

**A NOTE ON THE ESTIMATION OF THE EFFECT OF
EXCLUDING CERTAIN ITEMS FROM THE GST BASE**

PREPARED FOR THE CORPORATE SERVICES SCRUTINY PANEL

ESTIMATING THE EFFECT OF EXCLUDING CERTAIN GOODS AND SERVICES

The methodology used to estimate the yield was set out step by step, including the inherent limitations, in the report entitled “*Proposal For The Design Of A Prototype Goods And Services Tax – Final Report’ Crown Agents (January 2005)*” (“the CA report”) and the relevant sections of that report are included in appendix 1 to this document. This note specifically describes the way in which the effect of excluding certain items has been estimated and should be read in that context.

As noted in the CA report the base data for the estimates was drawn from both the 1999 household expenditure survey¹ and a dataset constructed from income tax and social security sources.

This survey provides line by line household expenditure data. Expenditure is analysed in sufficient detail to estimate the proportion of household expenditure in the tax base under various scenarios. This approach could therefore be used to estimate proportion of expenditure in the tax base including or excluding food, children’s clothes, books and medicines. The relevant steps in the GST yield calculation could therefore be made with these elements or without these elements in the base as required. Because the household expenditure data was available for a representative household in each quintile the difference in GST borne by a household in each quintile could therefore also be estimated. In each case the calculation was performed as follows:

Household consumption (1999 Household Expenditure Survey)	X
Uplift to 2003 prices	X
Less: untaxed proportion	(X)
	<u>X</u>
Threshold Adjustment (supplies from unregistered businesses)	(X)
Taxable Expenditure	<u>X</u>
Tax borne (@ 3%)	<u>X</u>

The calculation is first performed for each quintile using a tax base including food, children’s clothes, books and medicines. It is then performed again using a tax base excluding these items. As a further refinement the calculation can be performed using a higher tax rate determined heuristically to provide the same overall yield from household expenditure (or indeed the same yield after taking into account any estimated increase in administrative costs / tax leakage). In each case the difference in tax burden for the household can be calculated by comparing the figures.

A reasonableness test of the differences estimated in this manner was performed by means of a second calculation using the data set created from (anonymous) income tax payer social security data, separated into quintiles. For each quintile the calculation is as follows:

¹ A new household expenditure survey is in progress and the results are expected to be available in June 2006.

Gross Income, excluding income taxed at source (2003)	X
Less: income tax and social security	(X)
	<hr/>
	X
Add: income taxed at source (estimated by quintile)	X
	<hr/>
Disposable income	X
Less: savings	(X)
	<hr/>
Total consumption	X
Less: expenditure abroad	X
	<hr/>
	X
Less: untaxed proportion	(X)
	<hr/>
	X
Less: threshold adjustment	(X)
	<hr/>
	X
GST	X
	<hr/>
No of taxpayers	X
	<hr/>
GST per taxpayer	X
	<hr/>

*For an explanation of each line above see appendix 1. For the purpose of the quintile calculations, in the absence of better information it has been assumed that income taxed at source, savings and expenditure abroad are proportional to taxpayer income. Although these assumptions may not be accurate the margin of error will be lower when the **difference** attributable to alternative tax bases is calculated (compared to the absolute value of GST burden for each taxpayer) because the assumptions are applied consistently.*

CAVEATS

Several important caveats must be borne in mind:

- The significant effect on the administrative costs and risks of tax leakage of a departure from a simple GST is an important consideration that would need to be taken into account. For details see appendix 2.
- The above calculations assume, for simplicity, that the items excluded for the tax base will be zero rated. If the items were to be exempted an irrecoverable GST burden would fall on the supplier and, insofar as this is passed on to the customer a similar, but smaller, effect could be expected.
- The effects of any change in purchasing behaviour (i.e. households may purchase more excluded items and less taxed items) have not been considered.
- The effect of rate changes / excluding items on other components of the tax base (especially visitor expenditure) would also need to be considered.

APPENDIX 1 – EXPLANATION OF METHODOLOGY
(EXTRACT FROM THE CROWN AGENTS REPORT)

4.2. THE REVENUE RATE/YIELD

The following paragraphs contain our methodology for estimating the potential base of a possible GST and the likely revenue yields for three separate structures of the tax using the latest available data (2003). Given the lack of information on many variables that enter the estimation process, for which bold assumptions had to be made, and the major policy decisions that have yet to be made regarding certain crucial aspects of the tax, the estimates given below should be considered no more than the order of magnitudes at best.

