

Falkland Islands Development Corporation

*I Economy of the Falkland Islands*

## WORKING PAPER 1

### ECONOMY OF THE FALKLAND ISLANDS

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## Introduction

The economy of the Falkland Islands has been transformed beyond recognition over the past decade. When the first Shackleton Report was produced in 1976, the Falkland Islands represented a declining economy, suffering from a chronic pattern of dependency on a single crop - wool - a prolonged outward migration and a long-standing outflow of investment resources, as disinvested earned in the Islands were repatriated to the UK.

The scope of this report and the issues, given the enormous transformation of fortunes the Islands are experiencing, yet the economic constraints which the country faces now are only to be understood if seen within this historical context. Most characteristic is a backlog of development investment, low infrastructure provision and a skill shortage among the Falkland Islands population which reflects the well-known abilities required to run a largely subsistence lifestyle - 'jack-of-all-trades' - rather than the more highly specialised skill requirements typical of a more advanced society in the late twentieth century. Structural changes have already taken place within the economy; more will be inevitable, but the ability to ensure that changes maximise the potential benefits of the Islands' economic transformation depends on setting the future in the context of the past.

This working paper begins by reviewing briefly the economic context at the time of the conflict in 1982 - for little had changed between 1976 and 1982 despite the broad and imaginative recommendations of the first Shackleton Report. After the conflict, the second Shackleton Report initiated some radical economic reform and paved the way for economic revitalisation. The impact of these changes, supported by real capital inflows began a transformation of the economy which has in many ways had a greater impact on some Falkland Islanders than the financial transformation of the Islands' fortunes resulting from the declaration of the FICZ in 1985. This period of the Islands' economic history is the subject of the second part of the paper and sets the context for discussion on the impact of the fishing sector and the future economic needs of the Falkland Islands.

The next section describes the economic transformation of the past two years, including, most importantly, the impact of the FICZ on Government revenues, and sets the parameters for the economic projections shown at the end of the paper.

## WORKING PAPER I

## THE ECONOMY OF THE FALKLAND ISLANDS

## 1 BACKGROUND

1.1 Introduction

The economy of the Falkland Islands has been transformed beyond recognition over the past decade. When the first Shackleton Report was produced in 1976, the Falkland Islands represented a declining economy, suffering from a classic pattern of dependency on a single crop - wool - a prolonged outward migration and a longstanding outflow of investment resources, as dividends earned in the islands were repatriated to the UK.

The concerns of this report are the future, given the enormous transformation of fortunes the islands are experiencing: yet the economic constraints which the community faces even now can only be understood if seen within their historic context. Most characteristic is a backlog of development investment, low infrastructure provision and a skill endowment among the Falkland Islands population which reflects the multifaceted abilities required to run a largely subsistence lifestyle - 'jack-of-all-trades' - rather than the more highly specialised skill endowments typical of a more advanced society in the late twentieth century. Important changes have already taken place within the economy; more will be inevitable; but the ability to ensure that changes maximise the potential benefits of the islands' economic transformation depends on setting the future in the context of the past.

This working paper begins by reviewing briefly the economic context at the time of the conflict in 1982 - for little had changed between 1976 and 1982 despite the broad and imaginative recommendations of the first Shackleton Report. After the conflict, the second Shackleton Report initiated some radical economic reforms and paved the way for economic revitalisation. The impact of these changes, supported by real capital inflows began a transformation of the economy which has in many ways had a greater impact on most Falkland Islanders than the financial transformations of the Islands' fortunes resulting from the declaration of the FICZ in 1986. This period of the Islands' economic history is the subject of the second part of the paper and sets the context for discussion on the impact of the fishing sector and the future economic needs of the Falkland Islands.

