

**Norfolk Island:
Recent Economic Performance,
Present Situation, And
Future Economic Viability.**

Is There A Case For Change?

**Access Economics Pty Ltd
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EXECUTIVE SUMMARY

This independent study by Access Economics was commissioned by the Administration of Norfolk Island. The terms of reference require Access Economics to undertake an analysis and report on:

1. Norfolk Island's current economic position against the background of the Island's economic situation over the last five years.
2. The Island's future economic viability if the current economic framework is maintained and, if appropriate, recommendations for change.
3. The provision of an economic model suitable for the Island's needs (including key performance measures and indicators) which could be put in place to provide the Government with reliable and informed reports on economic performance on an ongoing basis.

E.1. Recent Economic Performance & Present Situation

E.1.1 Data Limitations

There are limited available statistical indicators of the recent general economic performance of Norfolk Island. This hampers attempts to assess how the Island economy - both private and public sectors - has been performing.

The main areas of the economy where comprehensive data is available are the public sector, population and immigration records. A census collected every five years is the only source of information on employment and unemployment. A household expenditure survey was conducted in 1995 and provides a range of information on the household sector, but as the survey was a one-off it is not possible to use this information to assess changes. (The survey had a very low response rate, in any case.)

E.1.2 Public Sector

After three years of deficits, the Norfolk Island Government budget returned to surplus in the 1994-95 financial year. It moved further into surplus in 1995-96 aided considerably by repayments of capital from the Electricity Service and Norfolk Telecom.

Within total Government revenue, collections from several revenue items are falling. The revenue from the Financial Institutions Levy (and stamp duty on cheques) has been falling, possibly partly due to the disincentive effects of this levy, but perhaps also due to lower levels of turnover. Collections from Company Fees have also fallen considerably in recent years.

On the expenditure side, growth has averaged 7% per annum over the past five years. Over the same period, inflation on Norfolk Island (based on the Norfolk Island Retail Price Index) has averaged 3% per annum. The number of users of government services (namely the local population) has been falling by 2% per annum.

In order to keep revenues rising to finance growth in expenditures, three main measures have been implemented in recent years: (i) an increase in the Accommodation Levy to \$1 per hot bed (previously a per room charge); (ii) increasing the Departure Fee to \$25 from \$15 in 1990-91; and (iii) increasing the

fuel levy to 20¢ per litre (from 10¢ per litre). Increases in Customs Duty rates and the Financial Institutions Levy occurred six years ago.

Overall, revenue has increased by an average 7.8% per annum over the past five years. This revenue has been raised from a population on the island (ordinary residents, plus the average daily tourist population) that has fallen at an average rate of 1.3% per annum over the past five years.

E.1.3 Saving Performance

Norfolk Island has an emerging saving problem. There is evidence of public sector dissaving (see below). Increased saving is required for several reasons. (i) to finance the growing needs of an ageing population; (ii) to make provision for essential infrastructure (both depreciation and net investment); and (iii) to build up the financial assets of the Island to diversify its sources of income away from heavy dependence on tourism exports. At present these requirements appear not to be addressed, at least as far as the public sector is concerned.

E.1.4 Population

The resident population of Norfolk Island has declined over the past five years. In 1991-92 there was an average resident population of 1,971, and in 1995-96 the average population had fallen to 1,807. This situation appears to be continuing into 1996-97 with the resident population at 6 August 1996 falling to 1,772. While no estimates of activity in the private sector are available, it is reasonable to expect that such a considerable decline in population from 1,971 to 1,772 (a 10% fall, or an average of 2% per year) would have a significant impact on the volume of activity on Norfolk Island.

E.1.5 Tourism Performance

Tourist numbers have risen on average by 4.5% per annum for the past two financial years, after being flat for the preceding four years.

However, one of the main issues of concern is the decline in tourism export earnings. While tourism *numbers* have increased, those tourists, on average, appear to be staying for a shorter duration and spending less per capita. The estimated injection of income to the Norfolk Island economy from tourism export earnings has been falling in real terms by 2.2% per annum over the past five years. This trend is not unique to Norfolk Island. Tourism operators around the world have faced lower yields from tourists as competition increased. Based on the current trends in per capita (real) spending, a 3% increase in tourism export *earnings* might require an 8% increase in tourist *numbers*. Alternatively, a reversal of the recent decline in real per capita spending will be needed.

A related issue of concern is the net emigration from Norfolk Island. The resident population of Norfolk Island has fallen 10% - from close to 2,000 five years ago to below 1,800 currently. Much of the decline has been in the temporary population of permit holders (General and Temporary Entry Permit holders). This population typically services the tourist industry and the decline in numbers is consistent with the observed real income (and employment) decline affecting tourism performance.

E.2. Long-Term Structural Problems

E.2.1 The Nature Of Norfolk Island's Future Problems

While to date Norfolk Island has, on some measures, performed reasonably satisfactorily, there is evidence that the Island faces several longer-term problems of a structural nature that are likely to threaten its long-term viability. These are as follows:

1. A tax bias against inbound tourism. While its stated policy is to promote tourism growth, the fact that the Island is raising more than 40% of total government revenue from tourists - the source of most of its export income - makes the Island less competitive than it otherwise could be. This may pose a serious threat to the long-term viability of Norfolk Island.
2. A lack of provisioning for long-term liabilities associated with the ageing of the population, the replacement of depreciated assets and the provision of new infrastructure.
3. A heavy reliance on revenue derived through Government monopolies.
4. A tax that discourages saving - the Financial Institutions Levy - at a time when more saving is needed.

In terms of public sector performance, Budget policy has contributed to each of these problems.

The Norfolk Island Government has delivered a Government Budget surplus in 1994-95 and 1995-96, after Budget deficits in the preceding three years. Taken at face value this is a good result. However, in part the Budget has been brought into surplus as a result of one-off repayments of capital. There are grounds for concluding that such transactions, being of a capital nature, should not be treated as 'above the line' revenue, and, while affecting the *cash-based* measure of the Budget balance, they would not affect the *underlying or operating balance* Budget bottom line. The remainder of the expenditure financing task includes heavy reliance on taxing tourists and revenue contributed through monopoly enterprises.

Over recent years, the Government's revenue has mostly covered only recurrent expenditure. There has been no provision for financing capital depreciation or for accumulating net assets. The estimated net assets of Norfolk Island's public sector have been flat in nominal terms, and falling in real terms (ie, after adjusting for inflation). The assets of several key Government enterprises have been run down in recent years, particularly those of the Electricity Service, Norfolk Island Airport and Norfolk Telecom. Each of these enterprises has had a reduction of net assets of around \$200,000 over the period 1994-95 to 1995-96. This reduction in net assets should be covered by a depreciation allocation from their operating surpluses, rather than allowing all profits to flow to Government revenue. That has not been done: rather, revenue has been allocated to recurrent expenditure. There are dangers in an economy slowly consuming the capital embodied in Government enterprises - it is a form of dissaving.

E.2.2 Are These Problems Likely To Become Serious Soon?

Since Access Economics visited Norfolk Island, potential pressure on the Island economy has increased because, on 29 January 1997, Ansett announced that it would discontinue the Norfolk Island air service from 1 July 1997.

Unless *equivalent* replacement services are found, this decision, alone, has the potential to confront Norfolk Island with something like a 1989 Australian Pilots' Dispute. Norfolk Island potentially is even more vulnerable to the adverse effects of this situation than was, say, Cairns during the Pilots' Dispute in

1989 because of its very heavy dependence on export income that is overwhelmingly derived from overseas visitors.

Prospects for viable replacement services are most likely to involve lower-cost operators than Ansett, perhaps based on Fokker F28 or SAAB 2000 aircraft, which have less capacity (especially for freight). If this turns out to be the replacement outcome, it would be similar to the response to domestic airline deregulation on mainland Australia, where higher-cost jet services concentrated on the larger, more high-yielding routes, and lower-cost services operated to regional areas.

Replacing the Ansett service with some other (possibly lower capacity) air service - assuming that eventuates - *will* provide some relief. But such solutions to this immediate problem, alone, are unlikely, in our opinion, to solve the long-term structural problems of Norfolk Island.

Of course the immediate priority of the Government is to find a replacement air service. But success on this front, in our opinion, should be buttressed by other measures.

The combination of reasons for Ansett's decision to pull out of the Norfolk Island service ultimately boil down to the opportunity costs, for a higher-cost operator, of flying the route. Specifically, there is a higher yield on mainland routes both because of larger traffic volumes and a much higher proportion of higher-yielding business traffic. In contrast, Norfolk Island's traffic is dominated by lower-yielding, more price-sensitive overseas visitors plus concessionally-priced travel by residents. So cost- and price-competitiveness become paramount for viable air services and continued tourism export income. Norfolk Island's policy settings, including its system of taxes and charges, are the only elements affecting *any* airline's opportunity costs that are amenable to *Norfolk Island's* control.

Naturally, Norfolk Island cannot do much about the cost disadvantage due to its remoteness or low traffic volume. Norfolk Island cannot do much about the relatively higher yields of eastern seaboard routes either. But Norfolk Island *can* do something about the cost disadvantage generated by its relatively high landing fees, its departure tax and other tax imposts.

E.2.3 Government Tourism Policy: Objectives Versus Operation

Access Economics acknowledges that the current Government has stated its policy of stimulating the economy by increasing tourism to Norfolk Island by 3% to 5% per annum over the period 1995-2005. We also acknowledge that tourist *numbers* increased 4.5% from 1994-95 to 1995-96, in line with that target.

We suggest that, information permitting, this policy objective could be refined by specifying, in addition, target growth rates for tourism *export income* because, at the end of the day, it is tourism *spending* that is (or should be) the natural focus of the island's tourism policy.

Our experience in mainland Australia shows that spending growth does not necessarily line up with growth in visitor numbers at all times. In this respect, we note that there is also information for Norfolk Island that indicates that, while total tourist numbers have been growing, tourists have been staying for a shorter time, on average, and are spending less per capita, so that *the export income received from tourists has been*

*almost flat in nominal terms and has been falling by an average of 2.2% per annum in constant dollar terms over the past five years.*¹

In our opinion, the performance of (real) tourism export income is a more significant indicator of the success or otherwise of any tourism export policy than the number of overseas visitor arrivals. Real export income growth is the better indicator of tourism promotion success.

Is Norfolk Island really pursuing a pro-tourism export income strategy?

There is a fundamental conflict between heavy reliance on visitors for *taxation* revenue and promoting overseas tourism. Norfolk Island now appears to be paying the price of that conflict, on the basis of the recent performance of real export income.

Many Norfolk Islanders, reading the previous paragraph, may object, claiming that the Island actively *encourages* tourism. Whatever the intention, the realities suggest otherwise. Glossy brochures and advertisements are an important part of marketing, but no amount of marketing, *of itself*, will make a destination internationally competitive. Worse, the various taxes and levies formally levied on businesses servicing travellers to Norfolk Island - and ultimately passed on to their tourist customers - are doing much to make Norfolk Island a higher-cost, less competitive destination.

In effect, if not intent, these taxes and charges *themselves* comprise an anti-tourist policy framework. They have contributed to Norfolk Island becoming a less competitive tourist destination than it would otherwise be. And it is these elements of the Norfolk Island cost structure that are amenable to policy action.

E.2.4 Can The Status Quo Continue?

In our opinion, the status quo is not sustainable in the longer term.

Clearly nobody should be telling the Norfolk Island community what its objectives should be. Those are matters for decision by the community itself. But equally, the Norfolk Island community cannot force others to contribute to the achievement of those objectives. Rather, to the extent that achievement of the community's objectives requires a contribution from others - through generation of export income from tourism, for example - that contribution can only be secured *voluntarily*.

At least for the foreseeable future, Norfolk Island seems destined to depend predominantly on export income to finance its living standards. And most of this is likely to come from price-sensitive *recreational* overseas visitors. The alternatives to this scenario are not attractive:

- *Finance (public) current expenditures by borrowing.* Lenders - overwhelmingly from overseas - will not be attracted to financing consumption and, as the Island's foreign liabilities mount up, will charge higher and higher risk premia to part with their savings. This path leads to a vicious circle of mounting debt driving higher interest rates which accelerates the accumulation of debt. It is unsustainable. At best, it eats into the amount of export income available to finance local expenditure.

¹ The main body of the report contains the details supporting this statistic.

- *Do without as much export income.* Without the spending associated with overseas visitors and related businesses, the income driving the generation of jobs on Norfolk Island will dwindle, and with it those jobs as well. The structural unemployment so generated will accelerate the population drift overseas. Norfolk Island will become less viable as a place to live for many of its residents.

