or petrol; it is also true, for example, in the case of licence

fees, registration charges or stamp duties [3]. Less obviously, it is even true of taxes on

payroll – employee payroll taxes, for example, are effectively taxes on income^[4] and of taxes on business profits: ultimately these will be shifted to shareholders or to customers or to some combination of the two. The way in which this 'shifting' happens, and the consequences, may be complex, but there are, in essence, three key questions for policy makers to consider.

• First, which individuals or groups (e.g. residents, Non-residents guest residents or visitors; those with higher or lower incomes; those who earn income or those whose income is in the form of interest; drinkers or teetotallers; etc.) will in practice bear a particular tax? Here there will be an interaction between fiscal policy and other policy objectives: in many societies, for example, there is a commitment to compensate for some of the effects of poverty, hence measures that increase the tax burden on those on low incomes relative to those on higher incomes are not favoured. So we need to understand the distributional consequences of different measures. And a word is due here about residents versus others. Different measures do impact differentially on guest or overseas residents. The introduction of 0%/10%, for example, leads to a reduction in the effective tax on non-residents: the majority of those who stand to benefit from the change are non-residents are, by definition, free to take their business and their capital elsewhere,

and will if new taxes provide them with enough of an incentive to do so^[5].

• The second question relates to how the individuals or groups affected will react to reduced incomes or higher costs (e.g. will they maintain their levels of consumption and

- save less; will they demand, and be able to obtain, higher wages; will businesses, whose shareholders are now relatively more squeezed by higher taxes, invest less; in the limit, will potential taxpayers move to an alternative location)?
- The third question relates to what, in the light of all these decisions, will be the potential effect on the economy. Other things being equal, reduced consumer demand and/or business investment result in lower growth, but other things are rarely equal and the pattern of effects, and the timescales over which they are felt, will be complex. They will be influenced by factors outside the local economy altogether (such as developments in the global economy and, in particular in the case of the Bailiwick, global financial services markets) as well as by the state of the local economy (e.g. the domestic labour market and the extent of inflationary pressures) and by other economic policies of government that may reinforce or reduce the impact of particular tax measures. Understanding all these effects is, accordingly, a complex business.
- 2.3 Following on from this, one of the very important 'other things' that may not be equal is what the government does with its revenues: i.e. the size and composition of its expenditure. The importance of this can be illustrated by considering what happens if a government decides to cut it's spending. There are, in broad terms, three ways in which this can be done.
 - First, a government may cut current expenditure by continuing to provide all the services it currently provides, but doing so more efficiently. This sounds appealing, but there are two issues here that need to be understood. Whilst efficiency is clearly desirable, experience from around the world suggests that efficiency gains in the public sector, particularly those to be achieved by use of new technology, rarely deliver in full what was hoped for. It is extremely important, therefore, to have realistic expectations in this regard. Further, given the nature of government services, these efficiency gains are likely to result in some job losses; to the extent that the individuals affected cannot be redeployed productively in some other part of the economy there will be a loss of purchasing power and, consequently, some negative effect on growth. Depending on the state of the labour market, this strategy may well nonetheless produce an acceptable outcome in comparison with revenue- raising measures, but the net effects need to be considered carefully.
 - Second, a government may cut current expenditure by cutting services^[6]. Here the negative effects that will need to be set against the cost savings are, potentially, rather more significant: cutting the number of teachers or health workers, for example, will reduce purchasing power unless these individuals can be redeployed elsewhere but will also have an indirect effect on the capacity of the economy through a reduction in the quality of education or health.
 - Last, a government may decide to cut capital spending. We referred in our first paper [7] to the fact that governments frequently respond to pressure on the public finances by cutting capital expenditure but observed that this can have deleterious, and sometimes unexpected, economic consequences. Significantly lower levels of capital expenditure typically impact quite quickly on economic performance by reducing demand in the construction sector but they may also result in poorer-quality infrastructure that, in turn, can also affect economic performance in the medium and longer term.

Tax bases and tax yields

2.4 An important area for policy-makers relates to tax bases and tax yields. Taking tax bases first, determining the base for a particular tax can have important consequences in terms of its

- potential impacts. To take an obvious example, a consumption tax levied on all goods and services will, relatively, be more burdensome to the poor, who have lower incomes and save less. But a tax levied on luxuries rather than on necessities, or at a higher rate on luxuries, will have distributional consequences that are relatively less favourable to the better-off. The determination of the tax base to be used, therefore, as well as the type of tax, will have some distributional consequences in all cases.
- 2.5 Against these consequences, however, policy-makers will need to set practical issues,

including the important matters of the costs of collection and the risks of avoidance^[8]. An option that may be favoured for distributional reasons may result in high collection and/or enforcement costs. For example, until the late 1980's Guernsey's income tax structure provided for a three-tier system of personal allowances, including an exemption allowance/marginal relief provision that assisted those in the lower income groups. This relatively complex system, however, was not readily understood by taxpayers and was difficult to administer, hence the system was abolished in favour of a simple allowance structure that is still in operation. 'Efficiency versus equity' in the management of the public finances is a common dilemma facing policy-makers.

- 2.6 Determining likely yields from particular taxes is another area that needs careful analysis. There are two areas of particular difficulty:
 - What, in the light of the tax base, are the basic drivers of likely yield from a particular tax? Clearly the yield from income tax, for example, is going to be driven by the evolution of personal incomes whilst the yield from profits tax will be driven by the evolution of corporate profits. To predict these yields requires assumptions to be made about economic growth and also about income distribution: in the case of income tax between different groups of individuals; and in the case of profits tax between the returns to capital and the returns to labour.
 - How will tax payers adjust their behaviour in the light of a new or modified tax? Although there are well-documented approaches to some of these issues gained from other jurisdictions there are also some well-documented surprises: the assumptions that have to be made here may have as much to do with psychology as with economics.

The effect of inflation: 'real' versus 'nominal'

Following on from issues of yield is the matter of measurement. Real growth, i.e. growth that 2.7 adjusts for the effect of inflation, is what measures the underlying performance of an economy and assessments of likely future economic performance are usually undertaken in real terms^[9]. If, for example, inflation is 2.5% per annum and real growth ignoring inflation is 2.5% the nominal rate of growth is 5% per annum. For policy-makers, understanding these distinctions and their significance is important. Depending on the tax base and how a particular tax is specified, the yield may vary in quite complex ways: the tax authority may, for example, actually get a yield benefit out of inflation. Personal income tax rates, for example, are usually set in nominal terms – X% of taxable (money) income – but personal allowances, and rate bands where these are used, if not adjusted to allow for inflation have the effect of increasing the effective tax rate, or tax burden, an effect known as 'fiscal drag'. And, of course, government income and expenditure in a given year are both in 'the pounds' of the year', so surpluses and deficits, too, will be in the pounds of the year in which they arise. For this reason tax authorities, including the Guernsey Treasury, usually prepare their forecasts in cash terms, but in this event care needs to be taken in estimating yields and looking at the evolution of deficits and surpluses over time.

The economic cycle: surpluses and deficits

- 2.8 Continuing with the matter of surpluses and deficits, the balance between revenue and expenditure is a very important area. The approach to the management of surpluses and deficits has important economic implications and can thus be used as an instrument of economic policy. Spending more than is coming in by way of tax revenues represents an injection of purchasing power to the economy, thereby giving a stimulus to growth; running a deficit, or spending part of a reserve built up in the past, can thus be used to improve economic performance. Spending on capital works is the classic example here: in the same way that cuts in public spending can save money quickly but may have unlooked for consequences in the longer term, increases in capital spending can give a quick fillip to a construction sector that is working below capacity. Increased incomes in this sector will result in increased spending and further economic growth throughout the economy (the 'multiplier effect').
- 2.9 But a crucial point to bear in mind is that demand management policies of this kind need to be assessed in the context of the economic cycle. Deficit financing may be an appropriate instrument in the lower part of the cycle when resources are unemployed but is definitely not appropriate in the upper part of the cycle when the economy is working close to full capacity. This gives rise to an important distinction that needs to be well-understood: that between cyclical and structural deficits. Simply put, in the long term public sector budgets need to be balanced: in other words, across the economic cycle taken as a whole expenditure should not exceed income^[10]. Within a cycle, however, it may be entirely appropriate for deficits or surpluses to be aimed for in order to achieve other economic objectives. Understanding where the economy is in relation to the economic cycle, and whether budget deficits are

cyclical or structural, is thus crucial to the management of the public finances $\begin{bmatrix} 11 \\ 11 \end{bmatrix}$.

Dealing with uncertainty

- 2.10 It will be clear from the foregoing that understanding the economic effects of tax and spending decisions and predicting the likely evolution of tax revenues is no easy task. It requires the making of assumptions about, for example, economic growth, the relative performance of different sectors and groups and the behaviour of individuals and groups. To take one example, a view is needed about economic growth. Forecasting economic growth is far from an exact science; although the models used by forecasting bodies have improved significantly in both scope and coverage, the one thing that can be said about any single-point forecast of economic growth for a particular economy is that, at a level of detail, it is more likely to be wrong than right.
- 2.11 Further, estimating the fiscal balance the difference between revenue and expenditure involves estimating the difference between two relatively large numbers, neither of which can readily be forecast with a great degree of accuracy. Thus estimates of budgetary surpluses and deficits are particularly prone to error.
- 2.12 This fact of life does not, however, mean that efforts to understand likely economic impacts are without value. What is does emphasise is the vital importance of understanding the key sensitivities (what are the factors that are likely to make a big difference to outcomes) and of using alternative scenarios to establish what the likely range of alternative outcomes might be. Thus in the case of economic growth, for example, it may be reasonable to take a central estimate of likely growth over three to five years and then look at the implications of (plausible) higher or lower figures.

Implementing change

2.13 The final area of importance to policy-makers relates to the implementation of change. Here there are practical issues concerned with administrative efficiency such as the likely costs of collection and the approach to avoidance and evasion that, as we have seen, may be in opposition to equity considerations. But there are also issues relating to the management of uncertainty. If the outcome of a particular decision may be difficult to predict there may be arguments in favour of waiting until the effects are clearer before making any further decisions. Thus, if the outcome of the change to 0%/10% is difficult to predict with accuracy there may be a case for 'wait and see' before deciding on further changes. But there may also be costs in adopting such an approach. If, for example, further changes are needed they may then have to be implemented more rapidly than may be desirable and this can have both administrative and economic consequences.

Conclusions

- 2.14 In summary, we can say that the general principles and practical issues relevant to the management of the public finances and of particular importance to policy-makers in the Bailiwick at this time include the following:
 - With regard to government revenues and their impact on the economy, it is important to recognise that, although there are many different types of tax (or charges), in practical terms they all reduce to being taxes on income or taxes on expenditure or some combination of the two: they reduce taxpayers' disposable incomes. They have different effects on different groups of people, however, and policy-makers need to understand, as far as is possible, these effects and be prepared to make decisions as to which groups should bear tax and how they will react as well as considering what will be the potential effect on the economy.
 - Policy-makers also need to understand how government spending impacts on the economy: different types of spending will have more or less beneficial consequences and particular types of cuts in spending may have significantly deleterious consequences.
 - Choice of tax base is important in terms of impacts, particularly distributional impacts, but also relevant are practical considerations concerning the costs of collection and combating avoidance. Efficiency and equity may pull in opposite directions.
 - Determining likely yields from a particular tax requires an understanding both of the drivers of yield and of how tax payers will adjust their behaviour in the light of the tax.
 - In analysing revenue and expenditure and the balance between them the effects of inflation need to be considered: the distinction between 'real' (after allowing for the effects of inflation) and 'nominal' (including inflation) measures is important.
 - The balance between revenue and expenditure is a key issue: across the cycle revenue and expenditure need to be in balance. Structural deficits are not sustainable.
 - In estimating the likely evolution of the public finances income and expenditure and the difference between them it is prudent to look at a range of assumptions and not to rely on single point forecasts.
 - In considering change, issues of administration are important but so are issues relating to the management of uncertainty.