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## 1.2

The Historic Situation

At the time of the 1976 Shackleton Report, the main characteristics of the Falkland Islands could be summarised as follows:

- the economy was almost entirely dependent on the export of wool, a pattern which went back to the 1870's and which defied repeated efforts to diversify into other types of farming, horticulture or processing of agricultural produce;
- a natural consequence of this monoculture was the vulnerability of the economy to fluctuations in the international wool price. The Falkland Islands have always been a price taker, with volumes too small to influence the world price, in spite of the quality of the product. This particular variable has always dominated the economy of the islands;
- The population was highly dependent on imports of almost all consumer goods as well as capital goods and some services;
- The agricultural sector was very much in the hands of UK owned large farming companies. The most important was the Falkland Islands Company, which, as well as owning 46 per cent of the agricultural land in the islands, produced almost half the wool, employed about one third of the island's work force and ran the coastal shipping services and external sea freight services. It also conducted the sale of most of the Islands' wool clip and held a dominant position in retail and wholesale distribution. Other UK companies owned a further 44 per cent of farming land, and the key agricultural sector was thus dominated by expatriate landlords.

This dependence on external resources and factors made the economy particularly vulnerable to imported inflationary pressures and to irregularities in the supply of inputs and indeed cash - there was a significant lag between sheep shearing and receipt of cash. High freight costs, irregularities of supply and the impact of the international wool price in combination had a negative impact on economic prosperity. It also encouraged a 'risk minimising' approach to life and economy by Falklanders, a philosophy which still very much colours attitudes and expectations in the islands.

Indeed, although the Shackleton team faced serious problems in accumulating economic data, their analysis of economic performance over the decade to 1974 showed clearly that GDP had actually declined slightly in real terms from £2.5 million in 1965 to £2.3 million in 1974 (expressed in constant 1974 prices). GDP per capita showed an increase from £1094 to £1164 over the period, but this reflected a declining population.

One of Shackleton's most important discoveries was the pattern of net capital outflows over the previous decade. A detailed analysis of the outflow of funds resulting from company activity in the Islands showed that between 1951 - 1974, a total of £5 million was drained

out of the Islands: over the same period the Islands received £2.6 million in UK Government assistance. When estimated in constant price terms, the total capital outflow over the period exceeded inflows of Government assistance almost fourfold. As well as being in some sense unfair, this net outflow accounted for the very low levels of new investment in the agricultural sector which in turn eroded the vitality in the economy. The Falkland Islands were indeed in a sorry state economically in 1976.

The central objectives for the Islands' future, identified by Shackleton and underlying the recommendations of his study, are worth quoting in full:

- "1. To at least maintain material standards of living relative to the UK, and to increase the range of economic activity based on the Islands' resources without causing serious disruption to the present quality of life in the Islands.
2. To reduce the individual Islanders' level of social and economic dependence by creating opportunities for more of them to secure a stake in the economy.
3. To bring about greater social cohesion and, especially for the young, an improvement in the quality of life.
4. To reverse the static/declining trend of agricultural yields and provide the basis for a secure future for the sheep farming industry.
5. By diversification of the economy, to increase the range and number of employment opportunities, particularly for school leavers.
6. To husband the natural resources of the Islands and the surrounding waters so as to strike a balance between long term economic objectives, the requirements of new industries, and the unique natural environment of the Falklands with its important contribution to the world's wild life resources.
7. To allow a wide cross-section of the Islanders to influence the scale and rate of economic and social development".

The single most radical recommendation was to develop a pattern of smaller farm ownership, to allow Falklanders themselves to build up a greater stake in their future through the purchase and subdivision of larger farms, and inter alia to contain the historic flow of dividends away from the Falkland Islands. This proposal was supported with institutional changes and a broad programme of economic diversification, including strengthening of the financial sector and establishment of a banking system to encourage local savings and investment. Additional resources were sought for education, social services, transport and communications. The cost of the development programme was estimated at about £5 million over 5 years.



## 1.3

1976-1982

The following period saw a more dramatic decline in the Island's fortunes. Wool prices fell by about 20 per cent in real terms, and the 1979 Iranian crisis pushed fuel prices up by about 20 per cent. Despite the recommendations of the first Shackleton report, depopulation continued. GDP fell by about 25 per cent, wool output dropped as world prices fell and farm profitability reached very low levels, some actually experiencing real disinvestment. Yet, while there was still a major outflow of funds, this was for the first time more than matched by an inflow of aid funds from the UK. Even so, but for income from philately, which showed an increase over the period, the economy would have been in very poor shape. Little had changed to alleviate the underlying structural weaknesses, dependence on a single product, with prices and to a large extent costs, set externally and a farm sector largely in the ownership of absentee landlords. (One farm had been sold and subdivided, Green Patch, following the recommendations of the first Shackleton report).