E.2.5 An Alternative Strategy

If the Norfolk Island community decides that neither of these options is attractive, then the alternative strategy for sustaining living standards and preserving a viable economy may be viewed as having three key objectives. These are:

- *Promotion of export income (not necessarily tourist numbers).* The need for (externally-sourced) revenue to finance (largely externally directed) expenditure suggests promotion of export income as the only viable strategy.
- *Financing needed capital investment.* The need to cover asset depreciation and fund new infrastructure development suggests the need for a portion of export income to be set aside - saved - for capital purposes.
- *Diversification of income sources.* In the longer term, reducing the Island's reliance on one export - tourism - is desirable the better to insulate the Island from unexpected shocks from 'putting most of its eggs in one basket'. Tourism is a volatile source of export income at best. This suggests the need for more saving to build up a stock of financial assets that can be invested overseas to generate another, growing, source of income to supplement exports.

In turn, these objectives suggest the need for two practical policy targets:

- *Making Norfolk Island an attractive and competitive destination for tourism and related businesses, and, where possible, other businesses.*
- *Ensuring a taxation regime that minimises avoidable burdens (and competitive penalties) on overseas visitors, and minimises disincentives for community saving.*

Amongst other things, this report therefore recommends that Norfolk Island consider significant changes to the current revenue-raising system to improve the competitiveness of Norfolk Island as a tourist destination. The immediate budgetary costs and/or pain of this proposal, in our opinion, would be outweighed over time as a result of a more competitive tourism environment.

The thrust of the suggested changes (see report Sections 5-7) is to take the burden of revenue-raising off the Island's major source of export income - tourism. That should help maximise that income by making Norfolk Island a more competitive destination. With export income maximised, the focus of revenue raising should then be on expenditure out of that income by Norfolk Island residents.

For example, we suggest that landing fees be considerably reduced in order to improve the economics of the Norfolk Island route. We understand that some Islanders may take the view that landing fees do not affect the profitability of the route because the airline passes them on to passengers. Of course, *any* airline will attempt to pass business taxes and charges on to its customers. But that entails raising airfares above levels that otherwise would apply. If recreational travellers are price-sensitive (and the evidence is that they are) this will seriously undermine demand for, and revenue from, the service. The airline is then forced to

cut capacity, or reduce profitability, or both. In either case, higher operating charges *do* affect the profitability of the service.

The thrust of these suggestions implies difficult decisions for the Norfolk Island community. We are conscious of the social and political concerns to which they will give rise. That said, it appears to us that failure to act in the broad directions proposed *itself* implies a community choice: to accept economic and social decline as income and the associated jobs run out and/or as overseas debts and debt servicing burdens mount.

Difficult decisions frequently require a crisis atmosphere to galvanise community support. It is in a crisis when the seemingly unacceptable may become acceptable.

Arguably, Norfolk Island now has such a crisis atmosphere.

We recommend that the Norfolk Island Government use this crisis to address some of the fundamental long-term and structural problems of Norfolk Island. A significant change in policy seems to us to be required if Norfolk Island is to become to a long-term viable community.

The Ansett decision provides a window of opportunity for the people of Norfolk Island to address these long-term issues, as well as seeking to fill the immediate gap that will be left when Ansett ceases its services.

E.3. An Economic Model Of Norfolk Island

As part of this consultancy, and subject to the severe limitations imposed by the available data. Access Economics has developed an economic model of Norfolk Island. This can be used as *one* tool by the Government to monitor the Norfolk Island economy, and also to examine the consequences of various changes in policy to the Government Budget.

Reflecting the available data, the model fully specifies the Government accounts, and has detailed information on passenger arrivals and population. Other statistical information on the private sector was not available, so the model concentrates on those sectors of the Norfolk Island where data is collected. Several other components can be estimated based on partial information and by making some identifying assumptions.

With the model, the user can (for example) specify a drop in the Financial Institutions Levy rate starting, say, in 1997-98 and observe the impact that the policy has on the Government Budget, money turnover and any indirect impacts on other areas of the economy.

A change in the rate of (say) the Accommodation Levy would cause a drop in revenue from that source, but stimulate an increase in tourism which would provide additional revenue through other sources.

The model also produces a summary output of the key economic indicators on Norfolk Island. A summary table based on the model is set out below. The assumptions underpinning these results are summarised in the full report (see Section 8).

Key Results	HISTORY	HISTORY	HISTORY	HISTORY	HISTORY	HISTORY	FORECAST	FORECAST	FORECAST	FORECAST
	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
Total revenue	6,411,733	7,423,600	6,836,722	7,106,688	8,252,666	9,324,156	8,776,648	8,444,300	8,674,476	8,833,142
Underlying revenue	6,118,883	6,565,968	6,168,345	6,304,179	7,093,468	7,580,980	7,615,532	7,127,175	7,381,717	7,560,890
Total expenditure	6,222,592	7,635,280	7,094,067	7,240,842	7,907,798	8,723,704	8,353,180	8,632,149	8,903,122	9,204,534
Revenue/Expenditure excess	189,141	-211,680	-257,345	-134,154	344,868	600,452	423,468	-187,849	-228,646	-371,392
Total enterprise profit/loss	1,860,103	1,886,806	1,540,665	2,296,572	2,267,026	2,132,559	2,574,178	1,982,845	2,117,388	2,218,531
Consolidated net assets	17,971,349	18,959,845	19,047,956	19,190,547	19,724,164	19,860,392	20,732,651	20,515,001	20,363,873	20,150,577
Passenger arrivals	28,712	27,351	27,187	27,224	28,501	29,787	30,110	27,180	27,677	28,082
Growth rate		-4.7%	-0.6%	0.1%	4.7%	4.5%	1.1%	-9.7%	1.8%	1.5%
Real tourism export earnings	26,869,007	25,869,434	22,590,906	21,471,906	25,726,035	24,111,811	23,910,075	21,384,721	21,519,575	21,345,817
Growth rate		-3.7%	-12.7%	-5.0%	19.8%	-6.3%	-0.8%	-10.6%	0.6%	-0.8%
Tourism contribution to NI incomes	40,303,510	39,343,807	34,642,053	33,999,541	42,317,126	41,903,002	42,217,251	38,777,789	40,466,153	41,423,873
Actual money turnover (\$'000)	97,675	98,429	91,273	83,287	81,289	89,079	87,861	80,703	84,216	86,209
Total merchandise imports	25,860,596	24,378,794	21,045,013	20,937,463	24,778,790	24,649,384	24,647,824	22,632,213	23,494,870	23,951,033

INTRODUCTION

1. Focus and Broad Thrust of the Report

1.1 Terms of Reference

This independent study by Access Economics was commissioned by the Administration of Norfolk Island. Access Economics visited Norfolk Island during the week of 13 January 1997, collecting information and meeting with administration officials and others.

The terms of reference require Access Economics to undertake an analysis and report on:

1. Norfolk Island's current economic position against the background of the Island's economic situation over the last five (5) years.
2. The Island's future economic viability if the current economic framework is maintained and, if appropriate, recommendations for change.
3. The provision of an economic model suitable for the Island's needs (including key performance measures and indicators) which could be put in place to provide the Government with reliable and informed reports on economic performance on an ongoing basis.

1.2 Main Report Findings: Brief Overview

Recent Performance and Present Situation

There is relatively little statistical information available on the Norfolk Island economy, especially the private sector component. The main areas of the economy where comprehensive data is available are the public sector, population and immigration records. A census collected every five years is the only source of information on employment and unemployment. A household expenditure survey was conducted in 1995. This provides a range of information on the household sector, but as the survey was a one-off it is not possible to use this information assess changes. (The survey had a very low response rate in any case.)

The Public Sector

After three years of deficits, the Norfolk Island Government budget returned to surplus in the 1994-95 financial year. It moved further into surplus in 1995-96 aided considerably by repayments of capital from the Electricity Service and Norfolk Telecom.

Within the total Government revenue, collections from several revenue items are falling. The revenue from the Financial Institutions Levy (and stamp duty on cheques) has been falling, partly due to the disincentive effects of this levy, but perhaps also due to lower levels of turnover. Collections from Company Fees have also fallen considerably in recent years.

On the expenditure side, Government Expenditure has averaged growth of 7% per annum over the past five years. At the same time, inflation on Norfolk Island (using the Norfolk Island Retail Price Index) has averaged 3%. The users of government services (namely the local population) has been falling by 2%.

In order to keep revenues rising with expenditures, three policy changes were made recently: (i) an increase in the Accommodation Levy to \$1 per hot bed (previously a per room charge); (ii) increasing the Departure Fee to \$25 from \$15 in 1990-91; and (iii) increasing the fuel levy to 20¢ per litre from 10¢ per litre. An increase in the Customs Duty rates and the Financial Institutions Levy occurred six years ago.

As a result revenue has increased by an average 7.8% per annum over the past five years. This revenue has been raised from a population on the island (ordinary residents, plus the average daily tourist population) that has fallen at an average rate of 1.3% per annum over the past five years.

Population

The ordinary resident population of Norfolk has declined over the past five years. In 1991-92 there was an average resident population of 1,971, and in 1995-96 the average population had fallen to 1,807. This situation appears to be continuing into 1996-97 with the ordinary resident population at 6 August 1996 falling to 1,772.

While no estimates of activity in the private sector are available, it is reasonable to expect that such a decline in population from 1,971 to 1,772 (a 10% fall, or an average of 2% per year) would have a considerable impact on the volume of activity on Norfolk Island.

Tourism Performance

Tourist numbers have risen on average by 4.5% per annum for the past two financial years, after being flat for the preceding four years. However, these tourists are staying for less time, resulting in a declining average population of tourists present on Norfolk Island. Further, our estimates suggest that these tourists are spending less per capita. The result is an estimated real decline, averaging 2.2% per annum, over the past five years in earnings from tourism.

Structural Problems

While to date Norfolk Island has, on some measures, performed satisfactorily, there is evidence that the Island faces several longer-term problems of a structural nature that are likely to threaten its long-term viability. These are as follows:

1. A tax bias against inbound tourism. While its stated policy is to promote tourism growth, the fact that the Island is raising more than 40% of total government revenue from tourists - the source of most of its export income - makes the Island less competitive than it otherwise could be. This may pose a serious threat to the long-term viability of Norfolk Island.
2. A lack of provisioning for long-term liabilities associated with the ageing of the population, the need for providing for replacement of depreciated assets and the provision of infrastructure.
3. A heavy reliance on revenue derived through Government monopolies.
4. A tax that discourages saving - the Financial Institutions Levy - at a time when more saving is needed.

An alternative strategy for sustaining living standards and preserving a viable economy may be viewed as having three key objectives. For Norfolk Island, the report concludes that these are:

- *Promotion of export income (not necessarily tourist numbers).* The need for (externally-sourced) revenue to finance (largely externally directed) expenditure suggests promotion of export income as the only viable strategy.
- *Financing needed capital investment.* The need to cover asset depreciation and fund new infrastructure development suggests the need for a portion of export income to be set aside - saved - for capital purposes.
- *Diversification of income sources.* In the longer term, reducing the Island's reliance on one export - tourism - is desirable the better to insulate the Island from unexpected shocks from 'putting most of its eggs in one basket'. Tourism is a volatile source of export income at best. This suggests the need for more saving to build up a stock of financial assets that can be invested overseas to generate another, growing, source of income to supplement exports.

In turn, these objectives suggest the need for two practical policy targets:

- *Making Norfolk Island an attractive and competitive destination for tourism and related businesses, and, where possible, other businesses.*
- *Ensuring a taxation regime that minimises avoidable burdens (and competitive penalties) on overseas visitors, and minimises disincentives for community saving.*

The remainder of this report is organised as follows:

PAST AND PRESENT ECONOMIC PERFORMANCE

- Section 2 reviews the current economic structure of Norfolk Island.
- Section 3 examines Norfolk Island's sources of income, its saving performance and its assets.
- Section 4 looks at issues relating to community welfare and the Government's role.

FUTURE ECONOMIC VIABILITY AND RECOMMENDATIONS

- Section 5 considers threats to the Island's viability and some directions for reform.
- Section 6 presents some general comments on policy.
- Section 7 reviews some recommendations for consideration by the Norfolk Island community.

ECONOMIC MODEL OF NORFOLK ISLAND

- Section 8 presents an overview of the economic model.

ATTACHMENTS

- The Attachments contain statistical evidence collected from Norfolk Island to support the findings presented in the body of the report.

PAST AND PRESENT ECONOMIC PERFORMANCE

2. What Makes Up Norfolk Island?

Every economy is different. In order to understand its current problems, and possible strategies for Norfolk Island's future, an understanding of the nature of the Norfolk Island at the present time is essential.