The starting point for us was the data on incomes and consumption patterns by income classes developed by OXERA Consulting. Advisors from OXERA Consulting did a superb job of utilising the combined income data of individual income tax payers from the Income Tax Department and the income data of social security contributors and recipients (generally low income earners) from the Employment and Social Security Department to generate a profile of Jersey households by income classes.

Then, taking the information on the consumption patterns of Jersey households from the *Household Expenditure Survey*, 1999, and using a Goods and Services Tax (GST) structure for Jersey, modelled after the UK VAT, they established how a five per cent GST can easily generate about £30.5 million from the households sector alone and another £11.5 million from tourists expenditure in Jersey.

This innovative approach helped them provide the policy makers with useful framework for key decisions relating to the potential GST base and revenue yield. Given the high quality of data manipulation and analysis performed, this section (Section 4) builds on the work already done by OXERA Consulting.

4.3. LIMITATIONS OF OXERA'S CALCULATIONS

The OXERA methodology and calculations, though extremely useful as a starting point for the calculation of the potential GST base, its revenue yield and its cost of living impact on households in different income brackets, have some limitations. Some of these are noted by the authors themselves²: First, it is assumed that there are no "net" household savings - even by higher income brackets - and that all households in Jersey effectively consume or spend their entire disposable income, after paying direct taxes. Second, it is assumed that all household expenditures are incurred in Jersey - and none are incurred abroad or "off Island".

While this may have been owing to the non availability of data on household spending abroad, the fact is that Jersey households do travel abroad and spend their incomes abroad (including for children's education and purchases abroad), on which GST or the VAT accrues to foreign governments. Third, the household consumption pattern data used in their calculations relate to the period March 1998 to March 1999 and it is unclear if the consumption pattern has changed since then. (They would certainly have changed by 2008 when the GST is planned to be introduced in Jersey). Fourth, in their calculations it is assumed that the consumption items are either taxed or zero-rated and that none of the items are exempted. In reality, however, most GST systems have both zero ratings and exemptions (in fact, more items are exempted than zero rated!). Fifth, OXERA's aggregate income data includes income payable to non resident partners of partnerships, consumption of which takes place abroad, while it excludes incomes subject to tax at source consumption of which takes place in Jersey. For GST base calculation purposes, however, the former should have been excluded while the latter should have been

² See "States of Jersey: Scope of GST" (Oxera, April 19th, 2004)

included. Finally, it is assumed in OXERA's calculations that all tourist expenditures in Jersey will be taxed and none will be zero-rated. In reality, however, tourists characteristically buy some items for export and these are normally zero-rated. In addition, they do make purchases from small traders who, typically, are exempt from GST because they are below the registration threshold.

There are a few other limitations also. First, all GST systems have an annual turnover threshold below which the suppliers and traders are exempt and are not required to be registered, primarily on administrative grounds. (In the U.K. this amount is £56,000). What this means is that the value added component of the sales of such traders and suppliers escape taxation.

Second, the economy has other consumers too, besides households and tourists. This may include certain profit making but exempt businesses (other than those which are below the turnover threshold) as well as charitable, religious and non-profit institutions, and the government, all of which purchase goods and services for providing services that are often unpriced. The GST paid by them on their purchases is likely to become a "sticking" tax and should be counted in the GST base. (Of course, purchases by government may not generate any "net" revenue, as the government expenditures would grow by the same amount).

Finally, if there are certain incomes that are not taxed (e.g. capital gains or incomes earned by the migrant workers who remain outside the income and social security tax nets), or are not reported to the income tax authorities, the consumption out of such incomes could well escape from the calculations of the tax base.

However, most of the limitations of the OXERA calculations are owing to the lack of relevant data in Jersey. For many of these items the data simply do not exist at present.

4.4. OUR METHODOLOGY AND ESTIMATES

Taking note of the above-described limitations, we present below a fuller and more detailed description of the methodology and the assumptions we have made in estimating the GST base³. Our methodology is applied to estimate the base of a broad based GST of the type that exists in New Zealand and Singapore (Scenario 1). It is also applied to estimate the base of a GST that parallels the UK VAT (Scenario 2) and a GST modelled after the basic framework of VAT described in the EU Sixth Directive (Scenario 3). The revenue implications of each of these Scenarios for Jersey are then calculated and noted in section 4.9.