Our remit

3.1 In November 2005, at the request of the States Treasury and Resources Department, the Independent Working Group was established and asked to examine the economic impact of changes to the Island's corporate tax regime. In March 2006 we produced our first paper: 'The economic case for a 0%/10% corporate tax rate structure in Guernsey'. As explained above, we concluded in that paper that there is no option for the Bailiwick but to adopt the '0%/10%' corporate tax structure. We acknowledged that there will, as a consequence, be a significant negative impact on public revenues in comparison with the existing situation (the 'Black Hole' problem'), and noted that different approaches to addressing the problem of the 'Black Hole' in the public finances will have different economic consequences. Our subsequent work, as described in this paper, has focused on examining these issues in more detail.

Time periods

3.2 Our analysis looks at two different time periods. First, we examine the period up to 2011 (Period 1) and, second, we look at the issues arising post- 2011 (Period 2). The reason for this distinction is that the period up to 2011, as was explained above, represents the first phase (to 2011) of the staged approach advocated by the Policy Council in its economic and taxation strategy described in its document entitled "Future Fiscal and Economic Structure". The document looks at the implementation of '0%/10%' and also sets out some revenue-

raising proposals to be implemented in the near term, i.e. from 2008^[12]. Our focus in respect of Period 1 has thus been to examine the evolution of the public finances to 2008 and beyond to 2011 and, in particular, to look at the likely scale of any budget deficit that may be apparent by then and that would need to be remedied in the following years. Our focus for Period 2 has, accordingly, been to examine, in the light of the conclusions relating to Period 1, the various options open to the Bailiwick with regard to the management of the public finances thereafter.

Data and analysis

- 3.3 A significant volume of data collection and analysis has been required to discharge our remit. We have relied in particular on two sources of information and support.
 - First, we have drawn on the resources of the States Treasury and Resources Department including the Income Tax Office and the States Policy Council, Policy and Research Unit. In particular, we have discussed with Treasury officials how they have gone about the work that has already been done in relation to government revenue and expenditure and the assumptions they have made. As will be explained below in Sections 4 and 5, in a number of areas we have made the same or similar assumptions; where our views differ this has been highlighted in the commentary^[13]. In keeping with the key principles set out above in Section 2, however, we have also undertaken sensitivity analysis around key assumptions; this should be of assistance to policy-makers in considering the most important risk areas.
 - Second, much of the detailed analysis has been undertaken by economic consultants Oxera, whose technical report describing their work is submitted in parallel with this one. Oxera have worked to the same key assumptions as we have; their role has been to perform the detailed calculations underpinning Section 4 and to model the various outcomes examined in Section 5. Where relevant, the Oxera technical report is accordingly quoted as a source in these Sections of our paper.
- 3.4 It should be stressed, however, that although we have made use of all the relevant information made available to us, there are various important areas where information is lacking. Some of the detailed economic data that, desirably, would inform parts of the analysis are simply not available. For example, only limited information is available in connection with the levels of beneficial ownership of Guernsey companies, i.e. the basis for establishing the amounts of profits that would be attributable to Guernsey resident shareholders under a partial attribution/distribution system. And, as was explained above in Section 2, in some areas, particularly those relating to how actual or potential tax payers may respond to certain new proposals, by definition there are no data available. For example, one can only 'best-guess' the extent to which Guernsey-resident beneficial owners of companies would 'distribute' their profits, which would then be subject to tax. No doubt some would leave the profits in the business, thereby escaping or deferring taxation, but how many is open to question^[14]. In the commentary in Sections 4 and 5 we have made reference to some of these problems and have, where appropriate, applied a range of different assumptions.

of these problems and have, where appropriate, applied a range of different assumptions. Inevitably, however, there remains scope for judgement on the part of policy-makers: our analysis will help to inform such judgements but cannot substitute for them.

Section 4 – The period to 2011

4.1 As explained above, our principle focus for Period 1 has been on analysing the evolution of the public finances in the medium term with a view to assessing whether or not there is likely to be a structural deficit by 2011 that will require to be remedied by further action on revenue/and or expenditure at that time. The analysis has two components: we need first to track the likely evolution of the public finances to 2008; then we need to consider the likely effect of the introduction of the revenue-raising proposals put forward by the Fiscal & Economic Policy Steering Group and published in the document "Future Fiscal and Economic Structure". In order to do this, however, we need to form a view about the likely evolution of the Guernsey economy as this is crucial to the analysis. Accordingly, this part of

our paper is structured as follows.

- First, we consider what should be appropriate key assumptions relating to the economy to use in our analysis of public revenues.
- Second, we consider the likely evolution of government revenue and expenditure under the existing tax structure in the period to 2008 and look at the fiscal balance as it might be at that date.
- Third, we examine the likely effects of changes to be made in 2008 the move to '0%/10%' and the other proposals put forward by the Policy Council and look at the fiscal balance as it would be under the new tax structure. We also consider the implications for the contingency reserve and examine the extent to which economic growth can help to address the revenue loss arising from the move to '0%/10%'.
- Last, we draw some conclusions from this part of our analysis.

Key assumptions

- 4.2 The crucial areas to examine are likely trends in economic growth and inflation, the related matter of tax yields^[15], and assumptions relating to government expenditure. Each of these is considered below.
- 4.3 Looking first at the key area of **economic growth**, Oxera has undertaken detailed analysis of the past performance of the Guernsey economy and this is described in their technical report. In our view the key points are as follows (Guernsey figures quoted are from Oxera's report).
 - As we noted in our first paper, the Guernsey economy is a very open one but also highly specialised. Its performance is primarily driven by the financial services sector that accounts for one third of the island's remuneration and more than half of its profits. Whilst this has served Guernsey well in that average incomes on the island are 20%

higher than in the UK (£28,000 per head $\begin{bmatrix} 16 \end{bmatrix}$ in 2004 as compared with £23,000 in the UK) it is also associated with a degree of risk: the health of the financial services sector, and its capacity to grow, is substantially influenced by global factors as well as by Guernsey's relative competitive position.

- This dependence on financial services as the key engine of growth is evidenced from Guernsey's past economic performance: recent (10- 15 years) growth has been largely driven by the expansion of the finance sector and the consequent expansion of other services (e.g. business and information services) depending on it.
- This dependence has also influenced the performance of the Guernsey economy year by year. In 2000, for example, when world economic growth was strong and global financial services were buoyant, Guernsey's GDP grew by 7.5% and total profits grew by 16% [17]. But in 2001, when global growth fell sharply, GDP growth fell to 1.2% and profits actually declined by 4%^[18]. Since 2001 the picture has also been one of much more modest growth although there has more recently been some evidence of a pick-up. Again, global fortunes are relevant here: in 2005 the global economy slowed from the significantly above-trend growth recorded in 2004 but is expected to improve again this year before dropping back to its long run average rate in 2007.
- All this means that predicting future movements in Guernsey GDP year by year is a

particularly hazardous business: movements in the global economy and in global financial services will have an effect but an effect that is likely to be amplified locally.

- Under these circumstances, and accepting that year-to-year fluctuations are difficult to predict, one approach is to iron these out by looking at longer term trends. Oxera has performed the calculations: they find that average annual real growth in GDP over the last 10 years is 2.9%; Although annual GDP growth has been volatile, statistically, this represents a reasonably accurate description of the past and might therefore provide a reasonable guide to the future, if not year-by-year at least over a run of years.
- The problem with this approach is that it assumes implicitly that the circumstances that have given rise to the historic pattern of growth will be continued into the future. Whilst this may be so, it can also be argued that Guernsey's recent past performance reflects its success in building, quite rapidly, a market in global financial services but that it may now have achieved a 'natural' market share and future growth will be through growth in the global market rather than from growth in market share, given that the island's competitiveness is maintained ^[19]. In other words, Guernsey has been going through a 'catch-up' period in economic growth which may now be coming to an end. If this is so, the sustainable real growth rate would be likely to fall to, perhaps, 2 to 2.5% on average rather than continue at the 10-year average rate of almost 3%.
- Also relevant to this is Guernsey's inflation rate. During periods of high growth Guernsey has paid a price in the form of increased inflation as demand in the growing financial services sector has outstripped supply. Since the recession of the early 1990's the headline rate of inflation in Guernsey has been as low as 1.4% but as high as 5.2%. Comparing inflation across the cycle with the UK, which has been on a similar economic cycle albeit with lower growth, Guernsey's headline rate of inflation has been around 1% to 1.5% higher.
- This, in turn, is linked to the state of the labour market. Clearly, even if more rapid growth, i.e. a continuing increase in Guernsey's share of global financial services, is theoretically possible this can only be achieved if a suitably-qualified workforce is there to deliver it. If it is not, a part of the theoretical gains disappears in the form of inflation. Our understanding is that the labour market in Guernsey is and has been very tight, with very low net immigration^[20]. Unless the Bailiwick was minded to encourage more immigration of skilled and qualified people, or significantly increase the skills of the resident workforce, wage-push inflation at times of more rapid expansion remains a real risk.
- The Policy Council's document emphasises the importance of maintaining a healthy economy, and we are aware that policy-makers are looking to adopt pro-growth policies. There is, we understand, a hope on the part of some that growth will, of itself, address part, or maybe even all, of the 'Black Hole' problem. This would obviously be desirable, and real economic growth, at any level, will undoubtedly make a contribution to the 'Black Hole' problem. We consider below the effect that economic growth alone can have^[21]; however, policies predicated on a substantial increase in the sustainable rate of growth over and above that dictated by the global macroeconomic environment tend to be fraught with hazard^[22]. Certainly, supply-side policies, and in particular policies directed at raising the level of appropriate competencies in the workforce, may in general deliver some growth dividend, and should be actively pursued^[23] but this dividend is likely to be relatively modest.

• In summary, therefore, on the matter of **economic growth** we are not convinced that, for Guernsey over the medium term, the past is necessarily the best guide to the future. We believe that, for the purposes of modelling the public finances, a central assumption on economic growth of 2.5% would be both prudent and appropriate. In our calculations, therefore, we have used this central assumption, but we have also looked at the implications of higher growth and lower growth, at 3% (the long term trend rate) and

1.5% (more recent experience since 2001) respectively^[24].

- 4.4 Turning now to **inflation**, again Oxera has examined the historical situation. Long term (the last 14 years), inflation has been averaging around 3.3% per annum but, as noted above, there have been significant variations around the average. The analysis confirms how periods of high growth have been accompanied by significant inflationary pressures: this is the manifestation of 'wage push' inflation associated with excess demand for labour in relation to supply at periods of high demand. In the light of this, we believe an appropriate approach to modelling inflation is to recognise the relationship with growth: high growth is associated with higher inflation. Our central estimates assume inflation at 2.5%; which combined with real growth of 2.5% gives nominal growth of 5%. Our high real growth assumption of 3% would naturally go with a higher inflation assumption of 3%, thus giving nominal GDP growth of 6%, whilst our low real growth assumption of 1.5% would be associated with inflation of $2\%^{251}$, giving nominal GDP growth of 3.5%.
- 4.5 The third key area for the making of assumptions relates to **tax yields**. Here we need explicitly to consider the relationship between economic growth and tax yields under the current tax structure so that we can estimate government revenues in the years to 2008. After 2008 the key features of the new tax structure predicated in "Future Fiscal and Economic Structure" are factored into our analysis, as explained below in this Section. Again, Oxera

have undertaken detailed analysis of tax yields and the results are set out in their report^[26]. The key points are as follows.