2.1 Economic Activity on Norfolk Island

Economic activity on Norfolk Island falls into four broad categories:

- **Tourism.** The provision of goods and services to tourists: accommodation, restaurants, the airport, shops, tours, hire cars, historical sites and museums.
- **Community facilities.** The provision of goods and services to the local community: the school and hospital, banks, shops, clubs, trades and professional services.
- **The Government and public service.** The Government provides services such as police, electricity, water and telecommunications.
- **Other.** Other activities including farming, palm and pine seed horticulture.

It is fair to surmise, and most Norfolk Islanders would probably agree, that tourism is the main economic activity on Norfolk Island. Tourism generates much of the employment in the economy and also contributes significantly to general revenue, which pays for community facilities and the Government.² The community knows that tourism is a dominant source of export income for Norfolk Island. A more quantitative analysis demonstrates the validity of this point.

2.2 Norfolk Island's Balance of Trade

Trade is made up of four components: imports of goods, imports of services, exports of goods and exports of services. Excluding the re-exporting of tobacco products, exports of goods in 1995-96 were valued at \$816,550.³ Imports of goods (not including re-exported tobacco product) in the same year were valued at \$24,649,384. The gap between imports of goods and exports of goods in 1995-96 was \$23,832,834. Services imports are relatively small, mostly made up of a steady trickle of Norfolk Island residents visiting the mainland - \$4,102,500 is a reasonable estimate of the value of service imports (although no one collects hard data).⁴ That increases the gap between all imports and exports of goods to \$27,935,334 in 1995-96.

The fourth piece of the picture is exports of services (essentially tourism). Norfolk Island needs to earn \$27,935,334 a year from tourism to cover the gap described above from the rest of the balance of trade.⁵

² The statistical detail in the Attachment section A3 provides evidence of this.

³ See Attachment section A.5 for details of Norfolk Island Customs data.

⁴ See Attachment section A.6 for details of the basis for this estimate.

⁵ Allocating the entire gap between total imports and exports of good to exports of services (tourism) implicitly assumes that the net income balance and net unrequited transfers balance are both zero. The net emigration from Norfolk Island might add slightly to the gap between total imports and exports of goods.

In the absence of other data (including for the capital account), and *assuming* that trade is more or less balanced (ie, treating services exports revenue as a residual), the Island's recent trade performance might look something like the following:

Table 1. Norfolk Island's balance of trade 1995-96⁶

Item	Example	Value in 1995-96
Imports of Goods	Food, fuel, alcohol, cars, clothing, etc.	\$24,649,384
Imports of Services	Outbound tourism	\$4,102,500
Total Imports		\$28,751,884
Exports of Goods	Palm and pine seeds & seedlings, etc.	\$816,550
Exports of Services	Inbound tourism	\$27,935,334
Total Exports		\$28,751,884

Table 2. Norfolk Island's balance of trade over the past six years.

TRADE GAP	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Imports of goods	25,860,596	24,378,794	21,045,013	20,937,463	24,778,790	24,649,384
Imports of services	3,892,899	3,947,801	3,757,044	3,498,236	3,829,406	4,102,500
Total imports	29,753,495	28,326,595	24,802,057	24,435,699	28,608,196	28,751,884
Exports of goods	2,884,488	2,097,391	1,707,355	1,769,339	396,779	816,550
Exports of services	26,869,007	26,229,204	23,094,702	22,666,360	28,211,417	27,935,334
Total exports	29,753,495	28,326,595	24,802,057	24,435,699	28,608,196	28,751,884

Table 3. The growth rate in tourism earnings

Tourism earnings	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Exports of services	26,869,007	26,229,204	23,094,702	22,666,360	28,211,417	27,935,334
Index, base 1990-91	100.0	97.6	86.0	84.4	105.0	104.0
Nominal growth rate		-2.4%	-12.0%	-1.9%	24.5%	-1.0%
Norfolk RPI Index	100.5	103.1	105.1	110.7	113.3	117.6
Real tourism exports	26,735,330	25,440,547	21,974,027	20,475,483	24,899,750	23,754,536
Index, base 1990-91	100.0	95.2	82.2	76.6	93.1	88.9
Real growth rate		-4.8%	-13.6%	-6.8%	21.6%	-4.6%

Table 4. Other measure of tourism activity (Source: NI Immigration Section)

Tourism growth	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Total tourists	28,712	27,351	27,187	27,224	28,501	29,787
Ave duration of stay	8.53	8.44	8.34	8.26	8.18	8.11
Ave tourist population	671	633	621	616	639	662

⁶ Service imports are estimated due to a lack of hard data. Figures are presented to the level of accuracy as provided to us by the Administration. Service exports are a residual.

Tables 1, 2, and 3 provide our 'guesstimates' of tourism income, based on the available data provided by the NI Customs Collector and Immigration Officer. Table 3 suggests that real tourism export earnings were 11.1% lower in 1995-96 than they were in 1990-91 (an index value of 88.9 in 1995-96 versus an index value of 100.0 in 1990-91). 'Real' tourism earnings adjust for the effects of inflation and are a more appropriate measure for assessing the performance of the tourism industry. **Table 4** shows that while the total number of tourists has increased, they stay for shorter durations so that the average population of tourists on Norfolk Island was *lower* in 1995-96 than it was in 1990-91.

These estimates suggest that only passenger numbers are increasing. Average length of stay is declining, and our estimates suggest the same is true of per capita spending, resulting in total real earnings from tourism falling. Over the period under review, export revenue from tourists, on these estimates, has recorded an average annual decline of 2.2%.

In the past, and assuming other balance of payments components (including the overall balance) net out to about zero, Norfolk Island has been able to earn over \$25 million a year from tourism to cover the amount of imports consumed.

From this perspective, on any sustainable basis, tourism export promotion at present is the most obvious way to maintain living standards for the foreseeable future. The estimated \$27,935,334 in export earnings from the 29,787 people that visited during 1995-96 implies an average yield of \$938 per tourist. Another way of looking at it is that two tourists yield Norfolk Island \$1,876. The population of Norfolk Island is 1,772 so every two tourists equals a fraction over \$1 in export earnings for every person on Norfolk Island.

This last point is only valid in gross terms, because tourists also consume imports. Attachment A, Section A.3 shows that tourists make up $\frac{1}{4}$ of the Norfolk Island population averaged over 1995-96. This may mean on average that about $\frac{1}{4}$ of imports are consumed by tourists. Allowing for the anecdotal evidence that tourists have higher daily consumption than locals, possibly around 30% of spending on the Island could be accounted for by tourists. The actual net injection into the Norfolk Island economy from tourists is closer to \$657, or \$0.70 per person for every two tourists.

2.3 The Norfolk Island Tourism Product: Main Characteristics

Norfolk Island sells a 'sun-seeker/island-getaway'-type *recreational* tourism product.

This may be the most volatile and price sensitive segment of tourism demand. In contrast, business/convention travel is less price-sensitive and spending propensities for such travellers generally are higher. For cost/price reasons the Norfolk Island tourism product tends towards a lower-volume/higher-margin segment of the leisure market, reducing its share of the overall leisure market.

This tourism product focus probably worked adequately when Norfolk Island had a significant tax-related shopping advantage over the mainland, but this is no longer the case. High freight charges, competitive duty free shopping in Australia and New Zealand, and lower import tariffs in Australia and New Zealand and low turnover all work to reduce the attractiveness of this aspect of the Island's tourism product.

3. Income, Savings and Assets

3.1 Overview

Although Norfolk Island's taxes and charges on tourism appear high, overall tourism revenue still only just covers recurrent expenditure. Little of the money earned from tourism has been saved.

Norfolk Island has a saving problem. Domestic saving is needed to cover depreciation of existing assets, to invest in needed infrastructure, to provide for an ageing population, and to develop alternative future income sources. Norfolk Island needs to save more.

3.2 Depreciation of Assets

Norfolk Island's productive assets include roads, the electricity generator, telecom switchboard, the airport, lighterage equipment, and various other assets.

These assets are all depreciated at historical cost, in line with standard accounting principles. However, when the asset is fully depreciated, the cost of replacement (allowing for inflation, increased capacity requirements and improved technology) could be substantially larger than the depreciation reserve. The Island's experience seems to have been that, when an asset needs replacement, there is generally insufficient provisioning, and so the assets have to be replaced by appropriating some revenue out of recurrent funding. Further, the net assets of several enterprises have fallen recently as the Government appropriates large dividends relative to earnings (see section 4.5 below).

The consolidated net assets (and the net assets converted into real terms using the Norfolk Island Retail Price index) of the Norfolk Island Government are:

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Consolidated net assets	17,971,349	18,959,845	19,047,956	19,190,547	19,724,164	19,860,392
Real net assets (adj for RPI inflation) \$1990-91	17,971,349	18,696,167	18,890,267	18,564,919	18,958,446	18,738,159

The real net assets of Norfolk Island have been virtually flat for most of the past five years. Flat or falling real net assets is evidence of a lack of savings and/or a lack of growth on Norfolk Island.

3.3 Provisioning for Capital Expenditure on Needed Infrastructure

Norfolk Island has suffered from a lack of sea freight and other facilities. Funding capital expenditures (particularly essential infrastructure) is a requirement for which own-provision arrangements are long overdue. As the February 1995 *Delivering the Goods* Report of the Joint Standing Committee on the National Capital and External Territories noted:⁷

'5.86 The Committee is conscious that the Norfolk Islanders, through the electoral system, have chosen a taxation regime marked by dependence on indirect taxation -

⁷ *Delivering the Goods* Report of the Joint Standing Committee on the National Capital and External Territories. February 1995, Chapter 5 page 157

including a range of levies which are ultimately paid by tourists rather than by residents. That is their democratic choice. However, it is debatable whether or not it is a choice which should be subsidised in the form of capital grants by the Commonwealth to Norfolk Island for the funding and maintenance of essential infrastructure.'

Two years later, this situation appears to be unchanged.

3.4 The Ageing of the Population

Norfolk Island has an aging population.

The problem of aging is more than just people getting old. It is the increasing *number* of elderly people (those requiring expensive health facilities and social security support) *relative* to the *number* of working people generating income (and so revenue) to provide these services. The *aged dependency ratio* is the ratio those over 65 to the working age population (ages 15 to 64). In Norfolk Island this is rising - that is, the heavier demanders of Government services are increasing faster than the suppliers of Government revenue.

The situation on Norfolk Island is further accentuated because there is a steady emigration of younger people. In Norfolk Island, there is insufficient economic activity to provide gainful employment for the young. As a result the non-working population dependency ratio is falling, but only because people are leaving Norfolk Island because there is no work. This converts the structural unemployment that a larger economy might face into 'structural emigration' on Norfolk Island. As the economy recedes, people will be driven off the Island.

Dependency ratios on Norfolk Island

Census - ordinary residents of Norfolk Island	1986	1991	1996
(1) Population, 15 and over	1,536	1,462	1,411
(2) Working population, 15 and over	1,217	1,099	1,080
(3) Non-working population, 15 and over	319	363	331
(4) Retirement age population, 65 and over	148	212	240
(5) Non-working pop., excl. retirement age pop.	171	151	91
Aged dependency ratio: (4)÷(2)	12.2%	19.3%	22.2%
Non-working dependency ratio: {(4)+(5)}÷(3)	26.3%	33.0%	30.6%

The working age population is falling at the rate of 100 people every five years, and the retirement age population is increasing at the rate of around 40 people every five years. The aged dependency ratio has doubled in ten years and total employment has fallen by 137 jobs.

An ageing population can be a serious problem if insufficient savings have been put away to fund the impending blowout in health and social security costs. With accelerated ageing due to emigration of the young, the Government will face diminishing revenues and increasing demand for Government services.

3.5 Government Discouragement of Saving

The Norfolk Island Government effectively discourages saving in several ways.

The high (1%) Financial Institutions Levy now imposed on all deposits is an incentive to Norfolk Islanders actively to avoid using the banking system. Deposits have dropped 42.5% in real terms compared with the level of deposits in the year prior to the introduction of the 1% Financial Institutions Levy.⁸

The Government also does not raise enough revenue to cover anything but recurrent expenditure. That is, the Budget does not contribute, in net terms, to Island saving either. The Government budget balance over the past six years is as follows (*Source: Government Accountant*):

Government budget	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Surplus/(Deficit)	\$189,141	(\$211,680)	(\$257,345)	(\$134,154)	\$344,868	\$600,452

The result in 1995-96 is a sizeable surplus, although much of it comes from a repayment of capital from the Electricity Service and Norfolk Telecom (\$481,815). One-off debt redemptions such as these should be excluded from any determination of the true state of the Government Budget. There are grounds for concluding that such transactions, being of a capital nature, should not be treated as 'above the line' revenue, and, while affecting the *cash-based* measure of the Budget balance, they would not affect the *underlying or operating balance* Budget bottom line. Excluding this capital repayment, the Government budget has averaged a surplus of \$8,245 over the past six years - virtually no contribution to Norfolk Island's savings.