4.5. BASE OF A BROAD - BASED GST (SCENARIO 1)

As noted above, our framework for estimating the GST base for Jersey uses OXERA's basic methodology but adjusts it for some of the limitations noted above, particularly the omissions relating to the technical and structural aspects of the GST.

Table 2 below presents our basic framework along with the estimates of the GST with the broadest possible base (Scenario 1) as well as two alternative scenarios (Scenarios 2 and 3).

³ The advice and assistance of Lindsay Proudfoot (Director, Finance and Information Systems, Income Tax Department), Duncan Millard (Head of Statistics Unit, Policy and Resources Department) and Fod Barnes (Senior Adviser, OXERA Consulting) in the development of the GST base estimates contained in this note is gratefully acknowledged.

Table 1: Estimate of Potential GST Base, 2003

POTENTIAL GST BASE

=

**Potential GST Base I (Households) + Potential GST Base II
(Tourists) + Potential GST Base III (Businesses) + Potential
GST Base IV (Government and Public Sector)**

Minus

Estimated Collection Leakage in early years, if any

Estimate of Potential GST Base, 2003

(For four sectors: Households; Tourists; Businesses; Government/Public Sector)

	Broad Based (Scenario 1)	UK (Scenario 2)	EU Sixth Directive (Scenario 3)
I. <u>HOUSEHOLDS:</u>			
			(£ Million)
Incomes earned in Jersey (including social benefits and pensions received)			
Plus			
Incomes earned outside Jersey			
Equal			
World Wide Incomes of Jersey Households			
Minus			
Incomes not reported to or covered by Income Tax Department ⁴			
Equals			
Incomes reported to Income Tax Department, excluding income taxed at source (2003) ⁵	1,622	1,622	1,622
Minus			
Taxes Paid - income tax and employees' social security contributions ⁶	239	239	239
Plus			
Income subjected to tax at source ⁷	97	97	97
Equals			
Disposable income in Jersey ⁸	1,480	1,480	1,480
Minus			
Net savings by households ⁹	81	81	81
Equals			
Total household consumption ¹⁰	1399	1,399	1,399
Minus			
Household consumption abroad ¹¹	100	100	100

⁴ These incomes could include those earned and kept abroad, incomes earned by casual, less than full-time and migrant workers, as well as untaxable capital gains and taxable incomes earned but unreported to the Income Tax Department.

⁵ Data taken from the Income Tax Department.

⁶ This includes income tax (£178million) and social security tax paid by employees (£61million). The data for the former was taken from Income Tax Department and the latter is based on the estimate prepared by OXERA.

⁷ Data taken from the Income Tax Department.

⁸ This estimate is broadly consistent with the estimate of net cash income, before housing costs, derived from the Income Distribution Survey, 2002.

⁹ Lacking data, it is assumed that net savings are about 5% of household incomes reported to the Income Tax Department (£1,622 million).

¹⁰ This estimate is broadly consistent with the aggregate household consumption derived from the Household Expenditure Survey data for 1998/99 adjusted for retail price index (RPI).

¹¹ According to available data, UK residents spent, on average, about £476 overseas per year in 2003 (source: Office of National Statistics). Adjusting this amount for the Gross National Income per capital of Jersey for 2003 (£33,600) relative to that of the UK (£18,800) and the size of Jersey population (87,000) yields a total amount of

Equals			
Household consumption in Jersey	1,299	1,299	1,299
Minus			
Household expenditures on zero-rated (untaxed) items ¹²	207	629	363
Minus			
Value added portion of consumer spending on taxed items purchased from businesses below the threshold ¹³	44	27	37
Equals			
Taxable household consumption (Potential GST Base I) (2003 Data)	1,048	642	898

II. TOURISTS EXPENDITURES IN JERSEY:

All expenditures by tourists in Jersey ¹⁴	213	213	213
Minus			
Expenditures by tourists on specifically zero rated (exported) items ¹⁵	2	2	2
Minus			
Local value added component of their expenditures on purchases from GST-exempt sectors ¹⁶	9	9	9
Equals			
Taxable tourist expenditures (Potential GST Base II) (2003 Data)	202	202	202

about £ 74 million. Jersey households, however, also spend more on education overseas than the UK households do. The total amount has, therefore, been raised to £100 million.