- There are three major tax bases currently in use in Guernsey: personal income tax; tax on corporate profits (also including companies paying income tax); and excise duties. Between them, these three taxes account for by far the greater part of government revenue (88% in 2004); the balance is made up of a number of other revenues and charges that are individually quite small^[27].
- The personal income tax rate and the rate of tax on corporate profits are currently the same, at 20%. In any one year, personal incomes and corporate incomes may be growing at different rates, thus generating different shares of total revenue from these two sources [28], but because the rates are the same the joint yield in relation to GDP should be no more than 20%.
- In practice, over the period 1990 to 2004 total government income (95% of which comes from taxes) as a share of GDP has, as might be expected in the absence of any significant change in tax structure, been reasonably stable, at between 20% and 22.5% of GDP. The average over the period was 21.7%. This suggests that customs duties and other sources of revenue between them have a slightly higher yield in relation to GDP than do taxes on income (the average for all revenue, at 21.7% of GDP, is greater than the 20% maximum yield for taxes on income) but the difference is not great.
- It is the case that average figures can conceal important year-by-year variations. The period 2000 to 2003 illustrates the point: total tax receipts actually fell in real terms

- whilst real GDP, although flat, did not decline^[29]; at this time there was a substantial fall in corporate profits at the same time as personal incomes in money terms continued to increase, i.e. the share of total income going to labour was increasing at the expense of that going to capital.
- Nonetheless, the fact remains that, taking one year with another, 20% should represent • the relationship between government revenue and GDP under the present tax structure unless customs duties, and other revenues, have a stronger relationship and are increasing their share of revenue as a consequence. We have found no consistent evidence of this: in fact, if anything the contribution of excise duties has declined a little recently. In the light of this, we have taken as our assumption in relation to **tax yields** under the current structure a 20% relationship with GDP.
- 4.6 The final key area relates to assumptions concerning government expenditure. Looking first at **revenue expenditure**. Oxera have examined revenue expenditure over the 12 years from 1995 to 2006. They find that the average annualised real rate of growth over the period is 2.5%, but with some significant changes year to year. The last five years have seen a slightly higher average real growth rate of around 3%. At the same time, the downward trend in real revenue expenditure as a proportion of GDP apparent up to 2000 has reversed into an upward trend as GDP growth has declined. The Policy Council's objective as set out in its economic

and taxation strategy is 'modest annual increases' in expenditure^[30]; if this is taken to be growth in nominal rather than real terms a reasonable central assumption might be

expenditure held constant in real terms, i.e. held at 2006 levels $\frac{31}{2000}$. Again, we have looked at higher and lower estimates of the level of spend, reflecting real squeeze and real growth of 1% respectively (RPI minus 1% and RPI plus 1%). Here it may be noted that the Treasury is assuming a squeeze at least equivalent to the lower end of our range. They have assumed a nominal increase of 1.5% per annum; given our central inflation assumption of 2.5% this

would represent real cuts of 1% per annum^[32].

Looking now at **capital expenditure** (CAPEX). Oxera's analysis shows that real CAPEX has 4.7

varied significantly year-on-year: from £9 million in 1996 to £53 million in $2003^{\boxed{33}}$. Owing to the 'lumpy' nature of CAPEX, one year's figures are a poor guide to trends: moreover, as we have already noted CAPEX can be relatively easily increased or decreased and is a favoured management tool of governments as a consequence, although the economic effects of cuts (or increases) can be of considerable significance. We understand that in the September Consultation Document the proposal was made to limit CAPEX to £15 million

per annum^[34], which is significantly below the long term average and would represent quite savage and possibly damaging cuts. We have therefore taken £15 million per annum as our lower estimate of CAPEX expenditure. Our central estimate is £20 million per annum whilst our higher estimate, at £25 million per annum, represents a return to the long run average rate of spend.

Revenue and expenditure and the fiscal balance to 2008

4.8 Using the above assumptions on economic growth^[35] and tax yields, we have first computed the likely tax yield in 2008 under the existing tax structure, i.e. before taking into account any of the changes proposed by the Policy Council. The results are set out in Table IV.1 below [36]

Table IV.1 Tax yield in 2008 under current tax structure £million: 2004 prices

	Real GDP in 2007	Tax Yield in 2008
Central growth assumption	1,528	306
(2.5% p.a.)		
High growth assumption	1,543	309
(3% p.a.)		
Low growth assumption	1,498	300
(1.5% p.a.)		

Note: Tax revenue in any one year is in large measure derived from economic activity in the previous year, hence the 2007 GDP figure is used to compute tax revenues for 2008.

Source: Oxera

- 4.9 The table illustrates the effect of varying the GDP growth assumption: the difference between a pessimistic and an optimistic view of likely growth translates into a difference in tax yields of £9 million by 2008. It is also worth noting at this point the importance of the tax yield assumption: as noted above we have taken 20% as this is the relationship implied by the current tax rates but by 2008 a variation in the yield assumption of 1% of GDP would translate into a change in receipts of the order of £15 million by 2008.
- 4.10 The next stage of our analysis has been to look at estimates of government revenue and expenditure, both revenue and capital, in 2008, under our set of three assumptions. The figures are set out in Table IV.2 below.

Table IV.2 Government expenditure in 2008 £million: 2004 prices

	Revenue Expenditure in 2008	CAPEX in 2008	Total expenditure in 2008
Central growth assumption	281	19	300
(RPI growth)			
High growth assumption (RPI + 1%)	286	24	310
Low growth assumption (RPI - 1%)	275	14	289

Source: Oxera

- 4.11 Again, the table illustrates the effect of the assumptions made about expenditure: by 2008 the difference between high and low spending assumptions amounts to £21 million in 2004 prices.
- 4.12 We can now look at the likely state of the fiscal balance in 2008 as it would be in the absence of any changes in policy. This is shown in Table IV.3 below; figures in brackets represent a deficit.

Table IV.3
Fiscal balance in 2008 under existing tax structure
£million: 2004 prices

	Central government expenditure assumption	High government expenditure	Low government expenditure
		assumption	assumption
Central GDP growth assumption	6	-4	17
High GDP growth assumption	9	(1)	20
Low GDP growth assumption	0	10	11

Source: Oxera calculations

4.13 Variations in assumptions, as the table shows, feed straight through to the fiscal balance and, because the balance is the difference between two relatively large numbers, the results show quite a large spread. It should, however, be noted that some combinations of assumptions are more likely than others: if real growth is low, for example, there will naturally be much more pressure on the authorities to limit spending hence the more plausible outcomes would be those on a diagonal line from top left to bottom right on the table, i.e. on the current structure the outcome, measured in constant (2004) prices, is more likely to be a surplus than a deficit but only a very modest one. This suggests that, on reasonable assumptions and before taking account of changes to the tax structure, the underlying position with regard to the Bailiwick's finances in 2008 would be a budget that was just in balance but with very little margin to

spare, i.e. the years of surplus would be at an end.

- 4.14 The above analysis looks at the position in 2008 on the assumption that the current tax structure is maintained until that date. In addition to the move to a 0%/10% corporate tax regime, the Policy Council's strategy document "Future Fiscal and Economic Structure" puts forward some proposals for revenue enhancement over the period 2008 to 2011/12 and we have been asked to take these into account in our analysis. In looking at the evolution of revenue and expenditure and the fiscal balance to 2011/12, therefore, the starting point is to examine the likely effect on total tax yields of all these proposals.
- 4.15 The proposals are summarised in Annex C, which is also reproduced in Oxera's technical report. As will be seen from Annex C, some of the proposals are quite specific and can readily be translated into assumptions about yield. Others, for entirely understandable reasons, are couched in more general terms. The first task, therefore, has been to examine the likely implications of the proposals in terms of government revenue; however, before presenting the results of this analysis a word is due about the use of the contingency reserve.
- 4.16 As will be seen from Annex C, the Policy Council's proposals for a phased approach to the management of the public finances envisage utilising up to one half of the contingency reserve (interest and capital) to part-fund the shortfall in receipts consequent upon the move to '0%/10%'. In the next part of our analysis we have taken the assumptions on expenditure set out above in this Section and then computed the overall effect on the contingency reserve of spending to these levels and looked at how this compares with the target of utilising no more than half of the reserve. Another way of looking at the issue is to examine what level of expenditure could be achieved if fully one half of the contingency reserve were to be utilised, and we look at this a little later in this Section.
- 4.17 Returning now to the effect of the Policy Council's proposals on revenue, this is illustrated in Table IV.4 below, which compares the revenue position in 2008 as it would be under the old (current) structure with the new structure that assumes implementation of the proposals. The first two lines replicate the figures in Table IV.1 that show tax yield under the current structure; the third line shows the proportion of that yield under the current structure derived from taxes on corporate profits. The ensuing lines show the net yield from implementation of the policy proposals; the total of these is then set against the loss in revenue– the yield from tax on corporate profits under the existing structure to show first the difference and then the new total yield.
- 4.18 The figures for yield under the new structure make, quite naturally, a large number of assumptions. These are examined in detail in Oxera's report but the key issues are commented upon in Annex D.
- 4.19 The table illustrates that, notwithstanding the implementation of some revenue-raising proposals, the net effect of change in 2008 is of the order of £40 million in 2004 prices, a figure which is not significantly affected by variations in the GDP growth assumptions. This amounts to a cut in government revenue of the order of 13% in the central growth scenario, or 2.6% of GDP.

Table IV.4 Tax yield in 2008 under new tax structure £million: 2004 prices

	Central GDP growth assumption (2.5%)	High GDP growth assumption (3%)	Low GDP growth assumption (1.5%)
GDP in 2007 (see Table IV.1)	1,528	1,543	1,498
Total tax yield under existing structure (see Table IV.1)	306	309	300
Of which: derived from tax on corporate profits	104	105	102
1. Continuing tax on banking profits	10	10	10
2. Continuing taxation of investment companies	10	10	10
3. Taxation of distributed profits	6	6	3
4. Increase in duties etc.	8	8	8
5. Increase in social security payments	17	17	17
6. Changes to interest payments	7	7	7
7. Increases in fees	5	5	5
New yield from changed items	64	64	60
Difference	(40)	(41)	(42)
Total yield	265	267	258

Source: Policy proposals and calculations by the Guernsey Treasury and Oxera.

Note: In 2006 the forecast is for tax on corporate profits to make up 34% of revenue and this split has been carried forward to 2008. The assumptions concerning the distribution of profits are 30% in the case of the central and high growth cases and 15% in the low growth case. Totals may not fully reconcile owing to rounding

4.20 The next element of the analysis is to pull together the revenue figures under the new structure and the expenditure figures set out in Table IV.2 to derive an estimate of the likely fiscal balance under the new tax structure. This is done in Table IV.5

Table IV.5

Fiscal balance in 2008 under new tax structure £million: 2004 prices

	expenditure assumption	expenditure assumption	expenditure assumption
Central GDP growth assumption	(34)	(45)	(24)
High GDP growth assumption	(32)	(43)	(22)
Low GDP growth assumption	(41)	(52)	(31)

Source: Oxera

Note: Totals may not fully reconcile owing to rounding.

- 4.21 The table illustrates how, although some benefit will be derived from the revenue-raising proposals of the Policy Council, there is likely to be a remaining and substantial structural deficit in the Bailiwick's finances ranging from £22 million to £52 million. Again, some combinations of assumptions are more plausible than others; nevertheless the fact remains that, on this analysis, the structural deficit is most likely to be between £30 million and a little over £40 million in 2004 prices, or around 2% of GDP in the central GDP growth scenario.
- 4.22 This is obviously a substantial deficit; however, it is pertinent to examine to what extent continuing economic growth from 2008 might, of itself, help to correct it. Oxera have performed some calculations to shed light on this, looking at the growth in GDP that would be required in order to eliminate the structural deficit by 2011. They find that, on our central assumption relating to government spending, i.e. that it is held constant in real terms, growth would have to average 4.2% per annum in real terms (6.7% nominal if inflation is 2.5%). With spending growth capped at RPI-1 (our low spending assumption), growth would have to be 3.% in real terms, whilst under our higher expenditure assumption (expenditure growth of RPI+ 1) would have to be 5.3% per annum in real terms. This sets a useful context for policy decisions: it suggests that, without further revenue-raising measures, only very substantial real growth can deliver a balanced budget by 2011.
- 4.23 To add to the picture, we now need to look at the likely evolution of the contingency reserve. As indicated above, the Policy Council has considered the use of up to one half of the reserve to help address the revenue reductions consequent on the move to '0%/10%'. It is therefore relevant to examine what effect the trend in the public finances described may have on the reserve in the period to 2011. Oxera have modelled the evolution of the reserve under various combinations of assumptions concerning growth, inflation, and government revenue and spending. Table IV.6 below reproduces their results using our central assumptions: real growth of 2.5%; inflation of 2.5%; and spending held constant in real terms.