⁸ See Attachment A.8 for details of bank deposits over the past six years

4. Community Welfare, the Government, and Raising Revenue

To put some of Norfolk Island's circumstances in perspective, section 4 looks at some of the broad principles and implications of a government's role in managing an economy.

4.1 The Need for, and Role of, Governments

Governments have important roles.

These include defining property rights and regulating means by which such rights can be allocated (law and order and related activities); ensuring socially-efficient use of scarce resources and intervening to correct instances where private action produces inefficient outcomes; and pursuing social welfare policies, including assistance to those in need, to the extent that the community collectively votes for such measures.

Importantly, governments have powers not available to private entities.

They can make laws and regulations. They can impose taxes and public sector charges. And, if so minded, they can go into business, either competing with private businesses or even legislating to ensure no private competition for public monopolies.

This last example exposes a danger. Governments are referees, setting the rules within which societies and businesses are permitted to operate. But, when they go into commercial businesses, they are also players in the game. Obviously, this sets up a conflict of interest. If the referee is also a player, the chance of even-handed rules of the game is reduced. With the best of intentions, over time, faced with all the pressures confronting those in power, referees will face overwhelming temptations to favour arrangements that confer extra benefits to the government players.

This conflict potentially is of relevance to Norfolk Island - see below.

This example aside, there are many activities in which governments can and should get involved.

4.2 The Cost of Government Activity

All government interventions require money (command over scarce economic resources) to some extent. Giving money to the poor, providing common services, regulation and licensing, are all expensive in the sense that they require scarce resources.

To be able to fund these activities the government has to raise money from somewhere. Raising money itself entails a cost. It reduces the welfare of those paying the taxes, etc, involved. Balancing these costs and benefits is both an economic and a political art in democratic societies.

A government's challenge is to raise revenue as painlessly and efficiently as possible, and spend it on programs that provide the largest increase in community welfare.

4.3 A Caricature of Norfolk Island Budget Revenue Policy

Looking at matters from a non-resident perspective, some observers might caricature Norfolk Island's public revenue strategy as follows

The objective is to increase the combined welfare of the (resident) community. Hence, Norfolk Island - ideally - should only tax foreign tourists. The welfare of tourists does not enter the combined community welfare calculation for the Norfolk Island administration (only the resident population enters this calculation). So taking money off tourists and giving it to the resident population provides an unambiguous increase in the standard of living for locals (increases the combined community welfare through spending programs without reducing it through revenue raising).

This is an even better option than taxing the resident rich and giving it to the resident poor. By only taxing tourists the local rich people get left alone (no decrease in their standard of living), the poor still get extra money (increasing their standard of living) and only the tourists get a lower standard of living, and they don't really matter, as they do not enter the combined welfare calculation: they do not vote.

This caricature of the status quo may appeal to some as politically astute. Overseas tourists do not vote in Norfolk Island. So high airport landing charges, departure fees, international call charges, an accommodation levy and various other indirect charges on tourists are a 'painless' way to help subsidise the standard of living enjoyed by the local community.

Is this really good policy? It *would* be, if foreign tourists really did not vote.

But, in fact, they do vote: not, to be sure, at the ballot box, but rather, at the Norfolk Island cash register. This leads to a very simple rule.

No vote at the cash register, no tax (or indeed any other) revenue for Norfolk Island.

If the Norfolk Island community is concerned about tomorrow, this simple rule must be recognised, because nowhere does it apply more than in relation to recreational tourism. Norfolk Island needs the tourism (cash register) vote.

The only way for residents to secure Norfolk Island's future is to provide for it themselves.

The present tax system appears to be weakening (export income and therefore general) prospects for the future.

Ansett is charged over \$4,000 per rotation to serve Norfolk Island with a 737-300. To serve mainland Australia airport costs just under \$500 in Federal Airports Corporation landing charges and \$700 in Air Services Australia terminal charges (737 aircraft at Sydney airport also pay a \$300 Aircraft Noise Levy). The total of these charges is \$1,200 for Brisbane and \$1,500 for Sydney compared to \$4,000 at Norfolk Island. (Note: there are also en-route charges levied by Air Services Australia. These charges are also

paid by aircraft going to Norfolk Island so do not change the size of the gap between Norfolk Island Airport and mainland airport charges.)

This landing fee revenue appears good value for the Norfolk Island Airport and provides the Government with a dividend, but it has contributed to the higher cost of the Norfolk Island route and to that extent has reduced the competitiveness of the Norfolk Island tourism product.

There may now be questions about whether Air New Zealand, itself a major shareholder in Ansett and presently also operating relatively high cost jet services to the Island, will follow Ansett's lead on similar opportunity cost grounds, particularly given its new access to the domestic Australian market.

In its February 1995 Report *Delivering the Goods* the Joint Standing Committee on the National Capital and External Territories stated:⁹

'5.268 Contributing to the cost of flying to Norfolk Island are taxes imposed by the Norfolk Island Government. Departure tax was \$25 per person at the time of the Inquiry and a passenger levy of \$36.60 for passengers flying in and out of Norfolk Island is generally included in the airfare.'

5.269 The Department of Tourism was critical of the imposition by the Norfolk Island Government of the passenger landing fee of \$36.60 return, which is loaded into the airfare. This compares unfavourably to landing charges at mainland airports of \$3 to \$4 dollars for most city airports...

5.270 Air New Zealand was also critical of the passenger landing fees, observing that the cumulative value of these charges could amount to \$NZ4,800 for a fully loaded B737 with the average B737 landing cost in New Zealand of \$NZ580.'

Ansett noted in 1994 that Norfolk Island was not competing with other destinations:¹⁰

'5.248 There is ... a frustration about the level of tourism activity that they have been able to generate. ...'

Tourists may well stop voting (coming to Norfolk Island) in growing numbers unless the Government changes the current effectively anti-tourist revenue regime.

Norfolk Island will achieve the highest per capita income possible by following these steps:

1. Maximising the amount of export earnings from tourism - this means keeping prices for tourists as low as possible (consistent with business viability) by removing tax wedges, generating more tourists and more revenue. The current tax bias against tourists reduces export earnings which reduces the income of the community.

⁹ *Delivering the Goods Ibid.* page 210

¹⁰ *Delivering the Goods Ibid.* page 203

2. After the tourists have spent their money, levy tax on the recipients of that money (that is, Norfolk Island residents). This is effectively redistributing the cake provided by tourists around the Island community as before, but it is now a bigger cake, so the community will be better off.
3. Save some of this income. Savings and investments today equals more income tomorrow, and helps fund essential infrastructure, an ageing population and capital replacement.

Taxes on tourists are not really 'easy money'. Given that leisure tourism is generally very price sensitive, taxes on tourists reduce the total amount of money flowing onto Norfolk Island and so reduce the total income of the community.

This tax bias against tourism is a major underlying problem of the Norfolk Island economy. Removing or at least reducing this bias is the key to higher per capita incomes on Norfolk Island.

Other parts of the tax system appear to have very large disincentive effects - that is, they are inefficient.

For example, the Financial Institutions Levy raises significant revenue *now*, but it is choking turnover at Norfolk Island's two banks. In 1989-90 bank deposits totalled \$129 million with a 0.25% levy (significantly, there was also an Australian Pilots' Dispute in this year, reducing business turnover). Bank deposits fell to \$115 million in the first year of a 1.0% levy (1990-91) and fell to \$89.1 million by 1995-96 - a decline of about one-third.¹¹

Will one of the banks one day close down its Norfolk Island branch (particularly considering the trend for fewer regional banks and more electronic services)? Will this be good for financial market competition? Will it be a good thing for Norfolk Island's continued viability?

4.4 The Real Revenue-Raising Punch Line

In the pursuit of revenue measures which, at first blush, appear to have minimal impact on the local community, the Norfolk Island Government appears to have implemented revenue measures which provide short-term benefits but, with the wisdom of hindsight at least, without adequate consideration of the longer-term reactions of those paying the taxes.

The irony is that revenue measures which when first implemented appear to benefit the community may in the longer run impose significant net costs on the community. (Conversely, the introduction of taxes which shift the tax burden onto local residents will have some costs to the community when first implemented, but may generate significant long term benefits to the community as well.)

4.5 Government Revenue from Monopoly Rents

In the general discussion in Section 4.1, we noted the danger - or conflict of interest - when a government can make the rules *and* play the game. The Norfolk Island operates several lucrative monopolies on Norfolk Island: it is a player as well as rule-maker. It appears that the Government has been running down the assets of the Government-owned enterprises in order to finance recurrent expenditure - in effect taking more from the operations of these businesses than is sustainable.

¹¹ See Attachment A.8 for details of bank deposits over the past six years

The Government appropriated dividends from the following enterprises to contribute 28.4% of the Government's underlying revenue in 1995-96.¹²

- The Liquor Bond
- The Post Office
- Norfolk Telecom
- The Electricity Service

There are many good reasons why a government might step in to provide services such as electricity supply and telecommunications. Many years ago these were very expensive to establish - and no private sector firm had the resources. So the government established these services. But that argument has long since passed. These enterprises are now lucrative enterprises but at the expense of making many core services more costly and reducing community welfare as a result.

The situation becomes even more serious when so much money is distributed from these enterprises that the net assets of the enterprise are reduced. For example, in 1995-96, the Government received \$1,207,358 from Norfolk Telecom. Of this, \$107,358 was the management fee and interest payment on debt, and the other \$1,100,000 was a dividend to the Government. However, Norfolk Telecom made a gross profit of \$1,035,204 - less than the dividend paid to the Government. Norfolk Telecom appears to have run down its assets to cover the dividend.

There are other examples, as the table below shows.

A summary of the net assets of Government enterprises

Enterprise	Net Assets 1995-96	Net Assets 1994-95	Comment
Liquor supply	\$540,000	\$540,000	No increase in net assets
Postal Services	\$21,927	\$42,083	Net assets run down \$20,156
Electricity Service	\$2,315,194	\$2,526,844	Net assets run down \$211,650
Norfolk Telecom	\$2,549,163	\$2,747,486	Net assets run down \$198,323
Norfolk Airport	\$7,920,559	\$8,169,312	Net assets run down \$248,753

The Government is not only using the Government-owned enterprises to deliver monopoly rents - the Government is also extracting such high dividends from these enterprises that they are running down their assets. This cannot continue. A community simply cannot run down the assets accumulated by their predecessors in order to finance their recurrent consumption for any length of time.

¹² See Attachment section A.2 for the source of this figure

FUTURE ECONOMIC VIABILITY: PROBLEMS & BROAD SOLUTIONS

5. Norfolk Island's Structural Problems

5.1 Emerging Threats to Norfolk Island's Future Economic Viability

Norfolk Island faces several structural problems.

1. A heavy tax bias against inbound tourism. While its stated policy is to promote tourism growth, the raising of more than 40% of total revenue from tourists - the source of most of its export income - makes the Island less competitive than it otherwise could be. This may pose a serious threat to the long-term viability of Norfolk Island.
2. A lack of provisioning for long-term liabilities associated with the ageing of the population, the need for providing for replacement of depreciated assets and the provision of infrastructure.
3. A heavy reliance on revenue derived through Government monopolies.
4. A tax that discourages saving - the Financial Institutions Levy.

The Norfolk Island Budget is contributing to all of these problems (see below).

The performance of tourism on Norfolk Island is central to its longer-term viability. All of the structural problems just listed - not just the first - to some degree impact on that performance.

Since Access Economics visited Norfolk Island, potential pressures on the Island's finances increased when, on 29 January 1997, Ansett announced that it would discontinue the Norfolk Island air service from 1 July 1997.

Unless equivalent replacement services are found, this decision, alone, confronts Norfolk Island with the permanent equivalent of an Australian 1989 Pilots' Dispute. Norfolk Island potentially is even more vulnerable to the adverse effects of this situation than was, say, Cairns in 1989 *because of its very heavy dependence on export income that is overwhelmingly derived from overseas visitors*.

Prospects for viable replacement services are most likely to involve lower-cost operators than Ansett, perhaps based on Fokker F28 or SAAB 2000 aircraft, which have less capacity (especially for freight). If this turns out to be the replacement outcome, it would be similar to the response to domestic airline deregulation on mainland Australia, where higher-cost jet services concentrated on the larger, more high-yielding routes, and lower-cost services operated to regional areas.

Replacing the Ansett service with some other (possibly lower capacity) air service - assuming that eventuates - *will* provide some relief. But such solutions to this immediate problem, alone, are unlikely, in our opinion, to solve the long-term structural problems of Norfolk Island.