¹² Using the UK model where all food and children's clothing are zero rated, about 48% of household expenditures will not be in the tax base. In the broad base scenario it is assumed that only household expenditures on housing costs and social protection services will be *zero-rated*; and the household expenditures on financial services, life insurance, trade union dues/professional dues, museums, zoos, libraries, exhibitions, and postal services will be *tax- exempt*. These add up to about 16% for an average household. In the EU Sixth Directive scenario, health and education expenditures are also exempt; therefore, almost 28% of the household expenditures will not be in the tax base. In all cases the proportions of these items in the household expenditures are calculated from the *Household Expenditure Survey*, 1999.

¹³ Once again, lacking relevant data, 10% of taxable household expenditures are assumed to be purchases from businesses below the threshold and 40% of the sale value is assumed to be their value added. (According to the Value Chain Survey recently completed by the Statistics Unit, the purchases of the wholesale/retail and hotels/restaurants/bars sectors were about 60% of their purchases plus value added or total value, leaving the remaining 40% to be the share of value added in total value). Hence about 4% of *taxable* household consumption of £1,092 million under Scenario 1 (and £670 million under Scenario 2 and £936 under Scenario 3) is assumed to be purchases from such businesses.

¹⁴Source: Jersey Tourism, *Annual Report*, 2003.

¹⁵ This could cover purchases of items like drinks and tobacco that the tourists take home.

¹⁶ This will cover expenditures on eating/drinking (£43 million), on-land transport (£14 million), entertainment and leisure (£8 million), gifts and souvenirs (£16 million), on-land tobacco (£0.5 million), and miscellaneous other expenditures (£28 million). Lacking proper information, it is assumed that 20% of these tourists' expenditures (totalling £109 million) will be incurred on purchases from businesses below the threshold and the ratio of value added of businesses below the threshold (untaxed) to their total turnover is 40%.

III. BUSINESSES¹⁷:

Financial Sector: Taxed input purchases of tax exempt financial sector ¹⁸	371	371	371
Plus			
Other Sectors: Value of GST-taxed inputs of other tax-exempt entities, such as religious, charitable and non profit institutions-without any priced services-as well as others, including public entities, e.g. Car Parks, Postal Services, who often provide services without invoices to general public and other businesses ¹⁹	30	30	30
Equals			
Taxable purchases of GST-exempt businesses resulting in “sticking” input taxes (Potential GST Base III) (2003 Data)	400	400	400

IV. GOVERNMENT/ PUBLIC SECTOR²⁰:

Non trading Committees: Taxed purchases of goods and services by non-trading Committees on revenue account as well as capital account ²¹	74	74	74
Plus			
Trading Committees: Any taxed purchases of goods and services by agencies and bodies under Trading Committees e.g. Harbours and Airport, who are unable to “pass” the input taxes onto the consumers and business purchasers of their outputs and services ²²	4	4	4
Equals			
Taxable Expenditures of Government and other public sector (Potential GST Base IV) (2003 Data)	78	78	78

¹⁷ This category covers taxed inputs entering into supplies by other GST-exempt businesses (other than those below the turnover threshold) – these will form “sticking” input taxes of such businesses passed on to other businesses (Taxed inputs of businesses below the threshold, which are supplying to domestic households and tourists, have already been accounted for above!)

¹⁸ Data are taken from the *Survey of Financial Institutions*, 2003. To the extent financial institutions sell services to other financial institutions i.e. there are intra financial sector purchases this estimate may be an overestimate.

¹⁹ Lacking data, a token amount of £30 million (equivalent to about 1% Jersey’s Gross National Income for 2003) has been put in.

²⁰ Of course, there will be no “net” revenue impact of this part of the tax base!

²¹ This includes the non-trading Committees’ direct purchases of goods and services (£59 million) and 10% of indirect purchases (£54 million), other than manpower expenditures and grants and subsidies, included in the revenue expenditures for 2003. 20% of their capital expenditures of such Committees are also assumed to be on consumables and therefore GST taxable. States of Jersey Treasury, *Financial Report and Accounts*, 2003

²² Assumed to be about 10% of their total revenue and capital expenditure in 2003.