Table IV.6

The Contingency Reserve from 2008

£million in nominal terms (**£**'s of the year)

	2008	2009	2010	2011	2012	2013	2014	2015
Opening balance	218	188	163	145	133	130	135	151
Interest	8	7	6	6	6	6	6	8
Deficit on the year	-38	-32	-25	-17	-9	0	9	19

Closing balance	188	163	145	133	130	135	151	178
Accumulated spending of the Reserve from 2008	-38	-70	-95	-112	-121	-121	-112	-93

Source: Oxera calculations.

- 4.24 The table illustrates that, on our central assumptions, a full half of the reserve in fact a little over one half would indeed be utilised by the end of 2011. On the assumption of lower growth or higher spending (not illustrated in the Table but set out in Oxera's report) the outturn would be even less favourable. Using our low growth and central spending assumptions £214 million (virtually the entire Reserve) would have been utilised by the end of 2011; using our central growth and higher spending assumptions the comparable figure would be £133 million. Only with high growth or a continuing substantial expenditure squeeze do the figures give a reasonable margin: high growth and central spending gives £39 million whilst central growth and low spending gives £91 million.
- 4.25 A final useful piece of analysis is to look again at government expenditure and, instead of using our central, high and low assumptions, compute what spending growth would need to be in order to balance the budget by 2011. Oxera have undertaken some calculations: the results are set out in Table IV.7.

Table IV.7

Government spending for a balanced budget in 2011

	Central GDP growth	High GDP growth	Low GDP growth
	assumption	assumption	assumption
	(2.5%)	(3%)	(1.5%)
Real spending growth	0%	-1%	1%
to 2008			
Real growth to 2011	-1.7%	0.4%	-4.8%
Nominal growth to	0.8%	3.4%	-2.8%
2011			

Source: Oxera

4.26 Again, the table shows how only under the high growth assumption can a very substantial squeeze be avoided if the budget is to be balanced in this way. It should be emphasised that the analysis builds in tight public spending controls in the period to 2008 as shown in the first line of the table; to achieve further real cuts thereafter, of close to 2% in the central growth scenario and nearly 5% in the low growth scenario, would be particularly hard to do.

Conclusions on the period to 2011

4.27 Our objective in this Section of our paper has been to analyse the evolution of the public finances in the medium term with a view to assessing whether or not a structural deficit will be apparent by 2011. We are aware that the Policy Council is proposing a phased approach to the management of the public finances, with some revenue-raising proposals that would take effect in 2008 at the same time as '0%/10%' is introduced; policy-makers will therefore need to take a view as to the likely scale of any such structural deficit and whether further action

- on revenue and/or expenditure will therefore be required over and above that proposed in the document "Future Fiscal and Economic Structure". Our conclusions are as follows.
 - Key to the evolution of the public finances is the likely performance of the Guernsey economy, and in particular economic growth. Whilst the historic performance of the Guernsey economy has in general been strong as it has built up its position in the global financial serves market we do not believe that it will be so easy to grow rapidly in the future in this highly competitive market. Whilst we applaud the stated objective of adopting pro growth policies, we believe it is important not to overestimate what these can achieve. Accordingly, we think a central assumption of average real growth of 2.5% per annum over the medium term is both prudent and appropriate but we also think it is important to consider the consequences of growth both above and below this central estimate.
 - Using assumptions on growth, inflation and tax yields, based on the relationship between tax receipts and GDP, and assumptions on government expenditure derived from the Policy Council's proposals, we have looked at the likely state of the public finances in 2008 under the existing tax structure, i.e. before the introduction of '0%/10%' and the other proposals of the Policy Council. We find that, on reasonable assumptions, the underlying position would be a budget that was just in balance but with very little margin to spare.
 - We have gone on to examine the likely effects of implementing the proposed changes in 2008. We find that, on the revenue side, the net effect of these changes would be a cut in revenue of the order of £40 million in constant 2004 prices, which in turn translates into a structural deficit of around 2% of GDP.
 - Looking beyond 2008, the analysis suggests that further action will be required unless real growth turns out to be at the top of, or above, the range that we have examined. Based on our central assumption on government spending (no real growth), a balanced budget by 2011 would require GDP to grow in real terms at over 4% per annum. Further, the figures suggest that the target of utilising only one half of the contingency reserve over this period would barely be met, if at all, on our central assumptions. Only with high growth or a very tight squeeze on government spending is there a reasonable margin against this target.
 - We conclude, therefore, that unless the Guernsey economy performs very strongly in the future, by 2011 action will in all probability be needed over and above the proposals already under consideration. Of course, growth may turn out to be higher than we think it prudent to assume, and efforts should certainly be made to adopt supply-side policies to promote growth, but too much emphasis should not be placed on growth to solve the 'Black Hole' problem; action is likely to be needed either to increase revenue or to further control public expenditure or some combination of the two.
- 4.28 Overall, therefore, our analysis suggests that policy-makers would be well-advised to give consideration now to appropriate additional policies in order to secure fiscal balance in the future. In our view they will very likely be needed, but in any event to be prepared to implement policies that, in the event, turn out not to be needed is clearly to be preferred to having to design and implement such policies at speed. Accordingly, in the next Section of our paper we look at the options open to the Bailiwick in this regard, and their likely distributional and economic consequences.

Section 5 – Beyond 2011

- 5.1 We concluded above in Section 4 that further action was likely to be needed over and above that already under consideration to achieve fiscal balance. We now turn to a consideration of the options open to the Bailiwick in this regard.
 - First, we look at the option of achieving balance through expenditure reductions.
 - Second, we look at options in the event that the emerging structural deficit turns out to be relatively modest, i.e. less than 1% of GDP.
 - Third, we examine those options that would be relevant to the management of a more substantial deficit, of 1% of GDP or more.
 - Last, we summarise our conclusions from this part of our analysis.

Achieving balance through expenditure reductions

- 5.2 The analysis presented above in Section 4 is predicated on a stringent approach to the management of public expenditure in the years to 2008. Following the objective set by the Policy Council of 'modest annual increases' in expenditure, our central assumption holds expenditure constant in real terms, i.e. nominal increases to cover inflation only. This is a challenging target. We have also looked at the effect of a real squeeze (growth at RPI -1) as well as very modest expansion (RPI + 1). As the analysis in Section 4 shows (see Table IV.5), only those scenarios that build in a real squeeze generate a structural deficit in 2004 prices of less than £30 million in 2008, and economic growth of 2.5% per annum or more is needed to contain it to around £20 million. To attempt to achieve balance, or even to make a significant contribution to achieving balance, by limiting expenditure would in our view be highly problematical.
- 5.3 To set the scale of the task in context, it is worth noting that, historically, both government income and government spending have moved closely with GDP, with a small (0.4%) wedge between them (i.e. GDP has been growing only a little more rapidly than government revenue and spending). If the structural deficit is to be eliminated by continuing to hold spending constant in real terms whilst the economy is growing the wedge would become very much bigger. If GDP grows at 2.5% per annum in real terms the wedge that historically has been only 0.4% would have to run at more like 2.5 percentage points for 5 years or more. We are very doubtful that this could be achieved in practice; certainly it would involve real cuts in services as the amounts are too large for efficiency gains realistically to solve the problem. And such cuts are unlikely to be achievable without economic damage.

Options to address a modest structural deficit

5.4 As we saw above in Section 4, under some assumptions the structural deficit might turn out to be relatively modest, at around £20 million in 2004 prices or 1% of GDP. These outcomes are likely to be associated with a real squeeze in spending but could also be achieved, or even improved upon, if economic growth turns out to be above the range we have looked at. It is therefore reasonable to enquire what might be a sensible strategy for dealing with a deficit of this order of magnitude.

- 5.5 Of course, a figure of around 1% of GDP in this regard is an arbitrary one. But the sums involved are such that the economic effects of alternative options are unlikely to be significantly different from one another and the distributional effects will not be massive, unless the entire burden is imposed on one group in the community. Policy-makers may therefore wish to look for pragmatic solutions and, subject to distributional considerations, put together a package of measures based on cost and efficiency considerations rather than on economic and distributional effects. This would point in the direction of using the existing tax base and increasing the effective rates rather than looking for new sources of revenue. Such a package might, for example, include some of the following measures.
 - Some further increase in the rates of existing taxes on consumption (customs duties) might be imposed. These are relatively low now in comparison with other jurisdictions and will rise only modestly under the 2008 proposals. It is also noticeable that at present the Bailiwick taxes vehicle ownership (vehicle excise duty) rather than use (fuel duty) and some move to increase duties on petrol might be appropriate for other, environmental, reasons. Changes in rates of this kind, as opposed to changes in the tax base, are relatively cheap to implement and, if modest, would give only a modest impetus to inflation (where fuel is an input cost to industry, as in the distribution sector, the burden will in the main be shifted to final consumers).
 - Some further adjustment to tax allowances over and above those already under consideration for 2008 might be made. These could include modest reductions in personal allowances; and abolishing altogether tax relief on non-business related interest, life assurance relief, and relief on pensionprovision. Again, implementation costs would be low and modest changes have only a marginal impact on the effective tax rate.
 - Some further upward adjustment could be made to the various fees and charges that are included in 'other income'. The 2008 proposals already include an amount in this regard (see Table IV.4); more could be done at the margin without major economic consequences. (As with fuel duties, fees and charges imposed on business are typically shifted to consumers and give an upward impetus to inflation, but again the amounts need not be so large as to have a significant impact on international competitiveness.)
- 5.6 In addition, a word is due about two other possible options. First, there is the matter of the Treasury's contribution to the Social Security fund. It has been suggested to us that the assumptions made by the Government Actuary in computing Fund requirements may be excessively pessimistic and the Treasury's contribution may therefore be higher than it needs to be. If lower contributions are required from the Treasury government spending would, effectively, be reduced. To investigate this would be beyond our remit and would require extensive analysis of the assumptions made by the Government Actuary, hence we are unable to comment on this issue. We would, however, urge caution in attaching too much weight to this as a potential solution to the 'Black Hole' problem; what is needed here are strategies to correct a structural deficit and policy-makers would need to be clear that any reduction in Treasury contributions to the Fund were not merely a temporary matter of timing.
- 5.7 Second, there is the matter of taxation of residential property [37]. We noted above that, at present, the Bailiwick collects very little by way of taxes on residential property, certainly when compared with some other jurisdictions. We would not advocate a wholesale revision

of the approach to property taxation in order to address a relatively modest deficit^[38] as such revisions take a considerable amount of time (and money) to plan and implement. But it may well be possible to increase the yield from the existing arrangements simply by raising the rates. Again, if the amounts involved are not very large the impacts will also be modest.

Options to address a substantial structural deficit

- 5.8 As we saw above in Section 4, the Bailiwick is, on the basis of reasonable assumptions, likely to face a structural deficit in excess of 1% of GDP. At this level of deficit consideration of new taxes (or significant changes to existing taxes), as opposed to merely adjusting the effective rates of existing taxes, becomes worthwhile, and issues relating to economic and distributional impacts become more relevant. We have, accordingly, considered what options are open to the Bailiwick in this regard. The following types of option may in principle be considered:
 - significant changes to the income tax regime;
 - significant changes to the payroll tax regime (in the Bailiwick management of social security contributions as a source of revenue is essentially a payroll tax), in relation to employer contributions or employee contributions or both;
 - the introduction of a new tax on consumption, such as a general sales tax (GST);
 - a new approach to the tax base with regard to duties, which are a special type of consumption tax ; and
 - a new approach to the taxation of residential property on occupiers and/or owners.
- 5.9 The only other new tax that could in principle yield significant amounts, and is in use in some other jurisdictions in various forms, is a general wealth tax. The Bailiwick has made clear that it does not wish to move in this direction, a decision that we would support. Wealth taxes are, notoriously, associated with big practical difficulties: defining the tax base is problematical; there are problems of avoidance; and, usually, high collection and enforcement costs. We have thus given no further consideration to the likely impact of a general wealth tax; otherwise, we consider below the advantages and disadvantages of each of the above options.
- 5.10 As was explained above in Section 2, there is only a limited number of ways in which, in practice, taxes can be imposed on an economy: all taxes get shifted to be ultimately taxes on income or taxes on consumption, hence all taxes reduce the spending power of individuals either directly or indirectly. Thus all these options reduce, in different ways, the spending power of Guernsey residents (and, to some extent in some cases, the spending power of non-residents). What is of importance to policy-makers is whose spending power is reduced (the distributional consequences); and how the affected individuals will react and what the economic consequences will be.
- 5.11 With regard to distributional consequences, Oxera has examined the consequences of some of the options and has conducted an extensive modelling exercise using a range of assumptions. We look at what their results show below in this Section; however, we first examine in general terms the key features of the options and their likely effects.
- 5.12 We look first at significant changes in **income tax.** Income tax is, of course, potentially paid by all residents with earned or unearned income. The economic consequences of the tax are relatively straightforward. The technical literature makes much of a possible distortion in taxpayers' choices as between work and leisure but in a modern society this is perhaps more theoretical than real for most employees^[39]; of more significance is that disposable income is reduced and savings may therefore be lower than they would otherwise be. But income taxes do not affect international competitiveness other than insofar as they may affect the willingness or otherwise of mobile workers with specialist skills to live in Guernsey, which

may in turn have an impact on the labour market.