Of course the immediate priority of the Government is to find a replacement air service. But success on this front, in our opinion, should be buttressed by other measures.

The combination of reasons for Ansett's decision to pull out of the Norfolk Island service ultimately boil down to the opportunity costs, for a higher-cost operator, of flying the route. Specifically, there is a higher yield on mainland routes both because of larger traffic volumes and a much higher proportion of higher-yielding business traffic. In contrast, Norfolk Island's traffic is dominated by lower-yielding, more price-sensitive overseas visitors plus concessionally-priced travel by residents. So cost- and price-competitiveness become paramount for viable air services and continued tourism export income. Norfolk Island's policy settings, including its system of taxes and charges, are the only elements affecting *any* airline's opportunity costs that are amenable to *Norfolk Island's* control.

Naturally, Norfolk Island cannot do much about the cost disadvantage due to its remoteness or low traffic volume. Norfolk Island cannot do much about the relatively higher yields of eastern seaboard routes either. But Norfolk Island *can* do something about the cost disadvantage generated by its relatively high landing fees and its departure tax.

We suggest in our report that landing fees be considerably reduced in order to improve the economics of the Norfolk Island route. This suggestion has already received considerable opposition from Norfolk Island, many claiming that 'landing fees do not effect the profitability of the route, since the airline passes them on to passengers'. Of course, *any* airline will attempt to pass business taxes and charges on to its customers. But that entails raising airfares above levels that otherwise would apply. If recreational travellers are price-sensitive (and the evidence is that they are) this will seriously undermine demand for, and revenue from, the service. The airline is then forced to cut capacity, or reduce profitability, or both. In either case, higher operating charges *do* affect the profitability of the service.

Is The Current Norfolk Island Strategy Really To Earn Export Income From Tourism?

Are the current policy settings on Norfolk Island consistent with the long-term viability of the Island?

For many years the people of Norfolk Island have elected to pay minimal tax, financing their standard of living through revenue raised substantially from tourists (and also by making what appears to be insufficient provision out of income for the funding and maintenance of essential infrastructure).

Is Norfolk Island really pursuing a pro-tourism export income strategy? There is a fundamental conflict between heavy reliance on visitors for *taxation* revenue and promoting overseas tourism. Norfolk Island now appears to be paying the price of that conflict.

Many Norfolk Islanders, reading the previous paragraph, may object, claiming that the Island actively *encourages* tourism. Whatever the intention, the realities suggest otherwise. Glossy brochures and advertisements may be an important part of marketing, but no amount of marketing, of itself, will make a destination internationally competitive. Worse, the various taxes and levies formally levied on businesses servicing travellers to Norfolk Island - and ultimately passed on to their tourist customers - are doing much to make Norfolk Island a higher-cost, less competitive destination.

In effect, if not intent, these taxes and charges *themselves* comprise an anti-tourist policy framework.

They have contributed to Norfolk Island becoming an uncompetitive tourist destination.

Alternative Tourism Strategies

The alternative tourism strategy for an island tourism product is a higher-volume/lower-margin tourism strategy. This has some benefits: it gives airlines a critical mass of passengers helping to make services more viable, and it generates more employment in absolute terms in tourism facilities (hotels, restaurants, tours). The policy of effectively restricting tourist numbers on the Island (eg, through licensing restrictions on supply of appropriate accommodation) and relatively high cost structure have resulted in Norfolk Island missing out on this market also. Norfolk Island is left with a low-volume/low-margin tourism export industry.

A viable tourism industry requires three key elements: appropriate transport, accommodation and entertainment services (the latter includes restaurants, tours, beaches, shopping, museums and shows). Each of these elements has to be viable in its own right, and all three are necessary to offer a tourism product.

The low-volume component of its tourism strategy is presumably intended to deliver the benefits of tourism income, without the possible downside of having to contend with large volumes of tourists. But low volumes make for difficult economics of airline operation - especially for high-cost jet services. Norfolk Island has other policies in place (departure tax, landing fees, etc) that also make the transport side of the tourism equation uncompetitive. There are also policies which reduce the competitiveness of the accommodation side of the equation (eg, the accommodation levy).

For purely recreational or leisure tourism the following three factors are of the most importance for people planning travel (given incomes):

1. Price of transport
2. Price of accommodation
3. Price of entertainment

There are other factors, such as facilities and quality of the resort, but these three price considerations are very important. Norfolk Island's competitiveness on all three fronts is affected by taxes and charges. Transport is expensive due to airport charges and the departure tax. Accommodation is expensive due to the Accommodation Levy and high electricity charges. Entertainment is expensive because of import duties, high freight costs and high international telecom charges that tourists must pay. These cost-side elements have resulted in Norfolk Island being a less competitive tourist destination than it could otherwise be.

Does Norfolk Island really *want* to be a tourist destination?

If the answer is 'yes' competitive market pressures dictate that the Island must minimise Government charges that increase the cost of holidaying on Norfolk Island. Norfolk Island cannot take tourism export income for granted. The Government must do everything it can to increase the volume of tourists *and the amount that they spend*.

It must also minimise (preferably remove) all charges that reduce Norfolk Island's competitiveness.

But will reducing taxes and charges ultimately paid by tourists also kill off the export income generated by those visitors? If tourism demand is price-sensitive (which most research confirms), the demand response to lower taxes and charges over time will be *increased* tourism spending (export income).

Tourism provides jobs and income for most of the people on Norfolk Island. It does so as a result of the dollars tourists spend on the island. Maximising this flow of dollars is the way to harness tourism to financing the living standards of the Island community. Requiring overseas visitors to contribute more than 40% of the Norfolk Island Governments' revenue¹³ via taxes and charges that make the Island a higher-cost destination is likely to *reduce* not raise export income.

5.2 What Is To Be Done?

Clearly nobody should be telling the Norfolk Island community what its objectives should be. Those are matters for decision by the community itself. But equally, the Norfolk Island community cannot force others to contribute to the achievement of those objectives. Rather, to the extent that achievement of the community's objectives requires a contribution from others - through generation of export income from tourism, for example - that contribution can only be secured *voluntarily*.

At least for the foreseeable future, Norfolk Island seems destined to depend predominantly on export income to finance its living standards. And most of this is likely to come from overseas visitors. The alternatives to this scenario are not attractive:

- *Finance (public) current expenditures by borrowing.* Lenders - overwhelmingly from overseas - will not be attracted to financing consumption and, as the Island's foreign liabilities mount up, will charge higher and higher risk premia to part with their savings. This path leads to a vicious circle of mounting debt driving higher interest rates which accelerates the accumulation of debt. It is unsustainable. At best, it eats into the amount of export income available to finance local expenditure.
- *Do without as much export income.* Without the spending associated with overseas visitors and related businesses, the income driving the generation of jobs on Norfolk Island will dwindle, and with it those jobs as well. The structural unemployment so generated will accelerate the population drift overseas. Norfolk Island will become less viable as a place to live for many of its residents.

If the Norfolk Island community decides that neither of these options is attractive, then the alternative strategy for sustaining living standards and preserving a viable economy may be viewed as having three key objectives. These are:

- *Promotion of export income.* The need for (externally-sourced) revenue to finance (largely externally directed) expenditure suggests promotion of export income as the only viable strategy.
- *Financing needed capital investment.* The need to cover asset depreciation and fund new infrastructure development suggests the need for a portion of export income to be set aside - saved - for capital purposes.
- *Diversification of income sources.* In the longer term, reducing the Island's reliance on one export - tourism - is desirable the better to insulate the Island from unexpected shocks from 'putting most of its

¹³ Refer to the statistical detail in Attachment section A.3 for the source of this figure.

eggs in one basket'. Tourism is a volatile source of export income at best. This suggests the need for more saving to build up a stock of financial assets that can be invested overseas to generate another, growing, source of income to supplement exports.

In turn, these objectives suggest the need for two practical policy targets:

- *Making Norfolk Island an attractive and competitive destination for tourism and related businesses, and, where possible, other businesses.*
- *Ensuring a taxation regime that minimises avoidable burdens (and competitive penalties) on overseas visitors, and minimises disincentives for community saving.*

The thrust of these suggestions implies difficult decisions for the Norfolk Island community. We are conscious of the social and political concerns to which they will give rise. That said, it appears to us that failure to act in the broad directions proposed *itself* implies a community choice: to accept economic and social decline as income and the associated jobs run out and/or as overseas debts and debt servicing burdens mount.

Difficult decisions frequently require a crisis atmosphere to galvanise community support. It is in a crisis when the seemingly unacceptable may become acceptable. Arguably, Norfolk Island now has such a crisis atmosphere.

We recommend that the Norfolk Island Government use this crisis to address some of the fundamental long-term and structural problems of Norfolk Island. A significant change in policy seems to us to be required if Norfolk Island is to become to a long-term viable community. The Ansett decision provides a window of opportunity for the people of Norfolk Island to address these long-term issues.

5.3 Some Principles for 'Good' Taxation Design

Some principles for tax system design appear particularly important for an economy like Norfolk Island:

- Taxing tourists can be bad - it can encourage them to 'vote' for another travel destination.
- Taxing consumption is not so bad - it does not discourage saving.
- Taxing saving is bad for those economies needing to save more - it tends to encourage spending.
- Extracting revenue through the use of monopoly power in government owned enterprises is bad. It distorts prices, provides a narrow income base and reduces the welfare of the community.
- Running down public assets to finance current consumption is not sustainable.

What tax system recognises these principles?

5.4 Alternative Tax/Revenue-Raising Systems

A goods and services tax (GST) - properly designed - has many desirable features. In particular, it taxes consumption and does not tax savings (until they are spent). However, a GST imposes a substantial burden on the overseas tourist (ie, on export income) and none on the Norfolk Islander who travels overseas (generating tourism import spending). When tourists holiday on the Island they would pay goods and services tax on their accommodation, restaurant, tours and entertainment. Further, when locals holiday *off* the Island, they will spend a considerable amount that falls outside the Norfolk Island goods and

services tax net. So a goods and services tax is still biased against tourists 'voting for Norfolk island'. Any plan to implement a GST would need some GST refund scheme to reduce this bias away from tourism exports at least (for example, the United Kingdom has such a VAT refund scheme).

There is an alternative. A taxation system that fits well with the abovementioned set of principles is a direct Expenditure Tax. An Expenditure Tax sounds similar to, but is actually quite different from, a GST. To simplify, it works in the following manner:

At the end of each year, the residents of Norfolk Island make the following calculation:

<i>Accumulated savings at the start of the year</i>	
	<i>plus</i>
<i>Income received during the year</i>	
	<i>minus</i>
<i>Accumulated savings at the end of the year</i>	
	<i>equals</i>
<i>Expenditure during the year</i>	

Savings may be defined to include cash in the bank, investments, stocks and bonds. Income includes wages, salaries, business profits, interest earnings and dividends, capital gains and fringe benefits. Expenditure could be taxed at progressive rates: eg, *as an illustration only*, it might be untaxed for the first \$5,000; taxed at 15¢ for each dollar from \$5,001 to \$10,000; and, taxed at 30¢ for each dollar from \$10,001 upwards. Alternatively, a uniform tax rate may apply to all expenditure (easier to administer, but less equitable). The exact tax rates and income thresholds will depend on the mix of reforms chosen by the people of Norfolk Island and the revenue target that must be achieved.

This tax system has many merits:

- It does not discourage saving;
- It does not encourage consumption relative to saving;
- It does not tax tourism export income, while taxing tourism import spending.
- It could be used to reduce reliance on extracting revenue from monopoly Government enterprises.

Given the size of Norfolk Island, and the fact that such a tax could be introduced from a 'clean slate' starting point, the implementation, transitional and administrative complexities otherwise associated with this tax would be greatly reduced. It is recognised that an expenditure tax will face opposition from Norfolk Island residents, as they are not used to keeping records of income and profits for tax purposes.

However, what is the alternative?

The fundamental issue is: can the status quo continue, and if not, what economic outcome is acceptable to Norfolk Island residents?

6. Some General Comments

Norfolk Island Government revenue is derived from four main areas

- Customs duty
- Taxes specifically targeted at tourists (Accommodation Levy, Departure Tax, Landing Charges)
- Taxes on savings (Financial Institutions Levy)
- Use of monopoly control of core enterprises

All of these methods of revenue raising fall heavily on the main external income source for the Norfolk Island economy - tourism - and discourage saving.

One option to address these problems is for Norfolk Island to shift the burden of tax away from tourists and on to local residents, while minimising tax disincentives for saving. This is particularly important when tourism represents 95% of the export earnings of Norfolk Island. Other options may appear more palatable in the short run, but are likely to be much less so in the long run.