Our framework starts from the basic presumption that the GST base in Jersey will consist of the following four elements:

1. Taxed Consumption of Jersey Households
2. Taxed Expenditures of Tourists
3. Taxed Sales by Jersey Businesses to other Businesses
4. Taxed Purchases of Goods and Services by Government and Parastatal Bodies

For the first two, we employ the same methodology as used by OXERA for incomes, taxes, and disposal incomes in Jersey as well as the aggregate data on tourist expenditures and the items tourists spend money on, while updating those to the latest year (2003) for which data are now available. From that point on we part company and present our own estimates.

Pending the availability of relevant data, Table 2 then makes many broad stroke assumptions, specially regarding (1) the overall households savings rate in the economy; (2) the share of off-Island consumption of Jersey households in total household consumption; (3) the average proportion of value added of (potentially GST exempt) smaller businesses in Jersey in the value of their sales; (4) the structural features of a broad-based GST in respect of zero ratings and exemptions and the extent to which they relate to domestic household expenditures, tourist expenditures, businesses and the government. All these are fully described in the footnotes to the table and must be revised once the relevant data and information become available.

Households

We assume that under Scenario 1, or the broad-based GST, the following expenditures of the households will be *zero-rated (i.e. not taxed)*:-

- Expenditures on housing rents and mortgages.
- Expenditure on social protection services and the household expenditures on the following items will be *tax-exempt*:-
 - Financial services.
 - Life insurance.
 - Trade union and professional dues.
 - Expenditures on museums, zoos, libraries, and exhibitions, and
 - Postal services.

Using the data on the consumption patterns of Jersey households, given in the *Household Expenditure Survey*, 1999, it appears that the household expenditure that will fall outside the GST base and that will go untaxed will, on average, be about 16 per cent:

Income Group	Group 1	Group 2	Group 3	Group 4	Group 5
Untaxed household expenditure under a broad based GST	12%	15%	17%	17%	16%

It is estimated therefore that £1,048 million of household expenditures in 2003 would have been subject to a broad based GST. (See Table 2 for details of calculations and the assumptions made underlying this estimate and those that follow).

Tourists

Assuming that tourists expenditures on items of exports, such as the purchases to take home (e.g. tobacco and alcohol products), will be *zero-rated*: and they will also enjoy the lower taxation of some of their purchases of services, such as on- Island transportation, entertainment and leisure, eating and drinking, *and* goods, such as gifts and souvenirs, on-Island tobacco, purchased from smaller (*tax-exempt*) businesses below the turnover threshold, an estimated £202 million of tourist expenditures would have been subject to GST in 2003. With the stagnant tourism in Jersey, we have assumed this amount to remain constant at about £202 million.

Businesses

Assuming that the financial sector is exempt (and not zero-rated) from GST, as occurs in all countries with the broadest possible base of the GST, their purchases of goods and services, estimated at £371 million for 2003 would be in the tax base. In addition, the purchases of goods and services of other tax-exempt sectors (including some public entities, religious, charitable and non profit institutions) would bear a GST on their inputs. This amount has been roughly put at £30 million for 2003.

All told, as a first approximation, the business sector tax base could be almost £400 million - primarily due to the huge role of the financial sector in Jersey's economy (almost 50 per cent of its Gross National Income). The decision regarding the exemption versus zero rating of this sector, or the amount of "sticking" tax collected from this sector, can thus make a huge difference to the GST base and its revenue yield.

Government and Parastatal Bodies

Government (Non Trading Committees) purchases of goods and services - both directly and indirectly - were about £74 million in 2003. Another small amount of about £4 million may be taxable on account of some of the Trading Committees' operations.

As was noted above, the purchases of government and non-profit making parastatal bodies would not necessarily provide a "net" revenue yielding GST base - after all, government will effectively be paying to itself! The tax base of about £78 million should nevertheless be recognised in the overall GST base calculations.

4.6. BASE OF THE UK TYPE GST (SCENARIO 2)

The basic difference between a broad based GST (Scenario 1 above) and the GST that parallels the UK VAT (Scenario 2) is the extent of zero ratings.

Applying the UK type GST will mean zero rating of food and children's clothing for Jersey households, in addition to the usual zero ratings and exemptions.