- 5.13 In distributional terms, the distinguishing feature of income tax is that it can readily be targeted to capture personal circumstances and in this way can be adapted to create a system with the desired degree of progressivity. Personal allowances can be used to manage the level of income at which tax starts to be payable and to reduce the average rate of tax on taxpayers with low taxable incomes relative to those with high taxable incomes. In some jurisdictions the rate itself is used to achieve distributional objectives, with lower or higher rate bands used to adjust the marginal and average tax rate for people on different levels of taxable income. The system can distinguish between earned and unearned income. And, in the limit, tax credits can be used to address problems at the lower end of the income distribution. At present, the regime in Guernsey is both simple and relatively benign: married residents do not start to pay tax until they have taxable income of at least £16,500 per annum (£19,500 per annum if both are aged 64 or over). There is a single rate of tax and, as noted above, other allowances are available, including mortgage interest and personal pension relief.
- 5.14 The Policy Council's proposals already envisage some changes to the existing regime in 2008, and these have been taken into account in the analysis presented in Section 4 of this paper. It would, however, be possible to make more radical changes; these could include cutting personal and other allowances significantly or raising the rate of tax. And combinations are of course possible: if the rate were to be raised, for example, those on low incomes can be protected by, at the same time, increasing personal allowances to take some people out of the tax net altogether. This is returned to below; here, however, it may be noted that increasing yield by cutting personal allowances is, potentially a higher-cost option as it brings more people into tax and thus increases collection and enforcement costs.
- 5.15 Turning now to the **payroll tax** regime, it is important to distinguish between **employer** and **employee** payroll taxes as these have different economic impacts.
- 5.16 The **employer** payroll tax is a good example of a tax that is shifted, sometimes in quite complex ways. The first round economic effect is to increase the cost of employing labour, in both the private and the public sectors. The tax will then be shifted: it may be passed to employees in the form of lower wages; it may be borne by business in the form of lower profits; it may be passed on to customers in the form of higher prices; or it may be shifted by some combination of these. Lower wages reduce employees' purchasing power; higher prices and lower profits make Guernsey-based production of goods and services less competitive both in export markets and in domestic markets where there is competition from imports. In all cases the effect will be to reduce economic growth but the distributional consequences may differ. To the extent that the tax is shifted to employees, residents not in employment

will not pay, but if it is shifted to prices they will pay indirectly through their purchases^[40]. Over time, other effects may manifest themselves: the employer payroll tax changes the relative price of capital and labour in capital's favour and therefore provides an incentive to business employers to adopt practices that reduce the input of labour and increase the input of capital. And also relevant will be the precise specification of the tax: minimum thresholds below which no tax is payable reduce the impact on businesses employing low-wage low-skill labour; ceilings have the effect of reducing the impact on high-wage high-skill sectors.

5.17 As with the income tax regime, the Policy Council has proposed some changes to the existing arrangements to take effect in 2008; it would be possible to do more and/or change significantly the approach to thresholds and ceilings. We would, however, urge caution in making too much use of employer payroll taxes; unlike some of the other options they present more of a risk to international competitiveness at a time when the Bailiwick needs to maintain its overall position against competing jurisdictions.

- 5.18 An **employee** payroll tax is somewhat more straightforward in its impact. It reduces gross employment income and is thus equivalent to a tax on earned income. It affects only employees: households without earned income, including pensioners and those with only investment or rental income, do not bear the tax. As with the employer payroll tax, the tax base is therefore smaller than that applying to income taxes (or for that matter taxes on consumption); for the same total yield, employees thus pay more tax under an employee payroll option than they would under an income tax option. And, again, the precise specification of the tax is relevant: minimum thresholds and ceilings have the effect of (relatively) increasing the net income of those below or above the threshold/ceiling. Thus thresholds and ceilings make a payroll tax relatively more progressive (thresholds) or more regressive (ceilings).
- 5.19 Like income tax, however, the employee payroll tax does not have a direct effect on international competitiveness; whether it affects competitiveness indirectly will depend on the state of the labour market. If employees are able to bid up their wages to recover some of the income lost in tax there will be a negative effect on prices and/or profits.
- 5.20 The option of a new **tax on consumption**, such as a GST, has some different characteristics from taxes on income or on payroll. Unlike the employer payroll tax, it does not generally affect the competitive position of Guernsey businesses as a GST is not usually applied to

exports and the tax rate on imported goods is the same as for locally-produced goods^[41]. Consumption taxes do apply to visitor expenditure thus, unlike income tax, some part of the burden, albeit probably a relatively small part, is shifted to non-residents, although as a consequence there will be some effect on Guernsey's competitiveness as a tourist location. Further, taxes on consumption give an immediate upward impetus to inflation. Again, depending on the state of the labour market this may be translated into higher wages, thus impacting on competitiveness indirectly.

- 5.21 Under a broadly-based GST, the burden is spread across all income groups and household types, although those groups who spend a larger proportion of their income (i.e. the less well-off) pay a larger proportion of their incomes in tax than do the better-off who save more, i.e. the tax is regressive rather than progressive, although features can be built in to reduce this, such as exempting necessities from tax altogether or imposing a lower rate of tax on them. One of the problems with a GST, however, is that is may be quite difficult in practice to remove regressive features. A more effective way of compensating the less well-off may be through the income tax system or through welfare payments. And, as a new tax, allowance needs to be made for the cost of setting up a GST, both for government and for those who need to operate it.
- A different approach to the taxation of consumption would be to adopt a **new approach to** 5.22 the tax base with regard to duties. We noted above for example that, at present, fuel duties are relatively low on the Island, the taxation of motoring being largely based on ownership (vehicle excise duty) rather than use, and we observed that a modest increase in the rate of duties generally could play a part in strategies to deal with a modest deficit. An option to help address a more substantial deficit could include a significant restructuring of duties to impose a greater burden on, for example, users of fuel. Insofar as fuel is an input to economic activity this would of course have an inflationary impact on Guernsey residents and would to some extent impact on international competitiveness, although this effect would be small as Guernsey's key sector in this regard, financial services, is not fuel-intensive. The distributional consequences would be the direct effect on users of private vehicles together with some secondary effect via inflation in the cost of fuel-intensive goods and services. including public transport. In general, like all consumption taxes, the effects are likely to be more regressive than progressive but, insofar as it may reduce private fuel consumption in response to its increased cost, such a move may help to achieve other objectives of policy.

- The implementation costs of making changes to the current system are likely to be minimal as these will consist of undertaking adaptations rather than major changes.
- 5.23 Last, there is the option of a **new approach to the taxation of residential property**. Again, we noted above that a modest adjustment in the rate of property tax could play a part in addressing a modest deficit. A more substantial role for property taxation is an option for addressing a more substantial deficit. This would involve a fundamental re-appraisal of tax bases and tax rates in the light of the special features of the Guernsey housing market and, , the implementation costs could be considerable. To examine it in any detail is beyond the scope of this paper^[42]. At a level of generality, however, it may be said that taxation of residential property may have some of the positive features of a wealth tax without all of the latter's disadvantages. Like all taxes it is shifted: in this case by the reduction in the disposable income of taxpayers. If, however, there is a reasonable correlation between the value of a residential property and the overall income of its occupant and/or owner, the tax may not be regressive in the way that general consumption taxes are, although it will have consequences for the housing market that may make the Island a less favourable location for mobile workers.
- 5.24 In summary, we can say that, in terms of their impact on the economy, there are differences between the options that are in principle open to the Bailiwick but these are not huge. Perhaps of most significance is that income tax does not of itself affect international competitiveness directly, neither do employee payroll taxes, consumption taxes, or taxes on residential property. Employer payroll taxes do have a direct effect of this kind. All taxes may have indirect effects through the labour market, although taxes on consumption, because they have a direct effect on inflation, can more speedily feed through into increased wage demands. On the other hand, consumption taxes do ensure that some at least of the burden is borne by visitors to the Island as well as domestic residents. Of equal or greater significance are the costs of implementation- higher in the case of new taxes or radically revised existing ones and, in particular, the likely differences in distributional consequences. We now look at distributional consequences in more detail by examining the impacts of particular revenue-raising measures on different groups of people.
- 5.25 Oxera has undertaken extensive modelling of these impacts under different assumptions; the examples we consider below are those designed to address a structural deficit of the order of £30 million in 2011, although the effects of addressing larger or smaller deficits would be, broadly, to increase or decrease the impacts proportionately. The consequences of different approaches are illustrated in Tables V.1 to V.6 at the end of this Section, which show, for six sample households on different income levels, the additional tax that would have to be paid by them in contributing to the elimination of the deficit. The following tax measures are assumed in the Tables, each of which generates the necessary revenue to address a £30 million deficit:
 - an employee payroll tax (2.5% on all income from employment);
 - an increase in the rate of income tax to 23%;
 - a reduction in personal allowances by 35%; and
 - introduction of a general consumption tax (GST) of 3%.
- 5.26 The figures are in nominal terms, i.e. in the pounds of 2011. Key assumptions used, together with explanatory notes, are set out in Annex D.
- 5.27 The tables illustrate the practical effect of the general principles discussed above. We look

- first at the lower income group: i.e. those with an income of £10,000 or £20,000. The payroll tax, of course, applies only to employees: where it does impact, at up to £500 (2.5% of £20,000) it is the second most expensive for those in this group and makes no allowance for different personal circumstances. Increasing the tax rate, by contrast, does make some allowance for different circumstances: those below the tax bracket pay nothing (virtually all those on £10,000), and the burden is close to zero for those on £20,000 as well unless they are single, in which case they pay £320. Personal allowances, again, are only of relevance to those who pay tax but in this case the impact will be greater as some people will come into the tax bracket as a result of the reduction in allowances. For those who are on lower incomes but who do pay, this is in fact the most expensive option in most cases, costing up to £1,318 for married couples. The consumption tax is also important for this lower income group: everyone pays, even those who pay no income tax, although it falls into second place behind the reduction in allowances for those who do. The relative burden is greatest for those on lower incomes: at $\pm 10,000$ the burden is 2.4% of the income of a single earner whilst at £20,000 it falls to 1.5%. And, because the impact increases with household expenditure, the burden also increases with household size: a household with two children earning £10,000 pays £290, or 2.9% of income, whilst the same household on £20,000 pays £411, or just over 2%.
- 5.28 Looking now at the higher income group, those with incomes of £50,000 to £100,000, the payroll tax, where it is paid at all, is important and, as incomes rise, quickly becomes the most expensive option for all except the single earners, who suffer most from an increase in the rate of income tax. The impact rises proportionately to income. Increasing the rate of income tax, by contrast, does make allowance for personal circumstances and because at this level everyone is in the tax net everyone is affected. Relatively, the single pay most, and this is for all practical purposes the most expensive option for them. Otherwise, the burden on married couples is second only to the payroll tax for those liable to payroll, and rises to between £2,275 and £2,440 for those on incomes of £100,000, depending on their circumstances. The effect of a reduction in personal allowances, by contrast, because it is fixed in money terms becomes relatively less significant as we move up the income curve. The impact is, evidently, greatest where allowances are highest: the single lose £659 whilst older and/or married taxpayers lose more (up to £1,557). For married taxpayers the loss is £1,318: 2.6% of income at £50,000 or 1.3% at £100,000. In the case of the consumption tax, the impact continues to rise in money terms as incomes rise but the relative impact reduces a little: at £50,000 the burden on a married taxpayer with two children is 1.8% but at £100,000 it is 1.4%.
- 5.29 Finally, for the highest income groups the picture with regard to the payroll tax is similar to that for the middle income group. Where it is levied, it is second only to income tax in its impact, rising to £5,000 on incomes of £200,000. Under the option of an increase in the rate of income tax, some allowance is made for personal circumstances: the burden on the single is greatest, rising to £5,720 on incomes of £200,000. The reduction in personal allowances works in the same way as for the middle income group: the burden falls relatively as incomes rise. On an income of £200,000 the burden on a single taxpayer, at £659, is only 0.03%: for a married couple it is 0.07%. And, finally, the burden of the consumption tax continues to rise with household expenditure but not proportionately with income as those on higher incomes save more. At an income of £200,000 the impact on a married taxpayer with two children is £2,646, or 1.3%.
- 5.30 In summary, therefore, it can be seen that, whereas the overall impact on the economy of different options to address a substantial deficit may not be markedly different, the distributional consequences are likely to vary rather more. An appropriate choice is thus likely to be driven at least in part by other objectives of policy. For example, if it is deemed important for everyone to contribute, the consumption tax has merit. If it is important to protect those on low incomes and impose a greater part of the burden on the better-off,