Broadly speaking, the 1982 Shackleton report echoed the recommendations made six years earlier, many of which had not been implemented. In particular, the need to strengthen the government structure was underlined. In economic terms, considerable emphasis was placed on building up infrastructure - road, internal air transport links and on pursuing the prospects of alternative external transport routes following the severing of links with Argentina.

The key recommendations however were to continue the subdivision of absentee owned farms with all urgency: and to seek some economic diversification including tourism development. In particular, the Report recommended that a Development Agency should be set up as a conduit for funds and a facilitator both for land redistribution and for economic diversification. The concept of the agency was modelled on the successful pattern of the Highlands and Islands Development Board. The development aid requirement associated with these recommendations was estimated at £30-£35 million over a 5 year period.

It was recognised that a portion of this funding, about £8 million, was needed essentially to bring the Islands' infrastructure up to date, recognising that weaknesses of infrastructure were an effective constraint to development. In 1982 there were still no paved roads outside Stanley, with the exception of the airport road. There was no proper port facility, no public electricity or water supply outside Stanley, and a very inadequate international telephone service. In Camp, infrastructure was weaker still with internal transportation constrained by lack of all weather tracks or bridges over permanent streams and by the infrequent coastal shipping services which in turn were hampered by poor jetty facilities.



## 2 THE ECONOMIC STRUCTURE - CHANGE AND DEVELOPMENT SINCE 1982

### 2.1 Introduction

This section examines the profound changes in the Falkland Islands' economy which have occurred since 1982. The first part presents an estimate of national income since 1982 and shows the dramatic growth which has taken place. We then go on to consider the structure of the economy on a sectoral basis, the distribution of employment and to look at levels of investment in the economy since 1982. Although statistical sources in the Islands are extremely sparse, we have attempted to assess the changing activity in terms of savings and investment. Finally, this section considers in greater detail the implications of economic change on public finances and discusses the role of aid flows, setting the scene for the projections of economic activity discussed in section 3.

### 2.2 Economic Growth

National income is customarily measured in two ways: the first measure is Gross Domestic Product (GDP) which measures the sum of all incomes arising in a country from within its territory; the second is Gross National Product (GNP) which includes the incomes earned from abroad through earnings on investments, philatelic incomes or, for example, fishing license fees paid by overseas fleets.

The very limited statistical data available in the Falkland Islands means that pictures of the economy over the past 6 years have to be assembled from rather fragmentary information pinned together in places by some rather heroic assumptions. Nonetheless, we believe that the estimates of economic growth shown in Table I.1 represent a realistic assessment of actual economic developments in the Islands, and are certainly sufficiently robust to form the basis of the analysis of implications for future developments and the projections presented later in this Working Paper.

Table I.1 shows estimates of GNP for the Falkland Islands between 1980-81 and 1987-8. It will be noted that there have been some adjustments to the estimates assembled in our Interim Report of November 1987. The main reasons for this are:

- o firstly, more detailed data concerning recent years - in particular company profits, depreciation and wages and salaries-have now been made available to the Consultants and have been incorporated into the estimates;
- o secondly, public sector accounts dominate national income estimates in the Falkland Islands economy: the estimates which have now been derived relate more closely to fiscal years, than to calendar years. This has called for some minor adjustments.

In particular, these adjustments show a considerable increase in GNP in 1985-86. Actual figures for trading profits revealed a much higher level than had previously been estimated.