Using the data given in the *Household Expenditure Survey*, 1999, we estimate the household expenditure that will go untaxed for each of the five household groups under Scenario 2 to average about 48 per cent (as against 16 per cent under the broad-based GST).

Income Group	Group 1	Group 2	Group 3	Group 4	Group 5
Untaxed household expenditure under a UK type GST	47%	47%	50%	50%	48%

4.7. BASE OF THE EU SIXTH DIRECTIVE TYPE GST (SCENARIO 3)

Applying the European Union Sixth Directive type GST to Jersey will mean exemptions for medical and education services, in addition to the usual zero ratings and exemptions.

Using the data given in the *Household Expenditure Survey*, 1999, we estimate that the household expenditure that will go untaxed for each of the five household groups under Scenario 3 will average about 28 per cent:

Income Group	Group 1	Group 2	Group 3	Group 4	Group 5
Untaxed household expenditure under a EU 6 th Directive type GST	21%	23%	26%	30%	29%

Table 2 below contains the estimates of the GST base under the above described three scenarios.

4.8. LIMITATIONS OF OUR METHODOLOGY AND ESTIMATES

Our methodology and estimates too have many limitations.

To begin with, the basic data normally needed to make the GST base calculations, such as the household savings rate, the levels and composition of imports and exports, gross capital formation, including residential and other construction, input-output ratios for various sectors, etc. are not readily available in Jersey at present. Under the circumstances, we had to make a number of assumptions, which may or may not be valid. It is only fair, therefore, that the policy makers are made aware of them and these are noted below.

The net savings rate (net of “dissavings” by the lower income groups or the spending by other households in any given year from out of their past savings, if any) for all Jersey households is assumed to be five per cent of their total income²³. Unfortunately, such data are unlikely to be available any time soon for Jersey; therefore best judgement on this subject would need to be made.

Other data that were unavailable were the likely amounts of purchases by Jersey households and tourists from the “smaller” traders, who are likely to be exempt from the GST on administrative grounds.

Pending the decision on the level of small trader exemption (which might be the annual turnover level as high as £300,000 - for further details see also Section 4.11), we have assumed that the Jersey households spend 10 per cent of their total expenditures and the tourists spend 20 per cent of their expenditures, excluding that on accommodation, on purchases from small traders. We also needed some idea of the value added of such

²³ UK household savings rate for 2002 was 5.5% (Source: OECD). The cost of living in Jersey being normally higher than that prevailing in the UK, Jersey’s household savings rate may well be around 5%.

traders that will essentially escape taxation. We have assumed this to be 40 per cent of the total value of their sales²⁴. As can be seen, we have made some very bold assumptions regarding all these factors. Data has recently been collected about the turnover levels of a sample of businesses (declared to the Income Tax Department), which we have used to analyse the scope of fixing a high annual turnover threshold, perhaps as high as £300,000, for small trader exemption under the GST.

Data have also been recently prepared in the Statistics Unit of the Policy and Resources Department that has helped us establish some indicative input-output ratios of various sectors of the economy of Jersey. A value chain survey has also been completed recently in Jersey that has helped us make better estimates of these ratios. Even with the availability of these data, judgements still remain to be made regarding the proportions of expenditures that Jersey households and tourists incur on their purchases from traders and suppliers with turnover below the GST threshold, once decided.

Exports are always zero rated under GST everywhere in the world. While the agricultural and manufacturing exports from Jersey may be small, and can be ignored for purposes of GST base calculations, data would, nonetheless, be needed of tourists' purchases for export. For the present, we have assumed this to be negligible - only about one per cent of their total expenditures in Jersey.

Three other factors that would have a very large impact on the potential GST base, and therefore the revenue potential of the GST, all relate to the yet to be decided structure of the tax: (1) What will be zero-rated? In the attached table, we have assumed three Scenarios. Under the broad-based GST, for example, we have assumed that only two items of household consumption (housing costs - rents as well as mortgage costs - and spending on social protection services) will be zero-rated.