- raising the tax rate has merit. And, of course, combinations of options can be used and other policies deployed to compensate for consequences deemed to be less desirable; for example, welfare payments can be used to compensate those on low incomes if a consumption tax is chosen, or tax allowances can be increased if the general rate of income tax is increased, thus reducing the effective rate on some low earners and removing others from the tax net altogether.
- 5.31 To assist policy-makers, we have in Box V.1 at the end of this Section summarised the key features that may be relevant in decision-making in this regard, but it is important to stress that there are no right or wrong answers here: policy-makers will need to make their decisions based on their own objectives.

Conclusions on the period beyond 2011

- 5.32 Our aim in this Section of our paper has been to look at the options open to the Bailiwick for achieving fiscal balance in the years beyond 2011. Our conclusions are as follows:
 - To aim to achieve balance through further expenditure reductions over and above those already proposed is not likely in our view to be a credible option. The analysis and conclusions set out in Section 4are predicated on a stringent approach to the management of public expenditure up to 2008. To limit expenditure still further after 2008 would be very difficult to achieve. It would certainly involve real cuts in services and a very limited capital expenditure programme; it could not realistically be achieved through efficiency gains. And such cuts are unlikely to be achievable without economic damage.
 - If the deficit turns out to be relatively modest (i.e. less than 1% of GDP), as it might in the event that spending is constrained but economic growth turns out to be above the range we have looked at, a reasonable approach would be to look for pragmatic solutions and put together a package of measures based on cost and efficiency considerations rather than economic effects. This points in the direction of using the existing tax base and increasing the effective rates rather than looking for major new sources of revenue and could involve some combination of further increases in duties, further adjustment to tax allowances and further upward adjustment to various fees and charges. It could also include an upward revision to the rates of tax on residential property.
 - If the Bailiwick has to address a more substantial deficit the options open are, in principle, significant changes to the income tax regime; significant changes to the payroll tax regime; the introduction of a new general tax on consumption; a new approach to the tax base with regard to duties; and a new approach to the taxation of residential property. We have not considered the introduction of a general wealth tax; we support the Bailiwick's decision not to move in this direction. Each of these options has different features but in terms of their impact on the economy the differences are not huge; we would however suggest avoiding measures that have a direct impact on international competitiveness, of which an employer payroll tax is the most obvious example. Of equal or greater significance are differences in the costs of implementation - we have not looked at these in any detail but they are likely to be significantly higher in the case of completely new taxes or radically revised existing ones - and, in particular, differences in distributional consequences. To assist policy-makers, we have summarised the key features of the various options in Box V.1 but, in conclusion, we would emphasise that appropriate decisions on options will depend on policy-makers' distributional and other objectives for the Bailiwick.

Table V.1

Additional tax to be paid: single, earned income, no children

Tax type	Income of £10,000	Income of £20,000	Income of £50,000	Income of £75,000	Income of £100,000	Income of £150,000	Income of £200,000
Apply an employee payroll tax of 2.5% on	250	500	1 250	1 075	2 500	2 750	5 000
Increase income tax rate to 23%	250	300	1,250	1,875	2,500	3,750	5,000
Reduce personal allowances by	20	520	1,220	1,970	2,720	4,220	5,720
Introduce a general consumption tax of 3%	242	308	790	1,027	1,301	1,893	2,543

Table V.2

Additional tax to be paid: single, aged over 64, unearned income, no children

Tax type	Income of £10,000	Income of £20,000	Income of £50,000	Income of £75,000	Income of £100,000	Income of £150,000	Income of £200,000
Apply an employee payroll tax of 2.5% on							
all income	0	0	0	0	0	0	0
Increase income tax rate to 23%	0	269	1,169	1,919	2,669	4,169	5,669
Reduce personal allowances by 35%	580	779	779	779	779	779	779
Introduce a general consumption tax of 3%	263	338	845	1 082	1 355	1 947	2 597

Table V.3

Additional tax to be paid: married, earned income, no children

Tax type Income Income Income Income Income Income

	of	of	of	of	of	of	of
	£10,000	£20,000	£50,000	£75,000	£100,000	£150,000	£200,000
Apply an employee payroll tax of 2.5% on all							
income	250	500	1,250	1,875	5 2,500	3,750	5,000
Increase income tax rate to 23%	0	40	940	1,690) 2,440	3,940	5,440
Reduce personal allowances by 35%	0	1,318	1,318	1,318	3 1,318	1,318	1,318
Introduce a general consumption tax of 3%	242	364	846	1,083	8 1,357	1,949	2,599

Table V.4

Additional tax to be paid: married, aged over 64, unearned income, no children

Tax type	Income of £10,000	Income of £20,000	Income of £50,000	Income of £75,000	Income of £100,000	Income of £150,000	Income of £200,000
Apply an employee payroll tax of 2.5% on all income	0	0	0	0) 0	0	0
Increase income tax rate to 23%	0	0	838	1,588	2,338	3,838	5,338
Reduce personal allowances by 35%	0	1,145	1,557	1,557	1,557	1,557	1,557
Introduce a general consumption tax of 3%	252	404	918	1,180	0 1,465	2,058	2,707
			,10	Table V	7.5	,	

Additional tax to be paid: married, earned income, two children

Tax type	Income	Income	Income	Income	Income	Income	Income
	of	of	of	of	of	of	of
	£10,000	£20,000	£50,000	£75,000	£100,000	£150,000	£200,000
Apply an							

employee payroll tax of 2.5% on all income	250	500	1,250	1,875	2,500	3,750	5,000
Increase							
income tax							
rate to 23%	0	40	940	1,690	2,440	3,940	5,440
Reduce personal allowances	â						
by 35%	0	1,318	1,318	1,318	1,318	1,318	1,318
Introduce a general consumption							
tax of 3%	290	411	894	1,131	1,405	1,997	2,646

Table V.6

Additional tax to be paid: married, earned income, no children, £100,000 mortgage at 5.5% interest

Tax type	Income of £10,000	Income of £20,000	Income of £50,000	Income of £75,000	Income of £100,000	Income of £150,000	Income of £200,000
Apply an employee payroll tax of 2.5% on	250	500	1 250	1 975	2 500	2 750	5 000
	230	500	1,230	1,8/3	2,300	5,750	5,000
Increase income tax rate to 23%	0	0	775	1,525	5 2,275	3,775	5,275
Reduce personal allowances by 35%	0	484	1,318	1,318	1,318	1,318	1,318
Introduce a general consumption	2.42	2.5.1	0.17	1.002	1.055	1.0.42	2.500
tax of 3%	242	364	846	1,083	1,357	1,949	2,599

Box V.1

Comparison of options

	Tax base	Effect on international competitiveness	Other economic effects	Distributional effects	Implementation costs	Other comments
Income tax:						
Increase rates	Only those paying income tax now	None direct. Indirect via competitiveness as location for mobile labour	May increase pressure in the labour market owing to reduction in disposable incomes	For taxpayers, burden rises as income rise.	Low	Effect on those on lower incomes can be mitigated by increasing allowances
Reduce personal allowances	Above, plus new taxpayers now brought into tax	As increase in rates	May increase pressure in the labour market owing to reduction in disposable incomes	Regressive for those paying tax: those on lower incomes pay relatively more	Higher than increasing rates because new people brought into tax	Allowances are relatively high now, so those on very low incomes pay no tax at all
Payroll tax:						
Increase employer rates	All employees	Direct effect of raising labour costs	The burden may be shifted in complex ways depending on the state of the labour market	May be borne by employees, shareholders, or customers	Low if no change to thresholds/ceilings	Thresholds/ceilings can be used to modify impacts
Increase employee rates	All employees	None direct. Indirect through wage-push in the labour market		For employees, burden rises proportionately to income	Low if no change to thresholds/ceilings	Thresholds/ceilings can be used to modify impacts
Consumption tax:						
Introduce a general consumption tax	All consumers	None direct if imposed on imports but not exports	Direct impact on inflation and thereby on wage demands	Regressive if imposed on all goods and services	High, as a new tax	Necessities (food etc.) can be exempt, thereby reducing the relative burden on those on low incomes.
Restructure indirect taxes – increase fuel duty	Purchasers of fuel	Only via inflation in cost of fuel to business	As GST	Marginally regressive via effect on transport costs	Some increase in enforcement cost as greater incentive to evade	Exemptions can be applied for fuel used in public transport but tend to lead to evasion
Increase taxes on residential property (occupiers rates & rateable values)	All occupiers and/or owner of residential property	None direct. Indirect via competitiveness as location for mobile labour	Effect on housing market will depend on detailed approach taken	Not regressive if strong correlation between value of property and income	High, as a new approach to the tax	Can be made more or less progressive by use of rate bands

Section 6 – Summary of key findings and conclusions

- 6.1 Above in this paper we have sought to examine in more detail the 'Black Hole' in Guernsey's public finances consequent upon the adoption of the 0%/10% corporate tax rate, and the options open to the Bailiwick to address the 'Black Hole' problem. Our key findings and conclusions are summarised below.
- 6.2 There are some **general principles and practical issues** relevant to the management of the public finances that are of particular importance to policy-makers in the Bailiwick at this time. They are discussed in detail in Section 2 and include the following:
 - With regard to government revenues and their impact on the economy, it is important to recognise that, although there are many different types of tax (or charges), in practical terms they all reduce to being taxes on income or taxes on expenditure or some combination of the two: they reduce the disposable incomes of taxpayers.
 - Different taxes do, however, have different effects on different groups of people, and policy-makers need to understand, as far as is possible, these distributional effects and be prepared to make decisions as to which groups should bear tax as well as considering what will be the potential effect on the economy.
 - Policy-makers also need to understand how government spending impacts on the economy: different types of spending will have more or less beneficial consequences and particular types of cuts in spending may have significantly deleterious consequences.
 - Choice of tax base is important in terms of impacts, particularly distributional impacts, but also relevant are practical considerations concerning the costs of collection and combating avoidance. Efficiency and equity may pull in opposite directions.
 - Determining likely yields from a particular tax requires an understanding both of the drivers of yield and of how tax payers will adjust their behaviour in the light of the tax.
 - In analysing revenue and expenditure and the balance between them, the effects of inflation need to be considered: the distinction between 'real' (after allowing for the effects of inflation) and 'nominal' (including inflation) measures is important.
 - The balance between revenue and expenditure is a key issue: across the cycle revenue and expenditure need to be in balance. Structural deficits are not sustainable.
 - In estimating the likely evolution of the public finances income and expenditure and the difference between them it is prudent to look at a range of assumptions and not to rely on single point forecasts.
 - In considering change, issues of administration are important but so are issues relating to the management of uncertainty.
- 6.3 In **our approach** to discharging our remit we have, as explained in Section 3, made use of all the relevant information made available to us but there are, inevitably, various important areas where information is lacking. We have made reference above in this paper to some of these problems and have, where appropriate, applied a range of different assumptions. Inevitably, however, there remains scope for judgement on the part of policy-makers: our analysis will help to inform such judgements but cannot substitute for them.