The 6 August 1996 Census reported that 53% of the resident working population had a job directly related to tourism. Many of the other 47% of jobs not directly related to tourism would also indirectly benefit *substantially* from the income brought into Norfolk Island by tourists. Tourism makes a very large direct and indirect contribution to the Norfolk Island economy.

But the Norfolk Island Government also generates a substantial portion of its revenue from tourists. By reducing the international competitiveness of Norfolk Island, this revenue strategy directly threatens the jobs of 53% of working Norfolk Islanders, and indirectly threatens the jobs of the other 47%. It is true that problems of remoteness are a natural disadvantage for Norfolk Island in the context of a tourism exports strategy. That simply reinforces the point that the Government should ensure that these natural disadvantages are not made worse by increases in the cost structure of its tourism product as a result of avoidable tax policy.

Current revenue-raising arrangements in effect are not consistent with the long-term viability of Norfolk Island. Unless these policies are changed, the long term viability of the Island is under a growing cloud.

Whether or not that happens is a matter for choice: Norfolk Island's choice.

The next section of the report reviews possible revenue alternatives.

7. Recommendations

Option 1 - Based On An Expenditure Tax

The following reform package is recommended for consideration.

7.1 Expenditure Tax Based Revenue

- Levy a tax on expenditure at progressive rates. The precise rate scale would be determined on the basis of revenue requirements, the expenditure base involved, and the other reforms adopted.
- The \$260 per year Health Care Levy should be subtracted from the above definition of expenditure so that people are not 'double taxed' on this expenditure. This Levy might also be more progressive (rising as income rises).
- A flat rate expenditure tax/health care levy structure is also a possibility if there is community preference for it.
- Remove customs duties on all items. The expenditure tax would finance the loss of revenue from this duty (with the average net effect on the cost of living roughly neutral).
- Customs duties may be retained on tobacco, alcohol, fuel and oil, if higher taxes on particular commodities are desirable for environmental or health reasons. (However, the taxes on fuel also affect the competitiveness of tourism.) Similarly the tax on Tattersalls may be retained for social reasons.
- Establish a provident fund for long-term liabilities.

7.2 Financial Institutions based revenue

- Remove the Financial Institutions Levy completely, or reduce it to rates comparable with those in mainland Australia.
- Remove the Stamp Duty on cheques.

7.3 Other taxes

- Remove the Accommodation Levy. This tax discourages tourism.
- Remove the Fuel Levy. Customs Duty on fuel *and* a Fuel Levy is unnecessary double handling - it simpler to have a higher Customs Duty and no Fuel Levy. Preferably have neither.
- Remove the Departure Tax. This tax discourages tourism.

7.4 Government monopoly based revenue

- Reduce Norfolk Island Airport landing charges to a rate that is competitive with other airports. Most Australian international airports charge \$7.32 per tonne landed (it is free to take off). A fully laden 737-300 costs just under \$500 per rotation in Federal Airports Corporation landing charges at Australian airports, plus around \$700 in Air Services Australia charges (plus \$300 Aircraft Noise Levy at Sydney). The total at Australian airports is \$1,200 for Brisbane and \$1,500 for Sydney. Compare this

with the \$4,172 per rotation charged by Norfolk Island Airport for the same aeroplane. (Note: there are also en-route charges levied by Air Services Australia. These charges are also paid by aircraft going to Norfolk Island so do not change the size of the gap between Norfolk Island Airport and mainland airport charges.)

- Reform the pricing of Norfolk Telecom so that prices more closely reflect the cost of providing the service, plus a normal rate of return. This would generate the following changes: cut international call costs by around half, introduce a 20¢ charge for local calls and an increase in line rental charges to reflect the true cost of providing the service. Further, international call price reductions may be necessary to bring Norfolk Telecom back to a normal rate of return, rather than the current monopoly rate of return.
- Allow more than one liquor store on the island - allow supermarkets to sell liquor and allow clubs to have a bottle shop.
- After allowing competition, sell the government-owned liquor store. There is no apparent market failure that could possibly justify the existence of a government owned liquor store. This asset sale revenue could be used to establish the provident fund for long term liabilities.
- Only take a fair management fee from Government owned enterprises. Allow the enterprises to build up assets, rather than run them down.

Recommendation 2 - Based on a Goods and Services Tax (GST)

This package will not generate benefits of the same magnitude as Recommendation 1. However, it is offered as a second-best alternative.

7.5 Goods and Services Tax Based Revenue

- Introduce a comprehensive, uniform rate, goods and services tax. The exact rate required would depend on the exact reform package adopted.
- As far as is practical, a rebate of the goods and services tax must be given to short-term visitors in respect of larger expenditures. For example, for documented expenditure that reaches a total of over \$100, the visitor is refunded the goods and services tax on the portion greater than \$100 (the tax on the first \$100 is to cover the administration of the refund). The refund is available to visitors that stay less than (say) 30 days and could be collected at the airport on departure. The main items that would generate refunds is expenditure on accommodation, restaurants and shopping.
- Remove customs duties on all items. The goods and services tax would encompass this duty.
- Excises might be retained on products for social reasons (tobacco, alcohol, etc.).
- Establish a provident fund for long-term liabilities.

7.6 Financial Institutions based revenue

As for Recommendation 1, section 6.2.

7.7 Other taxes

As for Recommendation 1, section 6.3, with one exception:

- Retain the departure tax, but only for ordinary residents (declared residents and permit holders). This is an approximation towards levying the goods and services tax on expenditure by residents outside the country. No departure tax should apply for tourists.

7.8 Government monopoly based Revenue

As for Recommendation 1, section 6.4.

7.9 Administration

One consideration when choosing a reform package is the amount of administration required to collect each tax (as Norfolk Island is a small community the administration overheads can be a significant burden). A straight GST may be easier to administer than an Expenditure Tax, but a rebate for tourists under a GST is essential if the reform is even partly to address the fundamental bias against tourism export. This rebate itself creates a considerable administrative load. In the end there may not be a considerable difference in administrative load between the two schemes.

For an expenditure tax there is a period of a few months after the financial year when the assessments are done, where substantial administration would be required. It might be possible for Norfolk Island to out-source this assessment work to a Chartered Accountant firm (or even the Australian Tax Office). This would save having tax staff employed all year round, and would assist with the confidentiality of sensitive financial information in a small community.

Other administrative tools, such as tax file numbers, would minimise the difficulty of tracking people and their expenditure.

ECONOMIC MODEL OF NORFOLK ISLAND

The economic model of Norfolk Island is contained in an Excel file NI_model.xls in the accompanying floppy disk.

8. Overview of the Economic Model

8.1 Coverage

There is a lack of data on the Norfolk Island economy. The only areas where comprehensive time series information is available are: the public sector, imports and exports of goods, population and passenger arrivals. The five-yearly Census collects some information on employment and social security.

A Household Expenditure Survey conducted in 1995 provided one snap shot of spending patterns on the Island. However, with no other information on the household sector collected, it is not possible to analyse the changes in consumption patterns or income over the past five years. Further, the response rates to the survey were so poor that many data items were not able to be published due to confidentiality restrictions. There is no other data collected on this sector of the economy.

There is also little information collected on the business sector. There is data available on turnover at the banks (due to the Financial Institutions Levy collections). There is also data on imports and exports which give some limited information on the business sector.

The economic model concentrates on those parts of the Norfolk Island which can be measured and analysed in terms of changes over time. To fully specify the model, some components had to be estimated from the available information. These estimates, necessarily, are approximations only.

The model allows the user to examine the impacts on the Government budget by changing several of the key policy variables that the government can control, including the Financial Institutions Levy, Departure Fee, Customs Duty, Fuel Levy and Accommodation Levy.

The model estimates the impact of the various policy settings on the Government budget.

Where assumptions have had to be made (due to a lack of data, for example) the assumption is highlighted in ***bold red italics*** so that the Norfolk Island Administration can easily assess the reasonableness of such assumptions.

8.2 Structure

The model estimates the Government Budget position by individually forecasting the outcome for each revenue and expenditure item that go to make up the final Budget position.

The model also provides estimates of earnings from tourism, other exports, imports and population growth.

General Economic Trends

To assist in projecting growth in tourist numbers, general cost escalations for inflation, and increases in wages due to productivity, the model uses some general economic trends to guide the growth rates in various activities.

Recent history and forecasts of future economic growth in Australia and New Zealand are provided. A forecast of inflation in Australia is also provided, to assist in forecasting the Norfolk Island Retail Price Index (RPI). The RPI has moved relatively closely to the Australian rate of inflation in the past, and this relationship is assumed to continue. The RPI is used for making adjustments to nominal data to allow for inflation and also for calculation real (inflation adjusted) measures of activity. A productivity component is included to allow for wages increasing faster than the rate of inflation.

As Norfolk Island uses Australian dollars, there is no need for an exchange rate between Australian and Norfolk Island. There are, however, exchange rate considerations between New Zealand and Norfolk Island. From a forecasting viewpoint, all available information about the future is assumed to be already factored into the current value of the NZD/AUD exchange rate. While there will most likely be changes in the NZD/AUD exchange rate in the future, (and these changes will have impacts on New Zealand tourism to Norfolk Island) such movements in the exchange rate are very unpredictable, in terms of timing, size and direction. An assumption of no change in the NZD/AUD exchange rate is used for the purpose of these forecasts. Obviously this assumption can be varied.

Tourism

Tourism is forecast from each city-pair service to Norfolk Island. Currently these are Sydney, Brisbane, Auckland, Lord Howe Island and the residual category Charter & Ships (Christchurch also had regular services for a while but currently is zero). There is a line in the model for each city-pair where the user can specify the capacity of regular public transport services (the Lord Howe Island and Charter & Ships do not have regular public transport so do not have a scheduled capacity constraint). From 1 July 1997, the model assumes that there are five SAAB 2000 services a week (50 seats each) from Sydney and three F28 services per week from Brisbane (65 seats each). There is an assumed operational maximum load factor of 95%. That is, airlines are assumed to be unable to average a load factor above 95% for an entire month.

If tourism numbers reach a level where there is a capacity constraint, the number is rationed back to the available air services. If there is a likelihood that additional capacity may become available in this circumstance, then additional capacity can be added in by the user.

Tourism numbers (using commercial accommodation) are forecast by city pair (Brisbane, Sydney, Auckland, Lord Howe and Others) according to economic growth in the relevant country multiplied by an elasticity. The income elasticity is set at 1.5 to reflect the luxury good nature of travel - that is, as real incomes increase people spend proportionally more on travel. Australia and New Zealand are the only countries currently providing regular services to Norfolk Island.

The cost-raising effect of the tax burden on tourists is incorporated into the forecasts by including the change in the tax burden on tourists (assumed fully passed on in higher prices) times a multiplier (not an

elasticity) of -0.25. For example, the estimated tax burden in 1997-98 is \$94.76 (in real terms, deflated by the RPI). If the Accommodation Levy rate was reduced to zero, the burden would fall to \$89.52 per tourist. That is a fall of 5.5%. This change in the size of the burden is multiplied by -0.25 to generate a 1.4% increase in tourism. To describe this impact in terms of elasticities, this removal in the Accommodation Levy would save the average tourist \$6.49 (in nominal terms) on a per capita expenditure estimated at \$1,551 in 1997-98 (expenditure of \$951 on Norfolk Island plus a \$600 airfare). This is a 0.42% drop in the average cost of the total holiday cost and causes a 1.4% increase in tourism numbers, so implies a price elasticity of 3.3. If the tax burden on tourists increases, then the number of tourists decreases more than proportionately (and vice versa). This tax burden factor effectively incorporates a wide range of cost factors including the pass through of landing charges, departure fee, accommodation levy and several other taxes directly or indirectly paid by tourists.

The duration of stay is assumed to decline slowly into the future, consistent with the current trend (this is a 0.05% per month drop in the average length of stay, or an annual 0.6% drop in the average length of stay). Trips by locals offshore are assumed to grow in relation to the growth in income of Norfolk Island (mostly driven by tourism). The number of visitors using private accommodation are assumed to move in relation to the ordinary resident population, as this is presumably friends and relatives visiting.

Having forecast passenger arrivals as described above, the number of tourists staying in public accommodation is used to estimate Accommodation Levy revenue. The total number of arrivals and departures (over 18 years old) is used to estimate Departure Fee revenue. (We note that the Departure Fee applies to those over 16 years old, but Norfolk Island Immigration only collects age information on an over/under 18 year old basis. A small adjustment is made to allow for this 16/18 year old data problem, and the discrepancy caused by cash vs accrual accounting.)