Under the United Kingdom type GST, food and children clothing are also assumed to be zero-rated. (2) What will be exempt, other than purchases from small traders? Once again under the broad-based GST, we have assumed that the household purchases of financial services, construction of residential properties, life insurance and postal services, payments of trade union dues/professional dues, and charges for museums, zoos, libraries and exhibitions would be exempt from GST, which form relatively insignificant proportions of household expenditures. Under the EU Sixth Directive type GST, medical and education expenditures of the households will also be exempt in addition. (3) How will the financial sector be treated under the GST? We have assumed that it will be exempted, as is the case in many other countries of the world. If so, £371 million of the purchases by this sector will be in the GST base, equivalent to almost one third of the rest of the GST base in the case of the broad-based GST.

If, on the other hand, they were zero-rated, that much of the GST base would not be available for taxation under GST and would need to be excluded.

4.9. OVERALL PICTURE - POSSIBLE GST BASE AND THE NEEDED RATE

The following table presents our best estimates of the GST base (excluding the non-revenue yielding tax base of the consumption by the government and the parastatal bodies) under the selected three Scenarios, applying our methodology and assumptions. The respective revenue yields at the GST rates of 3, 4 and 5 per cent are also shown in this

²⁴ According to the Value Chain Survey, recently completed by the Statistics Unit, the purchases of the wholesale/retail and hotels/restaurants/bars sectors, where most of the small traders are concentrated, were about 60% of their purchases plus value added (or total value), leaving the remaining 40% to be the share of value added in total value.

table. For comparison purposes the GST base estimates and the revenue yield estimates are shown *with* and *without* the financial services sector.

	GST base (£'million)				Revenue yield at different rates (£'million)		
	household	tourism	business	Total	3%	4%	5%
Broad Based							
(financial services zero rated)	1,048	202	30	1,280	38	51	64
(financial services exempt)				1,651	50	66	83
UK							
(financial services zero rated)	642	202	30	874	26	35	44
(financial services exempt)				1,245	37	50	62
EU 6th Directive							
(financial services zero rated)	898	202	30	1,130	34	45	57
(financial services exempt)				1,501	45	60	75

It is obvious from this table that, based on 2003 data, a broad based GST would likely have a total tax base from all four sectors of the economy (households, tourists, businesses, and government and parastatals) of £1,651 million, equivalent of about 63 per cent of country's GDP (of £2,610 million), when financial services are exempt, and about 49 per cent, when financial services are zero rated, as against the UK type GST that would probably have a base equivalent of only 48 per cent, when financial services are exempt, and of only 33 per cent, when financial services are zero-rated.

It also appears from this table that in order to achieve the revenue target of £45 million, the authorities do have a number of choices:

If financial services were zero rated, the broad-based GST (Scenario 1) is most likely to yield the needed revenue even at 4% rate, while the UK type GST (Scenario 2) will not do that at all. At five per cent tax rate, both the broad-based GST (Scenario 1) and a GST based on EU Sixth Directive (Scenario 3) are likely to yield revenue which would provide a significant amount of cushion for meeting the tax administration costs, the "loss" of revenue due to collection inefficiency, if any, as well as the cost of the promised income support scheme.

The broad based GST would of course offer a greater cushion (£19 million) than the GST based on the European Union Sixth Directive (£12 million). The cushions may be even higher depending upon the amount of consumption generated by incomes that are not taxed, e.g. capital gains or the incomes earned by the migrant workers who remain outside the income and social security tax nets, or are not reported to the Income Tax Department.

The incomes or revenues that might be derived from the above are not covered by our estimates. The starting point of our estimates are the reported and taxable incomes.

The estimated cushions will certainly be far higher, were some revenues to be raised from the financial sector even as the sector remains zero rated under the GST.

If, however, financial services were exempt (rather than zero rated), the GST rate can be even lower. With a broad-based GST, the rate can be as low as three per cent while the GST based on the European Union Sixth Directive and the United Kingdom type would require a tax rate of at least four per cent to yield £45 million or more.

Of course, at these rates, different amounts of surplus revenues would be available for meeting the tax administration costs, the "loss" of revenue due to collection inefficiency as well as the cost of income support scheme.

We fully recognise the significance of the financial sector and the central place it has in the Jersey's economy. The feasibility of exempting some or the entire financial sector from the GST will obviously hinge on its competitive position and the decision regarding the tax treatment of this sector under the GST will be crucial and will need to be taken extremely carefully. (For further information on this, see Paragraph 4.14).