TABLE I.1  
Estimated Gross National Product of the Falkland Islands 1980 - 1987/88  
(£000-current prices)

	1980 <sup>(1)</sup>	1982/3	1983/4	1984/5	1985/6	1986/7	1987/8
Wages & Salaries	2980	3780	4720	5340	5640	6500	8370
Payments in kind <sup>(2)</sup>	220	320	330	290	300	315	330
Pension contribution by employers <sup>(3)</sup>	50	80	90	100	130	150	195
Trading profits <sup>(4)</sup>	570	1280	2190	2240	2910	9400	12250
Rent <sup>(5)</sup>	150	220	280	330	390	430	475
GROSS DOMESTIC PRODUCT	3970	5680	7610	8300	9370	16795	21620
LESS: Net property and investment income to abroad <sup>(6)</sup>	50	420	550	390	500	1145	1225
PLUS: Government investment income <sup>(7)</sup>	450	1350	1220	1410	2280	3130	4500
Other government income from abroad <sup>(8)</sup>							
Fishing Licenses	None	None	None	None	None	11995	16500
GROSS NATIONAL PRODUCT	4370	6610	8280	9320	11150	30775	41395
LESS: Depreciation <sup>(9)</sup>	170	230	270	340	380	500	750
NATIONAL INCOME	4200	6380	5570	8980	10770	30275	40645

Source: Falkland Islands Government and Consultants' Estimates

Notes:

(1) From Shackleton Report 1976

(2) Estimated value of free accommodation, meat and fuel, particularly relevant in Camp; derived from taxable value of payments in kind adjusted by using GEU estimates of actual value.

(3) Pension contribution estimated on pro rata basis, from wages and salaries

(4) Value of company trading profits estimated from published accounts and discussions with companies in the Falkland Islands.

(5) Value of Government house rents and estimates of value of owner-occupied houses in Stanley.

(6) Dividends and unappropriated profits remitted abroad.

(7) Income of FIG from investments overseas.

(8) Other FIG income from overseas, mainly philately and seigniorage.

(9) Depreciation of company assets only.



The data must therefore be hedged around with caveats, but what is very clear is that GNP grew quite steadily between 1980 and 1986 from £4.2 million to £10.8 million. In 1987 it moved up dramatically to £30.3 million.

This represents an average rate of between 8 per cent and 9 per cent per annum in real terms (that is with the effects of inflation excluded) as Table 1.2 shows. Population in the Islands appears to have shown a modest increase over the period but per capita income still grows by over 7 per cent per annum.

TABLE 1.2  
Estimate GNP in constant 1987 prices

	(£'000)					
	1980	1982/3	1985/6	1986/7	Change % p.a. 1980-1985/6    1985/6-1986/7	
Gross Domestic Product	6230	7140	9380	16810	7.1	79
Gross National Product	6860	8310	11160	30790	8.4	176
Population	1813	1870	1916	1920	0.9	0.2
GDP per capita	3.436	3.88	4.895	8.755	6.1	79
GNP per capita	3.784	4.444	5.825	16.035	7.5	175

Source: FIG and Consultants' estimates  
Note: Deflator based on Stanley RPI

The economy was therefore in a considerable state of change and development throughout the 1980's. It appears likely that some growth was beginning even before the Conflict. After 1982 there were important injections of funds into the economy from two sources;

- most importantly in response to the 1982 Shackleton Report, development aid of £31 million was made available, as well as a tranche of £15 million to contribute to post-Conflict rehabilitation;
- secondly, the marked rise in GNP between 1982 and 1984 reflects the impact of the British Garrison in Stanley and the construction workers at Mount Pleasant both of whom injected considerable sums into the local economy.

Thus, a pattern of sturdy growth was emerging even before the declaration of the FICZ in late 1986. The revenues earned from fishing licenses in 1987 only accelerated what already had the appearance of a booming economy.

Between 1982-3 and 1985-6, GNP had increased at over 8 per cent a year with growing profits and wages and salaries. Government incomes from investments overseas also showed a sharp increase between 1984/5 and 1985/6. Per capita incomes had risen by an estimated 32 per cent between 1982/3 and 1985/6.

But when, late in 1986, the Government declared the 150 mile Fisheries Interim Conservation Zone, (FICZ) the license fees from this yielded nearly £12 million, effectively increasing Government earnings from overseas six fold. It is estimated that National Income increased by 180 per cent from £10.8 million in 1985/6 to £30.3 million the following year. This growth has been reinforced in the current year 1987/8, when it is estimated that National Income rose by a further 34 per cent to £40.6 million, as company profits grew and license fees received by Government rose to £16.5 million.