Revenue for Norfolk Airport is also calculated using the landing charge times the number of passenger movements. There is also some revenue from general aviation activity and other charges which is forecast to rise at the same rate as inflation.

The tourism forecasts can be updated monthly from immigration records. As each new month of hard data is entered, the forecasts will update with a new projection incorporating the latest information.

Population

The average resident population is forecast by category of resident. There are Declared Residents, General and Temporary Entry Permit holders. Each of these is divided into those resident on the island and those off the island to generate an estimate of the ordinary resident population on the island. In the model the user can specify the growth rate of the total population in each category and the proportion living on the island (and hence the number on the island is calculated). These were forecast to follow recent trends, with a declining population of GEP and TEP residents and a declining proportion of Declared Residents living on the island.

The ordinary resident population is expected to fall from an average population of 1,807 in 1995-96 to an average population of 1,688 by 2000-01.

The average daily tourist population over a year equals the number of tourist arrivals during the year \times average length of stay \div 365. As tourists are generally thought to consume a larger amount of goods and services than locals (although no survey evidence is collected) the tourist population is weighted up by a factor of 1.2 in order to derive a measure of their demand for goods and services on Norfolk Island.

Trade

Imports are forecast assuming a zero balance of trade. That is, Norfolk Island can only consume imports up to the value of export earnings. A zero trade balance is a relatively restrictive assumption (forced by a lack of data), however, the alternative is that any imbalance is offset by some other external transaction. For example, if there is an imbalance (say imports higher than exports) then this would have to be offset by either: a net income surplus (earning more money from investments overseas than overseas investors earn in Norfolk Island) an unrequited transfers surplus (generated by net foreign aid and/or net immigration) or an increase in debt or the sale of equity to overseas investors. Given the various restrictions on immigration, foreign borrowing and foreign ownership of Norfolk Island assets, these various options for funding a balance of trade deficit are limited. In any case, there is no data available to estimate the size of these, hence, the simplifying assumption of a zero balance of trade is the only way of making the model tractable.

Customs duty is applied to imports to derive Customs Duty Revenue. The general rate of duty is currently 10%, with several different rates applying for tobacco, alcohol, fuel and food. The Government also receives exemptions on duty, so the amount collected is slightly less than the customs rate times the value of imports (these exemptions are allowed for at the same relative rate as in history). Fuel levy is also charged, but not on all categories of fuel (does not include distillate or butane). To calculate the fuel levy, the model converts the value of fuel imports (less distillate and butane) into a volume of fuel imports (based on an estimated unit value) and then applies the levy rate. Historical data is used to ensure this technique adequately describes the actual outcome in history.

Merchandise exports are forecast to grow in line with productivity and inflation. Earnings from tourism are calculated from the number of tourists times per capita expenditure. This is used to estimate the injection of funds from tourism, the turnover of money and the resulting Financial Institutions Levy collections. The zero balance of trade identity is used to calculate the forecast of imports (less exports earnings means less imports, more exports means more imports).

The change in the level of export income is used to forecast the change in the level of money turnover on the island. This is then multiplied by the Financial Institutions Levy rate to derive FIL revenue. There is an assumed disincentive effect of the FIL as illustrated in the following table (the disincentive rate is the drop in bank deposits compared to a situation with no FIL):

FIL rate	0.00%	0.10%	0.25%	0.50%	0.75%	1.00%	2.00%	3.00%
Disincentive	0.00%	2.70%	7.05%	16.55%	29.42%	40.54%	56.25%	61.34%

For example, suppose in a given year, there would be \$100 million in banking turnover on Norfolk Island. If instead there was a 1% FIL, the turnover would fall to \$59.46 million. If the FIL was 0.25% the

turnover would only fall to \$92.95 million. Beyond an FIL rate of 3%, the disincentive effect levels out at just over 60%.

The above rates of disincentive were estimated using information on turnover over the past six years, and from when the FIL rate changed from 0.25% to 1.00%.

Government enterprises

The profit and loss statement for each Government Enterprise is extrapolated to generate forecasts. Total wages and salaries are usually forecast to grow at the combined rate of inflation, productivity and any change in the target population that the particular enterprise services. For example, the cost of running the school moves in line with the under 18 population (plus inflation and productivity). The cost of policing is forecast to move in line with the combined population of ordinary residents and tourists (plus inflation and productivity).

The model is a tool for allowing the Norfolk Island Government to project the future. Several items in the profit and loss statement will need refinement using the expertise of those on Norfolk Island. For example, people on Norfolk Island may be able to provide a more educated guess on the future Power House operating costs of the Electricity Service (and many other expenditure items that do not fall within our area of expertise). Once an appropriate forecast is generated for each component, the model aggregates them and calculates the Consolidated Net Assets, Government Budget Balance and several other key indicators for Norfolk Island.

Expenditure and revenue

General Government expenditure and revenue are forecast item by item in the model. Revenue items such as the Departure Fee and Accommodation Levy revenue are linked to the number of passengers and the number of tourists staying in public accommodation, respectively. The expenditure items are links to the population requiring the various services, the rate of inflation and various other cost escalation factors as appropriate.

For many of the items, small adjustments need to be made to reflect differences in the revenue actually received and the revenue one would expect if the appropriate calculations were made based on historical data. For example, customs duty actually paid is slightly lower than the 10% legislated rate for many categories, due to duty exemptions for the Government. The Departure Fee collections do not quite correspond to the actual passenger numbers times \$25 Fee (less the Norfolk Island Government Tourist Bureau commission) due to the cash basis that the accounts are compiled on. Similarly, the Financial Institutions Levy collected in 1995-96 refers to deposits from June 1995 to May 1996. These various discrepancies are only minor in size, but require adjustments to ensure that all data is on a comparable basis.

Dividends to the Administration

One area that will have a considerable impact on the forecast Budget balance and the consolidated net assets of Norfolk Island is the size of dividend paid to the Government by several of the enterprises. As a starting point, dividends have been forecast in similar levels as paid in recent history.

8.3 Usage and Output

Any data item formatted in ***bold italic red type*** is a forecasting assumption that can be changed by the user. This includes variables such as tax rates, customs rates, air service constraints and other factors.

Historical data taken directly from Government accounts, and Immigration and Custom data is formatted in ***bold blue type***. These numbers can be updated as and when new data comes to hand. For many items this will be once a year, although the population and passenger data can be updated monthly.

When updating a full year, several historical formulae will need to be copied over to the next year, as the formulae used to calculate derived items in history are often different from the equation used for forecasting.

There are circularities in the workbook. A circularity often occurs when demand for a good impacts on the price of the good, which in turn impacts on demand for the good and so on. In Excel, the Calculation Option has to have the 'Iteration' check box selected, Maximum Iterations=50, Maximum Change=0.1.

Model Output

The model produces a range of both summary output (budget balance, total tourism earnings, etc) and detailed output (monthly tourism levels, imports by category, etc). All the output is in standard Excel format so is readily available for printing, charting and so on.

Key Results	HISTORY	HISTORY	HISTORY	HISTORY	HISTORY	HISTORY	FORECAST	FORECAST	FORECAST	FORECAST
	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
Total revenue	6,411,733	7,423,600	6,836,722	7,106,688	8,252,666	9,324,156	8,776,648	8,444,300	8,674,476	8,833,142
Underlying revenue	6,118,883	6,565,968	6,168,345	6,304,179	7,093,468	7,580,980	7,615,532	7,127,175	7,381,717	7,560,890
Total expenditure	6,222,592	7,635,280	7,094,067	7,240,842	7,907,798	8,723,704	8,353,180	8,632,149	8,903,122	9,204,534
Revenue/Expenditure excess	189,141	-211,680	-257,345	-134,154	344,868	600,452	423,468	-187,849	-228,646	-371,392
Total enterprise profit/loss	1,860,103	1,886,806	1,540,665	2,296,572	2,267,026	2,132,559	2,574,178	1,982,845	2,117,388	2,218,531
Consolidated net assets	17,971,349	18,959,845	19,047,956	19,190,547	19,724,164	19,860,392	20,732,651	20,515,001	20,363,873	20,150,577
Passenger arrivals	28,712	27,351	27,187	27,224	28,501	29,787	30,110	27,180	27,677	28,082
Growth rate		-4.7%	-0.6%	0.1%	4.7%	4.5%	1.1%	-9.7%	1.8%	1.5%
Real tourism export earnings	26,869,007	25,869,434	22,590,906	21,471,906	25,726,035	24,111,811	23,910,075	21,384,721	21,519,575	21,345,817
Growth rate		-3.7%	-12.7%	-5.0%	19.8%	-6.3%	-0.8%	-10.6%	0.6%	-0.8%
Tourism contribution to NI incomes	40,303,510	39,343,807	34,642,053	33,999,541	42,317,126	41,903,002	42,217,251	38,777,789	40,466,153	41,423,873
Actual money turnover (\$'000)	97,675	98,429	91,273	83,287	81,289	89,079	87,861	80,703	84,216	86,209
Total merchandise imports	25,860,596	24,378,794	21,045,013	20,937,463	24,778,790	24,649,384	24,647,824	22,632,213	23,494,870	23,951,033

ATTACHMENTS

The Attachments provides details of calculations and statical information referred to in the main body of the report.

A.1 Government revenue

Norfolk Island Government revenue by item (*Source: Government Account*)

Revenue item	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Taxes						
Customs Duty Total	2,089,150	2,159,290	1,995,597	2,041,093	2,343,411	2,517,768
Other Taxes						
Financial Institutions Levy	976,746	984,287	912,727	832,868	812,892	890,786
Departure fees	359,975	546,836	525,570	569,884	702,302	731,408
Fuel levy	161,408	171,480	159,547	167,277	299,409	301,891
Company fees	76,647	62,049	69,677	54,232	50,878	46,759
Accommodation Levy	72,345	75,696	75,196	76,578	188,543	197,164
Stamp duty on cheques	27,877	26,571	25,012	24,359	22,637	20,057
Absentee landowners	78,361	72,702	74,848	62,319	67,101	58,571
Liquor licences	55,548	48,138	43,987	54,837	54,869	55,307
Conveyancing	58,006	85,538	114,610	110,945	108,147	157,227
Tattersalls lotteries	52,238	71,092	64,937	44,964	64,461	81,238
Vehicle Rego & licence	174,432	206,426	216,570	203,543	214,417	218,784
Public works levy	33,099	458	0	0	0	0
Total	2,126,682	2,351,273	2,282,681	2,201,806	2,585,656	2,759,192
Earnings						
Water assurance	5,000	0	20,000	10,000	10,000	10,000
NI Airport	16,600	50,000	50,000	132,500	132,500	70,000
Health care	20,000	0	0	10,000	10,000	10,000
Workers comp	0	0	5,000	20,000	10,000	10,000
Liquor supply	666,270	648,194	610,956	677,419	687,280	720,345
Postal services	20,000	70,000	20,000	39,500	170,000	260,000
Norfolk Telecom	353,358	953,358	607,358	907,358	1,187,358	1,207,358
Electricity service	125,407	245,407	225,407	225,407	125,407	125,407
Lighterage service	45,701	53,241	67,553	81,553	76,553	26,500
Total	1,252,336	2,020,200	1,606,274	2,103,737	2,409,098	2,439,610
Interest from investments	423,784	349,366	222,439	189,174	277,925	409,399
Charges						
Ag., pasturage and dog fees	18,618	15,022	14,995	17,171	17,062	15,175
Misc. revenue	95,627	133,033	305,582	163,764	132,570	194,402
Mobile plant hire	17,286	18,183	12,707	12,663	12,920	33,673
Rentals	85,397	82,746	84,345	116,762	124,402	123,602

Sale of surplus	9,473	7,488	4,449	8,779	10,023	10,148
Court fees and fines	11,562	14,481	31,743	17,224	6,928	6,288
Crown lease	15,600	11,900	13,806	13,082	15,964	14,065
Curator of deceased estates	18,920	14,258	14,565	7,303	16,155	2,640
Dental fees	67,113	80,691	85,251	11,161	587	0
Tanalith plant charges	53,225	91,293	88,644	84,674	71,113	78,585
Sale of Forest produce	16,827	21,783	30,225	24,228	27,063	31,378
Timber royalty	6,577	8,720	12,950	10,067	3,241	9,717
NI Emergency service	0	0	0	37,987	143,711	155,765
Total	416,225	499,598	699,262	524,865	581,739	675,438
Other income						
Electricity service - repaid cap.	0	0	0	0	0	349,288
Norfolk Telecom - repaid cap.	0	0	0	0	0	133,527
Total	0	0	0	0	0	482,815
Appropriation former years	103,556	43,873	30,469	46,013	54,837	39,934
Total revenue	6,411,733	7,423,600	6,836,722	7,106,688	8,252,666	9,324,156

A.2 Underlying Government revenue

Of the revenue in Section A.1, many are fee-for-service type revenue which are directly offset by the cost of providing the service (that is, they do not contribute revenue for general expenditure). For example:

- The Tanalith plant generated revenue of \$78,585 in 1995-96 but cost \$86,358 to run.
- Similarly the NI Emergency service generated \$155,765 in revenue in 1995-96, but cost \$163,337 to run.
- The management fee of \$10,000 for several of the Government services only covers the cost of the NI Administration providing accounting and administration services to the enterprise.
- The repayment of capital by the Electricity Service and Norfolk Telecom is not a recurrent revenue stream.
- Appropriations from former years and Interest from investments are also revenue that is not raised directly from people on Norfolk Island.