- 6.4 In our examination of the **period to 2011** in Section 4 of the paper, we have analysed the evolution of the public finances in the medium term with a view to assessing whether or not a structural deficit will be apparent by 2011. Our conclusions are as follows.
 - Key to the evolution of the public finances is the likely performance of the Guernsey economy, and in particular economic growth. Whilst we applaud the stated objective of adopting 'pro growth' policies, we believe it is important not to overestimate what these can achieve. Accordingly, we think a central assumption of average real growth of 2.5% per annum over the medium term is both prudent and appropriate although we also think it is important to consider the consequences of growth both above and below this central estimate.
 - Using our assumptions on growth, inflation and tax yields, and assumptions on government expenditure derived from the Policy Council's proposals, we find that, on reasonable assumptions, the underlying position in 2008 under the current tax structure would be a budget that was just in balance but with very little margin to spare.
 - When we consider the likely effects of implementing in 2008 the changes proposed by the Policy Council, we find that, on the revenue side, the net effect would be a cut of the order of £40 million in constant 2004 prices, which in turn translates into a structural deficit of around 2% of GDP.
 - Looking beyond 2008, our analysis suggests that further action will be required unless real growth turns out to be at the top of, or above, the range that we have examined. Based on our central assumption on government spending (no real growth), a balanced budget by 2011 would require GDP to grow in real terms at over 4% per annum. Further, the figures suggest that the target of utilising only one half of the contingency reserve over this period would barely be met, if at all, on our central assumptions. Only with high growth or a very tight squeeze on government spending is there a reasonable margin against this target.
 - We conclude, therefore, that unless the Guernsey economy performs very strongly, by 2011 action will in all probability be needed over and above the proposals already under consideration. Of course, growth may turn out to be higher than we think it prudent to assume, and efforts should certainly be made to adopt supply-side policies to promote growth. We would urge the Bailiwick to pursue, in particular, policies to improve the skills base of the workforce; these will be necessary to maintain competitiveness. But too much emphasis should not, in our view, be placed on growth to solve the 'Black Hole' problem.
 - Overall, therefore, our analysis suggests that policy-makers would be well-advised to give consideration now to appropriate additional policies in order to secure fiscal balance in the future. In our view they will very likely be needed, but in any event to be prepared to implement policies that, in the event, turn out not to be needed is clearly to be preferred to having to design and implement such policies at speed.
- 6.5 In examining the **period beyond 2011**, our aim in Section 5 of the paper has been to look at the options open to the Bailiwick for achieving fiscal balance. Our conclusions are as follows.
 - To aim to achieve balance through further expenditure reductions over and above those already proposed is not likely in our view to be a credible option. A stringent approach to the management of public expenditure is already predicated in the period up to 2008. To

- limit expenditure still further after 2008 would be very difficult to achieve. It would certainly involve real cuts in services and a very limited capital expenditure programme; it could not realistically be achieved through efficiency gains. And such cuts are unlikely to be achievable without economic damage.
- If the deficit turns out to be relatively modest (i.e. less than 1% of GDP), as it might in the event that spending is constrained but economic growth turns out to be above the range we have looked at, a reasonable approach would be to look for pragmatic solutions and put together a package of measures based on cost and efficiency considerations rather than economic effects. This points in the direction of using the existing tax base and increasing effective rates rather than looking for major new sources of revenue and could involve some combination of further increases in duties, further adjustment to tax allowances and further upward adjustment to various fees and charges. It could also include some upward revision to the rates of tax on residential property.
- If the Bailiwick has to address a more substantial deficit the options open are, in • principle, significant changes to the income tax regime; significant changes to the payroll tax regime; the introduction of a new general tax on consumption; a new approach to the tax base with regard to duties; and a new approach to the taxation of residential property. We have not considered the introduction of a general wealth tax; we support the Bailiwick's decision not to move in this direction. Each of these options has different features but in terms of their impact on the economy the differences are not huge: we would however, suggest avoiding measures that have a direct impact on international competitiveness, of which an employer payroll tax is the most obvious example. Of equal or greater significance are differences in the costs of implementation - we have not looked at these in any detail but they are likely to be significantly higher in the case of completely new taxes or radically revised existing ones - and, in particular, differences in distributional consequences. We have illustrated the latter in Section 5of this paper but we would emphasise, in conclusion, that the final choice of options must depend on policy-makers' distributional and other objectives for the Bailiwick.

In summary, below are our key conclusions.

- It is in our view appropriate to adopt a phased approach to the management of the public finances in seeking to address the 'Black Hole' problem, and sensible to take early action along the lines proposed by the Policy Council to raise revenue in 2008.
- Our analysis, however, suggests that these proposals will not be sufficient to remedy the structural deficit, unless the economy grows faster than the upper end of the range we have considered. We would emphasise the importance of pursuing pro-growth policies, particularly in relation to the labour market and the skills of the workforce; these will anyway be needed to maintain international competitiveness. But too much should not be expected of such policies in terms of rapid real growth of the economy.
- Further action will therefore, in our view, very likely be needed to remedy the deficit, although it will, of course, be appropriate to keep the performance of the economy, and the state of the public finances, under close review over the next five years.
- We do not think that further squeezes on public spending alone can remedy the problem; the scale of what would be needed would be likely to result in economic damage.
- If the deficit turns out to be modest (less than 1% of GDP), as it might be if public spending is constrained and growth is very strong, a package of measures based on cost and efficiency considerations might well be appropriate; this would involve using the

existing tax base and increasing effective rates rather than looking for major new sources of revenue.

- In the likely event that a more substantial deficit has to be addressed we have set out above in this paper some options for consideration. We suggest avoiding measures, such as extensive use of an employer payroll tax, that have a direct impact on international competitiveness. Otherwise, the Bailiwick will wish to consider the different distributional effects of the various options and also take into consideration their likely costs of implementation. The analysis set out in Section 5, and the summary set out in Box V.1, should help in this regard, but policy-makers will, ultimately, have to make decisions in the light of their own distributional objectives.
- We would, therefore, urge policy-makers to give consideration now to the options open to them and to start to plan implementation of the chosen approaches. If things turn out more favourably than we think probable planning can always be suspended. But to be obliged to implement proposals in haste is likely to both high-cost and economically damaging.

The Independent Group April 2006

Annex A

Comparison of estimates and computing the effect of the 2008 proposals

Table A.1 below compares the projected public sector revenues set out in 'Future Economic & Taxation Strategy' (Appendix 11 and 12) with the central assumptions used by Oxera.

Table A.1 Impact of policy proposals: comparison of assumptions

		2008 prices (£m)	
		Central assumption: 2.5% growth, 2.5% inflation	
	Policy Council		Explanation
Tax revenue in 2008 pre 0%10% and policy measures	343	340	Oxera figure based on real growth in revenue of 2.5% pa, Treasury figure estimated directly.
Component derived from corporate profits			Oxera estimate by taking the predicted split between corporate profits and other revenues in 2006 and

	116	116	rolling forward to 2008.
Tax revenue in 2008 post	278	276	
0%10% and policy measures	plus	plus	
	22 social security	19social security	The £2m difference between the Treasury outcome and the Oxera outcome is likely to arise from rounding
	total = 300	295	errors in both sets of calculations.
Policy measures			
1. Continuing tax on banking profits	10	11	Base figure provided by Treasury; difference arises due to small differences in growth assumptions.
2. Continuing taxation of investment companies		11	Figure provided by Treasury
3. Taxation of distributed profits	14	7	Oxera figure assumes that 30% of profits are distributed, based on actual average distribution of the S&P 500 index companies in 2005 (actual likely figure for Guernsey uncertain, as there is a financial incentive not to distribute profits; Combined Treasury figure appears to consist of £10m from investment companies (page 9) and, therefore, £4m from other distributed profits.
4. Increase in duties etc (including TRV)	6 to 10 from TRV, and other indirect taxes should be increased	9	Oxera estimate is based on halving the estimate contained in the September consultation document as a result of the proposal to raise these taxes 'but less so than previously indicated'.
5. Increase in social security payments ²	22	19	Differences in the Treasury and Oxera estimates are likely to arise due to differences in the data used in the calculation and differences in the methodology used to estimate the yield.
6. Changes to interest payments	7	8	Oxera estimate based on policy council, difference arises in conversion from nominal to real terms.
7. Increases in fees	8	6	Treasury estimate, provided to Oxera, New estimate used by Treasury includes changes in miscellaneous income, fees and charges.
Additional revenue	Up to £6m		The revenue projections by the Treasury with respect to increases in duties and TRV, results in a total tax yield in this category of £60m in 2008. Yield in the same categories in 2005 was approximately £45m (2005 money), which is the equivalent of approximately £48m in 2008 money. The total increase in this category is, therefore, around £12m.
Yield of policy proposals	73	71	

Source: Unless otherwise indicated, Guernsey Treasury; Policy Council (2006) Draft Future Economic and Taxation Strategy Policy, in particular Appendix 11 and 12; and Oxera calculations.

Annex B

Estimating GDP in 2004 and 2005

One important piece of information used to project future tax revenues are data on GDP.

The best available information regarding the trends in Guernsey's GDP are statistics calculated by the Policy and Research Unit. When Oxera began work in January 2006 GDP figures were available up to and including 2003, with a provisional estimate for 2004. The provisional estimate indicated that real GDP had shrunk slightly.

The Policy and Research Unit is currently revising its methodology to calculate GDP, and this revised methodology will be used to calculate the final 2004 GDP figure. The new methodology will also be used to re-calculate the 2003 figure so that comparisons with past GDP figures can continue to be used.

The revised figures are not yet available, but preliminary analysis suggests that, although the new figures are likely to produce a substantial increase in the level of measured GDP, the trends in GDP

growth would be similar under both methodologies. The use of the historic data to learn about potential future trends thus remains valid.

Notwithstanding the change in methodology, the preliminary figure for 2004 used in the analysis was based on the old methodology. Data that have become available since the preliminary figure was calculated suggest that the remuneration and profit components of GDP will be higher in the final 2004 calculation than was used in the preliminary calculation.

It is therefore possible that the preliminary estimate of GDP for 2004 (based on the old methodology) may somewhat *understate* the level of GDP in 2004 that would finally emerge using the old methodology. Because it is the 2004 GDP level that is used to calculate the estimated 2007 GDP (under the assumption of real growth at 2.5% pa), and in turn the 2007 GDP is used to calculate the tax yield in 2008, an upward revision in the level of the 2004 GDP would result in an upward adjustment in the estimated level of tax receipts in 2008. Each 1% increase in the level of GDP in 2004 would translate into a 1% increase in projected tax revenues in 2008 (and in the intervening years as well). 1% of tax revenues in 2008 will be approximately £3m after the proposed changes to the tax structure have been made.

It will not be possible to finalise the estimates of tax revenues in 2008 using the central growth assumptions until the new GDP figures for 2004 are released. It should, however, be born in mind that there may be an understatement in the preliminary GDP figure in 2004 and, therefore, a similar understatement in the following years, and the results of the analysis should be interpreted accordingly.

Annex C

Summary of Policy Council's proposals

Overall objective

The key objective is maintaining a healthy economy. Managing the States Finances should support that objective.

The Island's future clearly lies in providing a business environment where its residents are in well-paid, secure and sustainable jobs which add value to the businesses in which they are employed.

- Change is in the best long term economic, social and political interests of Guernsey.
- Public sector expenditure (revenue and capital) must be curtailed.
- It is in the long term best interests of Guernsey to maintain and enhance both the finance and non-finance sectors.