The impact of the newly exploited fishery resource shows up in the national income statistics in two places: partly as an increase in Government income from overseas and partly in much enhanced company profits. Firstly, Government has required every vessel fishing within the FICZ to purchase a license, the value of which is computed according to size of vessel and potential catch. Secondly, fishing companies, particularly those registered in the UK, have been required to enter into joint venture agreements with the Falkland Islands Government through Stanley Fisheries Limited, a subsidiary company of FIDC.

The fishing company invested a sum equal to the value of licence fees into the joint venture for investment in the fisheries sector in the Islands. Most of the fleets actually fishing are in fact Far Eastern, Spanish or Eastern Bloc (Poland).

The joint venture arrangement thus effectively levied a premium on Far Eastern and Spanish fleets which is then reinvested in the fisheries sector through Stanley Fisheries Ltd (see Working Paper 2) for a fuller discussion of the joint venture system<sup>(1)</sup>. (The Polish fleet did not pay joint venture fees).

It is also important to understand the broader implications of economic change in terms of investment and employment. Developments over the past five years are discussed below in terms of both. This analysis also provides some insight into the structure of the economy, although data concerning the sectoral breakdown are limited in the extreme and it has not been possible to disaggregate the National Income estimates in sectoral terms. However, it is important to try to unravel structural changes and the factors underlying the rapid growth which has characterised the years leading up to the declaration of the FICZ. Important changes have been taking place in the Falkland Islands throughout the decade, but there is a danger that the changes during the period before 1986 become overshadowed by the drama of the fishing. Analysis of investment and of the changing employment structure can help to clarify the underlying patterns.

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(1) The payment of joint venture premiums was discontinued in May 1988.



## 2.3

Investment in the Falkland Islands Economy

The major change which occurred in the Falkland Islands economy after 1982 originated in the much increased flow of capital aid into the country. The 1976 Shackleton Report estimated that capital aid flows into the Falkland Islands between 1976-80 totalled £5.8 million. The Report further estimated private sector investment in the islands at no more than £800,000. With Government incomes from overseas, investments in the Falkland Islands over that period probably totalled about £8 million, equivalent to about £2 million per annum.

Total investment generated by the public sector in the Falkland Islands between 1982/3 and 1986/7 has been estimated at nearly £30 million, an average of £5.8 million per year, nearly three times the level of investment in earlier years. Table I.3 shows that £19 million totalled public sector investment in infrastructure and development while FIDC invested for a further £7.6 million in loans, grants and equity. The Corporation's operating costs and recurrent outlays or training, studies etc. are excluded from the FIDC's total. Responding to FIDC initiatives, the private sector invested £2.4 million in association with FIDC supported projects. There are no records available on other private sector investments made without FIDC assistance, so the £2.4 million as shown in Table I.3 underestimates the total value of private sector investment.

The total level of investment built up rapidly over the period, from £358,000 in 1982/3 to about £14 million in 1986/7. The pattern of disbursements of capital aid underlines this cumulative effect and reflects the lag between project concept and implementation.

## 2.3.1 Directly Productive Investment

FIDC has been extremely active in generating investment in productive (as opposed to infrastructure) activities within the islands. Between 1984-1987 FIDC financial assistance to all sectors reached £1.9 million, while FIDC direct investment is estimated at about £7.5 million excluding fishery investments through Stanley Fisheries Ltd. Financial assistance from FIDC can take the form of loans, grants and equity participation, and is generally matched by private sector funds. Table I.4 summarises FIDC financial assistance by sector between 1984 and 1987. Private funds reached £2.4 million, 55.4 per cent of the total. Agriculture and general industrial/service activity accounted for 34 per cent and 38 per cent of total investment respectively. Tourism accounted for one fifth but the modest share of fisheries and the low private sector commitment over these years is in startling contrast to the present situation where fishing has become central to the whole economy. The figures reflect a conscious effort to diversify the economy and lessen dependence on the vulnerable sheep farming industry.