The aim of this section is to examine how much of Norfolk Island Government general revenue is paid by tourists compared to how much is paid by locals. To this, we first need to know how much net revenue is raised from people on Norfolk Island (as opposed to fee-for-service and interest earnings, repayment of capital and so on).

This is revenue that is generated by the Government that is not directly related to the provision of a service. The revenue from the Tanalith Plant and the NI Emergency Series are directly spent on the provision of these services. The management fee on the Water Assurance Fund is probably very close to the cost of the accounting and administration of the fund, so does not contribute revenue for general spending. The repayment of capital is a one-off injection so does not contribute to structural Government revenue.

Removing these items that do not provide a net contribution to general revenue gives a measure of underlying Government revenue. This is revenue available for funding essential infrastructure, the hospital and school, police and public works.

Norfolk Island Government, underlying revenue

(Excludes fee-for-service revenue, one-off debt redemption and management fees. Includes revenue from monopoly pricing of Government enterprises.)

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Underlying revenue	6,118,883	6,565,968	6,168,345	6,304,179	7,093,468	7,580,980

More details on the calculation of this item are available in the model. Underlying revenue includes revenue from the Airport and Norfolk Telecom where a charge well above the competitive rate is charged, but concealed from the Government budget.

In addition to the revenue listed above, funds are raised for the Health Care system via a levy, but this is directly related to the cost of health care so does not contribute to underlying revenue. The Tourism Bureau receives a commission for the collection of departure fees, to fund some of the administration of the Bureau. It is this underlying revenue that funds expenditure on the police, school, public works and so on. Further, when people contribute the above revenue they do not directly receive a service - it is essentially pure revenue raising.

A.3 Underlying Government revenue paid by tourists

How much tax do tourists pay? Firstly the average number of tourists on the island, compared to locals, is as follows:

Norfolk Island population and average tourist population (*Source: Immigration Section*)

Island Population	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Ordinary Residents	1,971	1,971	1,919	1,857	1,837	1,807
Average Tourist Population	671	633	621	616	639	662
Total NI Population	2,642	2,604	2,541	2,473	2,475	2,469
Allowance for higher spend ¹⁴	1.20	1.20	1.20	1.20	1.20	1.20
Weighted tourist population	805	759	746	739	766	794
Weighted NI population	2,776	2,730	2,665	2,596	2,603	2,601
Proportion of weighted total						
Ordinary Residents	0.2900	0.2781	0.2798	0.2848	0.2944	0.3052
Average Tourist Population	0.7100	0.7219	0.7202	0.7152	0.7056	0.6948

¹⁴ While there is no survey evidence collected, it may be reasonable to assume that the average tourist spends at a higher rate than the average local (per day). A relativity of 20% higher (hence a factor of 1.20) is used to reflect this.

At any one time, tourists are about 25% of the Norfolk Island population. Allowing for a higher daily consumption by tourists, tourists account for about 30% of the expenditure on goods and services on Norfolk Island. This is an estimate because of the lack of hard data collected on Norfolk Island.

Tax revenue paid by tourists:

- Departure tax. 90% of departures are tourists (the other 10% are locals - according to Norfolk Island Immigration records). The amount shown in the Government accounts is just over 90% of the departure tax calculated by multiplying the over 18 passengers by the \$25 fee (a 5% commission is taken by the Tourism Bureau and there are cash vs accrual discrepancies)¹⁵. So the departure tax paid by tourists matches very closely with the tax shown in the accounts (the NIGTB commission and accrual adjustment offsets the tax paid by locals). The entire amount in the Government accounts can be attributed to tourists. For 1995-96, this is a \$731,408 tax burden shouldered by tourists.
- The accommodation levy is almost exclusively paid by tourists (assuming relatively few locals use tourist accommodation.) For 1995-96, this is a \$197,164 tax burden shouldered by tourists.
- The gap between the Norfolk Island landing charges of \$36.60 and a competitive charge (estimated based on FAC and ASA charges) of \$13.00 can be considered a virtual tax on tourist of \$23.60. For the 29,787 tourists in 1995-96, this is a \$805,255 tax burden shouldered by tourists.
- Tourists spend money on the Island, so they indirectly pay Customs Duty and Fuel Levy. These two items total \$2,819,659. Assuming tourists account for around 30% of the total expenditure on the island, for 1995-96, this is a \$860,666 tax burden shouldered by tourists.
- The profits of the Norfolk Telecom deliver 14.8% of the Government's revenue through monopoly rents. Charges are only levied on overseas calls. A substantial amount of this would be contributed by tourists. Of the \$1,614,521 in international calls, we estimate that \$492,812 were made by tourists (based on the assumption of around 30% of expenditure is made by tourists).
- Other taxes that indirectly end up being paid by the tourist include the Financial Institutions Levy, liquor licences and virtual taxes through electricity and postal services. These could add around \$200,000 to the tourist tax burden for 1995-96 (a conservative estimate, although difficult given the lack of data collected on Norfolk Island).

The estimate of the total tax burden shouldered by tourists in 1995-96 is \$3,483,408. This is 45.9% of the total underlying Government revenue for 1995-96

The following table shows our best estimate of the tax burden of tourists. Underlying revenue is estimated as the sum of revenue items not related to the provision of a service plus monopoly profits from Government enterprises.

Tax burden on tourists

¹⁵ The Departure Fee is collected from the age 16+ passengers, but immigration records collect data on an over/under 18 years basis. Even still, the \$25 times 31,709 passengers over 18 during 1995-96, less the 5% commission to the NIGTB still generates \$753,078, but the accounts only report \$731,408, presumably due to a discrepancy between accrual and cash basis accounting and various exemptions.

Weighted share	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Tourist tax burden estimate	\$2,566,409	\$2,795,769	\$2,608,795	\$2,758,768	\$3,247,763	\$3,483,408
Total underlying revenue	6,118,883	6,565,968	6,168,345	6,304,179	7,093,468	7,580,980
Tourist % of total revenue	41.9%	42.6%	42.3%	43.8%	45.8%	45.9%

The disincentive to tourists generated by Norfolk Island Government taxes is illustrated in the following table, based on the average tax burden per tourist.

Tax burden per tourist

Weighted share	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Tax burden per tourist	\$89.38	\$102.22	\$95.96	\$101.34	\$113.95	\$116.94
Burden on a family of four	\$357.54	\$408.87	\$383.83	\$405.34	\$455.81	\$467.78

A.4 Switching the tourist tax burden to the locals

Suppose, instead, that the local residents contributed the revenue currently charged to tourists (\$3.483 million in 1995-96, as calculated in Section A.3). From the 6 August Census, there were 1,772 ordinary residents of Norfolk Island. A quotient of these two quantities suggests that a tax contribution of \$1,965 per resident per year would be sufficient to remove the current burden on tourists. The tax would be more likely to be paid by employed persons. From the Census, there were 1,080 full time workers on Norfolk Island. This implies a \$3,225 tax contribution per year by these employed persons would be required offset the burden on tourists.

This \$3,225 is in addition to tax already paid by locals indirectly through the Financial Institutions Levy, Customs Duty, Fuel Levy and other indirect taxes. If these indirect taxes are removed as recommended, the Expenditure tax will have to raise more than \$3,225 from each local to cover both the move away from taxing tourists *and* the move away from indirect taxes currently paid by locals.

A.5 Norfolk Island Customs data

Imports of goods¹⁶

Imports	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Building Materials & Supplies		2,399,527	1,874,056	2,122,355	2,882,779	2,340,977
Household Appl. & Furnishing		1,869,766	1,660,929	1,822,168	1,274,588	1,288,846
Consumer Durables		3,551,439	3,112,736	2,428,056	4,468,446	4,708,617
Food & Household Supplies		4,208,791	4,107,482	4,525,843	5,411,844	5,572,357
Tobacco & Alcohol		1,252,201	914,127	852,092	1,078,158	3,528,253
Clothing & Footwear		3,503,129	2,894,865	3,570,494	4,363,667	4,050,545
Motor Vehicles		1,741,512	1,394,847	973,180	1,598,137	1,256,881
Rural & Farming		593,622	557,291	997,980	825,062	620,242
Fuel		1,791,921	1,643,868	2,022,260	1,380,359	1,663,059
Miscellaneous		3,466,886	2,884,812	1,623,035	1,495,751	1,868,384
Total Imports	25,860,59	24,378,79	21,045,01	20,937,46	24,778,79	26,898,15
	6	4	3	3	0	9
Less tobacco re-exports	0	0	0	0	0	2,248,775
Total actual imports	25,860,59	24,378,79	21,045,01	20,937,46	24,778,79	24,649,38
	6	4	3	3	0	4

Exports of goods

Exports	1990-91	1991-92	1992-93	1993-94	1994-95†	1995-96
Palm seeds/sprouts	855,511	611,093	376,562	319,915	230,530	490,005
Pine seeds/sprouts	0	9,760	0	3,036	110,961	100,622
All others *	2,028,977	1,476,538	1,330,793	1,446,388	55,288	225,923
Tobacco re-exports	0	0	0	0	0	2,248,775
Total (incl. re-exports)	2,884,488	2,097,391	1,707,355	1,769,339	396,779	3,065,325
Total actual exports	2,884,488	2,097,391	1,707,355	1,769,339	396,779	816,550

* The item 'All Others' contains a substantial component of re-exports (things that are not produced on Norfolk Island, but were imported then exported and so are included in the official figures as exports). The 'All Others' item includes a large component of re-exports in every year except 1994-95.

† The data for 1994-95 was compiled on a different basis by the Collector of Customs, to remove all exports which 'do not create local earnings' (such as re-exports). When re-exports are removed (almost all of the 'All others' item) the palm and pine exports are the only exports of any significant volume.

A.6 Imports of services estimate

This item is mainly made up of travel debits (that is, locals going overseas for a holiday). The Immigration section recorded 3,282 locals returned to Norfolk Island during the year. The number is higher than the

¹⁶ The Collector of Customs reported to us that for tobacco exports (re-exports) in 1995-96 were \$4,168,426, however we note that total imports of tobacco & alcohol was \$3,528,252 in the same year, calling into question the amount of re-exports. The estimated amount \$2,248,775 is difference between total imports and dutiable imports of tobacco and alcohol and provides a more realistic time series for net tobacco and alcohol imports (\$1,279,478 in 1995-96).

population of 1,772 because several people presumably made multiple trips out of Norfolk Island. If each person spent \$1,250 (perhaps conservative given the airfares alone are around \$700) then the total service imports are \$4,102,500.

A.7 Ansett share of tourist traffic

Ansett transported 21,481 of the tourists to Norfolk Island in 1995-96. That is 72.1% of the total tourist traffic to Norfolk Island. On the basis of the \$27,935,334 in estimated export earnings from tourism during 1995-96, the average tourist would spend \$938. The tourists supplied by Ansett would amount to $938 \times 21,481 = \$20,145,665$ worth of service exports. Making the allowance for the fact that tourists are $\frac{1}{4}$ of the population at any one time, and might consume about 30% of the imports, then the tourists supplied by Ansett would generate an injection into the Norfolk Island economy of $70\% \times \$20,145,665 = \$14,101,965$.

A.8 Declining deposits due to Financial Institutions Levy

The Financial Institutions Levy was 0.25% in 1989-90 and increased to 1% from 1 July 1990. From the Financial Institutions Levy returns collected by the Norfolk Island Accounts Section, turnover at the banks has been:

\$'000	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Deposits	129,327.6	114,585.3	106,999.4	91,272.7	83,286.9	81,289.2	89,078.6

Total deposits have fallen by 31% over six years. The general price level on Norfolk Island has risen 19.8% over the period Dec-1990 to Sep 1996 according to the Norfolk Island Retail Price Index compiled by the Administration (data is not available back to the start of 1989-90). Allowing for inflation, deposits in 1989-90 of \$129.3 million would be worth \$154.9 million in today's money. The current level of deposits of \$89.1 million is a real 42.5% drop on the equivalent level in 1989-90.