Proposals

- The basic rate of income tax on company profits should be 0%.
- Only a limited amount of regulated business (ie, specific banking activities) should be subject to taxation at 10%.
- Trading activities regulated by the Office of Utility Regulation should be subject to taxation at 20%.
- Resident individuals should continue to pay tax at 20% on assessable income.
- Guernsey resident shareholders should be taxed at 20% on their distributed profits and on all rental and investment income but with some rules to ensure compulsory distribution in certain circumstances.
- Significant individual taxpayers should be liable to the standard rate on their non-Guernsey income only up to a defined income ceiling with a total tax payable of £250,000. Guernsey income to be taxed as above.
- 'Wealth taxes' such as inheritance and capital gains taxes should not be introduced.
- The rates of existing indirect taxes should be increased, in particular duties on alcohol, tobacco and Tax on Rateable Values, but less so than previously indicated.
- The General Revenue grant to social security should be reduced by about half ∉20m).
- General Revenue should continue to fully fund the non-contributory elements of the present social security system (Family Allowances, Supplementary Benefit, etc) of around £22m per year.
- Half of the Contingency Reserve (interest and capital) should be used to fund the shortfall in public sector expenditure.
- Income tax reliefs on interest payable and life assurance policies should be less generous.
- The Corporate Anti-Poverty Programme will continue to be a key policy of the States and will need to continue to be funded.
- A system of goods and services tax should be fully investigated, and legislation developed, but not introduced in the short term.

Delivery

In order to move from the existing tax regime to a future competitive regime, a two stage process should be adopted:

Stage one

The States will need to run a deficit budget, funded by use of half of the Contingency Reserve with:

- Robust Public Sector expenditure control with only modest annual increases.
- Existing indirect taxes increased.
- Social Security: the employer rate increased by 1%, selfemployed rates and employee rate staying the same. Upper Earning Limit for employees, employers and self-employed raised to £60,000.
- No Goods and Services Tax.
- The promotion of economic growth.

Stage Two

Having run a deficit budget for three to five years (ie, until 2011/12), and then after taking into account international events, GST history in Jersey and economic performance, evaluate and produce an overall package which sustains the economic position and delivers a balanced States Revenue budget.

Source: www.gov.gg

Annex D

Assumption used in the distributional analysis

The following assumptions have been used to calculate the distributional impact of using different taxes to meet a specific level of income generation – in this case £30m in 2011.

Calculation of the relevant tax base

The relevant tax bases have been calculated using 2004 data, mainly derived from the taxation records:

- Payroll the total income recorded under income from remuneration. This includes income attributed to the self-employed.
- Income the total personal income reported in the tax records
- Consumption personal income, less net savings, less income spent outside the Island, plus visitor expenditure.

All three tax bases have been assumed to increase in line with GDP growth, and have been grossed up to 2011. An assumption has been made that 2% of the 2.5% pa growth in incomes arises from increases in real wages and 0.5% from increases in the number of workers.

For payroll taxes no other assumptions have been made.

For income taxes:

- Personal allowances have increased in line with inflation

For consumption taxes

- The proportion of income that is spent in each spending category in the Household Expenditure Survey, which was conducted in 1998/99, has remained stable for a household with the same real income in 2011 as in 1998/99.

Calculation of impact and different household types

- For **payroll taxes** the tax rate has been applied to earned income. Households analysed either have all unearned income (those over 64) or all earned income.
- For **income taxes** the taxable income of the household has been calculated and the changes in rates or allowances directly applied to the household in question.
- For **consumption taxes** further adjustments have been made with respect to different household circumstances.
- An assumption has been made that the spending pattern and relationship between gross income and spent income revealed in the Household Expenditure Survey (which is an average within each decile) relates to a household of a couple with no children. As a result, variations from this household type will see different relationships between gross income and disposable income (and hence potential consumption spending). The adjustments made are as follows (and have a relatively minor impact).

- Those with children receive Family Allowance and there is an assumption that this is spent on taxed items.
- Pensioners pay less tax (because they have higher personal allowances) and spend less on social security contributions. As a result they have a higher disposable income for any given level of gross income, and therefore, incur more consumption tax.
- Those with a mortgage pay less tax as a result of the allowance against taxable income arising from mortgage interest payments. As a result they have higher disposable incomes for any given level of gross income and, therefore, incur more consumption tax. (If those with mortgages spend the same level of gross income on housing as those without mortgages eg renters their disposable income after housing costs will be the same as those without mortgages, and their spending on taxed items will be similar.)

The household types

The objective is to prove an illustrative range of households, and to illuminate the differences between them. There is no assumption that these household types are representative, or that they represent any particular household. This is particularly true of the illustrated impact of consumption taxes, where individual household's consumption patterns may vary considerably from the average pattern revealed in the Household Expenditure Survey.

^[1] The economic case for a 0%/10% corporate tax rate structure in Guernsey, Paper One, March 2006.

^[2] What are the fiscal options for Guernsey after introducing the 0%/10% corporate tax regime? April 2006

^[3] These are either absorbed as business costs thereby reducing profits or are passed on to customers or are, as in the case of stamp duty on residential property transactions, ultimately borne by the purchaser.

^[4] The impact of employer payroll taxes are more complex but essentially these represent a business tax that is passed on to employees via reduced wages or to customers in the form of higher prices, or is absorbed in the form of lower profits.

^[5] Different tax measures present different risks in this regard. Non-residents can, for example, contribute to employer payroll taxes via lower returns to non-resident shareholders, or visitors can contribute, via higher prices charged, to increased customs duties or to a general consumption tax

^[6] There is a special example of expenditure reduction (or increases) that involves the management of social security funds. Managing surpluses/deficits on such funds, as opposed to setting contribution levels in pay-as-you-go schemes, may well be a matter of managing timing issues rather than a way of cutting spending per se, unless the assumptions

made are regarded as over-optimistic (or pessimistic) on an on-going basis.

^[7] The economic case for a 0%/10% corporate tax rate structure in Guernsey, Paper One, March 2006.

^[8] In this context, it may be observed that new taxes involve set-up costs that may be substantial, as well as on-going collection costs. Changing the rates of an existing tax may be, and usually is, a cheaper way of raising revenue than looking for a new tax base, but may have less desirable distributional consequences.

^[9] For example, the UK Treasury publishes its view as to the long term sustainable real growth rate of the UK economy (currently around 2.5% per annum). Sustainable growth is linked to a view about the relationship between economic growth, unemployment and inflation: the NAIRU (the Non-Accelerating Inflation Rate of Unemployment) is used by policy-makers wishing to manage an economy to produce non-inflationary growth.

^[10] The reverse is also true: across the cycle income should not exceed expenditure. Building up surpluses over the longer term, unless this is against a specific policy objective regarding their future use, will have a depressing effect on the economy.

[11] A word is due here about public borrowing. At present, the Bailiwick has a non-borrowing policy: it issues no debt. The comments above therefore apply to the use of the contingency reserve as the instrument of managing surpluses or deficits. Precisely similar arguments would apply if the Guernsey authorities were to borrow to finance deficits, although here the biting constraint is that current income and current expenditure should balance across the cycle, i.e. there should be no structural deficit. Borrowing to finance capital expenditure, i.e. to invest in public assets, raises different issues: if the capacity of the economy is improved by such investment then borrowing to finance it may be entirely appropriate. This gives rise to what has been termed the 'Golden Rule' of public finance: across the economic cycle borrow only to finance investment.

^[12] Our analysis assumes implementation of these proposals from 2008; in practice some of them could be implemented earlier. And, of course, in the context of the analysis relating to Period 2, proposals for new and/or increased taxes could be implemented earlier than 2011.

[13] We have also undertaken a more detailed comparison of Treasury estimates and our own. The results are shown at Annex A.

^[14] And it is not possible accurately to determine how many self-employed people would choose to incorporate, and thereby shelter some of their profits. There are about 2,800 self-employed people in Guernsey, hence the issue is not insignificant.

[15] Our approach to the analysis of likely revenues is to consider real growth in the economy, and likely inflation, and then to see how this might translate into tax yields, taking account of inflation. The Guernsey Treasury adopts the approach of forecasting nominal tax yields directly. In doing this, however, it makes implicit assumptions about economic growth and about the relationship between economic growth and tax yields as well as an assumption about inflation. In our work we have sought to reconcile the Treasury's assumptions to our own, and this is reported on in the commentary below and in Annex A.

[16] Average incomes in the finance sector were £39,000.

[17] Almost 70% of these were derived from financial services

[18] Around 65% of which were from the financial services sector

^[19] Since 2001 there has been much more overt competition between offshore jurisdictions. Whilst Guernsey needs to ensure its competitiveness is maintained – the 0%/10% proposal has this as its objective – it is unlikely to be able to improve it significantly relative to other jurisdictions and needs to be vigilant in avoiding any deterioration.

^[20] Between 1991 and 2001 immigration dropped from 7,695 to 6,902, and there were over the period almost the same number of leavers as arrivals.

[21] See Section 4.

^[22] Unless such policies are directed towards exploiting 'catch up' opportunities, as explained above. Guernsey has, in all probability, in large measure been through this phase.

^[23] For example, building on the work of the Commerce and Employment Department in its "Building Confidence" report on developing the economy. A key priority for Guernsey must be to develop the skills and competencies of the workforce if international competitiveness is to be maintained.

 $\begin{bmatrix} 24 \end{bmatrix}$ As explained above, the Guernsey Treasury does not make an explicit assumption as to real GDP growth. The Treasury's estimates for tax yield, however, combined with their inflation assumption, equates to real growth of the order of 2%.

[25] It is unlikely that, even in circumstances of low growth, inflation would fall below 2%.

^[26] Oxera's analysis takes account, where appropriate, of the timing of tax payments, e.g. payments of income tax are made in the year after the income is earned.

^[27] Interestingly, taxes on residential property that are used in many jurisdictions as a source of income to local and national governments do not feature as being of significance in Guernsey. This point is referred to below in Section 5.

^[28] There may also be significant variations in the importance of different segments within these two sources. Within the corporate sector there have been quite significant variations in yield by sector, accounted for by the steep rise in yield from offshore insurance and, to a lesser extent, banking in the late 1990's and a fall in both after 2001.

^[29] In other words the total percentage of GDP taken in tax actually declined somewhat. But there is now some evidence that the percentage is increasing again on the basis of new estimates of the outturn for tax receipts in 2005.

[30] Future Fiscal and Economic Structure, Policy Council, March 2006

[31] For consistency, as measured in 2004 prices. This would amount to £278 million in 2004 prices (£297 million in 2006 prices).

[32] The Treasury's implicit inflation assumption is 3%, which would generate real cuts of the order of 1.5% per annum. Such cuts would be difficult to achieve without damaging consequences; this is returned to below in the commentary on the fiscal balance in Sections 4 and 5.

[33] The probable outturn for 2005 is £60 million. This would appear to represent a considerable element of catch-up not likely to be repeated.

[34] Future Economic & Taxation Strategy, Second Consultation Document, September 2005

[35] It is important to recognise that our growth assumption is an average one and in practice growth will vary year by year across the cycle to generate this average. Thus in any one year the GDP growth may actually be above or below our average.

^[36] In estimating GDP in 2007 we have also had to build assumptions about the starting point. GDP figures for 2004 are estimates and no figures are yet available for 2005. The approach we have adopted to address this problem is described in Annex B.

[37] We are aware that the Treasury and Resources Department is currently revising the TRV system, including revisions to charges on residential and commercial property. We are supportive of this approach.

[38] As opposed to addressing a more significant deficit, where the case is much stronger. See below.

[39] It may be of more relevance to the self-employed.

[40] This will include, of course, visitors to the Island.

^[41] The exception to this is where a VAT-type regime is chosen and some sectors are exempt. Exempt businesses (as distinct from zero-rated businesses) do not charge VAT on their sales but may not recover input VAT either. If such businesses are competing internationally with businesses in jurisdictions that have no such tax they will be at a competitive disadvantage.

[42] And the Guernsey authorities have, we understand, started on such an exercise. See footnote 38.