The strategy is clear too in FIDC's direct involvement in projects. An analysis of commitments made over the years 1984-86 shows that agriculture accounted for only 37 per cent compared with 40 per cent in other industrial/agricultural processing ventures and 13.6 per cent in retail, as Table I.5 shows.



Table I.3  
Estimated investment in the Falkland Islands<sup>(1)</sup> 1982/3 - 1986/7

	£000					
	1982/3	1983/4	1984/5	1985/6	1986/7	Total
<b>Public Sector</b>						
Infrastructure and Development	358	1249	4561	4935	8039	19142
FIDC <sup>(2)</sup>	-	167	992	1443	5039	7641
<b>TOTAL</b>	<b>358</b>	<b>1416</b>	<b>5553</b>	<b>6378</b>	<b>13078</b>	<b>26783</b>
<b>Private Sector<sup>(3)</sup></b>						
	-	81	295	879	1147	2402
<b>Total Investment</b>	<b>358</b>	<b>1497</b>	<b>5848</b>	<b>7257</b>	<b>14225</b>	<b>29185</b>
<b>LESS land transfer<sup>(4)</sup></b>	<b>-</b>	<b>450</b>	<b>210</b>	<b>696</b>	<b>750</b>	<b>2106</b>
<b>Total investment net of land transfer</b>	<b>358</b>	<b>1047</b>	<b>5638</b>	<b>6561</b>	<b>13475</b>	<b>27079</b>
<b>Capital aid<sup>(5)</sup></b>	<b>90</b>	<b>860</b>	<b>5175</b>	<b>5698</b>	<b>10755<sup>(6)</sup></b>	<b>22578</b>

SOURCE : FIG FIDC, Consultants estimates. See also Appendix I.1

NOTES:

(1) Excludes Rehabilitation Fund Investment.

(2) Investment by FIDC includes both financial assistance and direct investments and refers to funds actually disbursed including loans grants and equity participation. Investment in the fisheries sector through Stanley Fisheries Ltd in 1986/7 (£7.2 million) is excluded as its impact was in the next period (1987/8).

(3) This includes only funds invested jointly with FIDC and therefore underestimates total private investment which, for example, would include Cable and Wireless.

(4) Regarded as transfer payments rather than net capital investment.

(5) Excludes £15 million Rehabilitation Grant.

(6) Estimated outturn.



Table I.4  
Breakdown of FIDC financial support by sector 1984-87 £000

	FIDC	% of total	PRIVATE FUNDS	% of total	TOTAL	% of total
Agriculture	520.1	26.8	942.2	39.2	1462.3	33.7
Fisheries	246.0	12.7	43.0	1.8	289.0	6.7
Tourism	467.9	24.2	482.0	20.1	949.9	21.9
Industry and Other Services	702.4	36.3	934.8	38.9	1637.2	37.7
<b>TOTAL</b>	<b>1936.4</b>	<b>100.0</b>	<b>2402.0</b>	<b>100.0</b>	<b>4338.4</b>	<b>100.0</b>
Percent of Total	44.6		55.4		100.0	

Source: FIDC Annual Accounts. See Appendix I.1 for more detail.

Table I.5  
Sectoral breakdown of committed assets in FIDC own projects, <sup>(1)</sup> 1984-86

Sector	Per cent of total
Agriculture	36.7
Agricultural processing/horticulture	34.9
Engineering/other industry	5.2
Retail	13.6
Other	9.6
<b>TOTAL</b>	<b>100.0</b>

Source: FIDC. See Appendix I.1 for more detail.

(1) Excludes tourism

### 2.3.2 Development/Infrastructure Investment

It was noted earlier that, by the time of the second Shackleton Report in 1982, the level of infrastructure in the islands was still lagging behind that of a modern economy even making allowances for the remoteness of the islands and the small population. The aid inflows to the Islands since 1982 have done much to alleviate this, putting in place many basic infrastructure needs - electricity and water supply for example. Table I.6 lists some of the main projects which have been undertaken as a result of the commitment of £31 million by the Overseas Development Administration (ODA).