4.10. FINAL CAVEATS

As noted above, besides the data difficulties, there are at least three major policy decisions - regarding zero rating, exemptions and financial sector treatment - that are yet to be made and which would have the most significant impact on the GST base and the likely GST rate that would be needed to generate £40-45 million.

The authorities would therefore urgently need to make these policy decisions and early in order for the drafting of the GST legislation to begin in earnest. The decision regarding the level of turnover threshold for GST registration is also extremely important for the GST base.

One final caveat: Our calculations in Table 2 have been made using the data for 2003. (The consumption pattern data used in the calculations, in fact, relate to the period 1998-1999.)

By the year 2008, when the GST is likely to be adopted, many changes would have taken place - including possibly the international economic environment. The GST base and rate calculations would, therefore, need to be updated and refined in light of new data and economic circumstances closer to the time of its introduction.

APPENDIX 2 – ADVANTAGES OF A SIMPLE GST
(EXTRACT FROM THE CROWN AGENTS REPORT)

3.4 WHY CHOOSE A SIMPLE GST?

A **simple** GST is one that has a broad base and a single positive rate. It requires few zero rates (other than for exports and international transport of goods and persons); few exemptions (beyond the usual ones for small traders, the financial sector, construction of residential properties, medicines, books and newspapers, public broadcasting, postal services, etc); and an invoice-based collection and administration system, with as few special schemes as possible.

Being a tax with a single positive rate, the simple GST minimises the costs of compliance for the traders and suppliers. The costs of administration for the government and the tax authority are also low because of the built-in self-policing character of the tax implicit in the input tax credits only against output taxes.

The simple GST also ensures that the effective burden of the tax on the consumer is exactly the same as the nominal rate of the tax and the customer knows exactly what he/she is being charged by way of GST. The tax therefore treats all consumers fairly.

Finally, a simple GST treats all businesses uniformly, with minimum deviations, and thus minimises the distortions in the allocation of resources in the economy. It also maximises the revenue yield for the government at the lowest possible tax rate.

A **complicated** GST, on the other hand, is one that consists of many more zero ratings, exemptions and special schemes, all of which tend to narrow the tax base, complicate tax administration and make tax compliance cumbersome and costly.

Traders with a mixture of sales of zero-rated, exempt, and taxable supplies have to keep separate accounts for each of these categories of sales, imposing on them a huge additional burden of compliance. Such traders can also easily be tempted to evade taxes on their taxable supplies.

Extensive zero ratings and exemptions generate continuing pressures from taxable sectors for equity and therefore zero ratings, exemptions, or special treatments for them as well.

Consumers having different consumption patterns end up paying different amounts of taxes and bearing very different levels of tax burdens under a complicated GST. Different effective tax rates for different items of consumption end up discouraging consumption and therefore the production of certain items more than others, thereby creating undue and undesirable distortions in the use of resources in the economy.

By virtue of its narrower tax base, the complicated GST also requires a much higher rate to yield a given amount of revenue than a simple broad-based GST does - i.e. fewer items attract a higher rate of tax to achieve the same revenue yield.

Many countries have, therefore, attempted to adopt a simple GST, with as few exclusions and exemptions as possible, in order to make the tax a truly broad-based tax on domestic consumption, with no differentiation in the tax rates, other than the introduction of a zero rate for very limited categories of items.

The GSTs of Singapore and New Zealand represent by far the best examples of simple GST while VAT in the United Kingdom is an example of a complicated GST.

The main reason for the complications in the United Kingdom system is that it attempts to provide relief to lower income groups by zero rating food and children's clothing - which is known to be an extremely poor instrument of relief, especially when compared with an

income support system appropriately tailored to compensate the lower income groups for the burden of GST.

An income support system is a superior and far more effective instrument of relief than a tax rate reduction. It is targeted; it is not susceptible to abuse; and its budgetary cost is transparent and known with a degree of certainty.

A GST based on the United Kingdom model would also be far more cumbersome and costly both in administration and in compliance.

We therefore recommend that, given the extra costs involved in administration and compliance, the inclusion of such items as food and children's clothes in the tax base of the GST is desirable, subject to an effective income support mechanism, since the resulting effect on the taxpayer will be that he or she will pay, overall, a lower amount of tax.

Finally, a broad-based, low-rate GST minimises economic distortions. Since all goods and services are equally affected, customers are less likely to change their spending behaviour.