Of the total aid committed, about £2.5 million was earmarked for agriculture. Apart from the Stanley/MPA road and the new hospital which clearly serves the whole population of the islands, the main impact of the remaining capital aid flows has been to modernise Port Stanley and install basic core infrastructure.

Support for the agricultural sector has been through the Land Distribution Programme and direct funds disbursed through FIDC rather than in capital aid projects.

### 2.4 Changing Employment Structure

An analysis of the structure of the labour force by occupation in the Falkland Islands can be derived from the two national Censuses of 1980 and 1986. Because essentially there have only been two economic sectors in the Falkland Islands - agriculture and services - any change in the pattern of occupation gives a strong indication of changes in the economic structure. The censuses do not provide data on jobs and employment so occupational activities, which are listed in detail, must provide a proxy indicator.

Table I.7 summarises the changing picture of occupations in the Islands between 1980 and 1986 and provides some comparison between population and levels of economic activity, as indicated by occupation, in Stanley and Camp. The data must be treated with some care; many Islanders carry on two or even three occupations and the number of occupations shown in the census are not necessarily 'full time equivalent jobs'.

Although the detailed data are difficult to interpret, the relative changes are indisputable. Most striking is the fact that, overall, in a period when population in the Islands increased by about 65 (4 per cent), the number of occupations reported increased by 163, nearly 20 per cent.

Most of the growth has been in Port Stanley where the number of occupations increased by 30 per cent from 493 to 641, while the number of occupations in East Falkland increased by about 30, or 12 per cent. In West Falkland, the number of occupations actually declined by 8.5 per cent from 163 to 149. Over the same period, the population in Port Stanley increased by 17 per cent from 1050 to 1231, while the populations of East and West Falkland fell, from 441 to 386 (-12 per cent) and from 322 to 261 (-19 per cent) respectively.

These figures suggest a much higher level of economic activity than in earlier times and indeed, as Table I.8 shows, male participation



Table 1.6 Activity and Population in the Falkland Islands  
Main Development Projects since 1982

Project	Value of Project (£ Million)
<u>Completed or nearly completed</u>	
Port Stanley Electricity	4.2
Port Stanley Water	3.4
Land Transfer	2.1
School Hostel	1.2
Stanley/MPA road	1.3
Hospital	6.1
<u>Others</u>	
Telecommunications	1.0
Camp tracks	0.4
Others	0.2
PLUS TC and ARC	5.9
<b>TOTAL</b>	<b>25.8</b>

Source: FIG. ODA

(1) It should be noted that the total Falkland Island population quoted in the 1986 Census as 1915 included 31 persons temporarily resident overseas. The statistics on occupational activity include these people, and to make comparisons between population and occupational changes the 31 have been excluded. In Table 1.3 where per capita figures are calculated, the full population of 1915 has been used.

(2) Distribution of population: Stanley figures for 1986 probably include school children from Camp in Stanley. Adjustment would show population in Stanley 1187; Camp, 693. (See Storey, Unpublished Draft Report, April 1988).

TABLE 1.7  
Economic Activity and Population in the Falkland Islands

	1980	1986	Actual change	Percent change
<u>Stanley</u>				
Number of occupations	493	641	+148	+30.0
Population	1050	1231	+181	+17.2
<u>East Falkland</u>				
Number of occupations	233	262	+ 29	+12.4
Population	441	386	- 55	-12.5
<u>West Falkland</u>				
Number of occupations	163	149	- 14	- 8.6
Population	322	261	- 61	-18.9
<u>Falkland Islands</u>				
Number of occupations	889	1052	+163	+18.3
Population	1813	1878 <sup>(1)(2)</sup>	+65	+ 3.6

Source: Falkland Islands, Report of Census, 1980, 1986

NOTES:

- (1) It should be noted that the total Falkland Island population quoted in the 1986 Census as 1916 included 31 persons temporarily resident overseas. The statistics on occupational activity include these people, and to make comparisons between population and occupational changes the 31 have been excluded. In Table 1.2 where per capital incomes are calculated, the full population of 1916 has been used.
- (2) Distribution of population; Stanley figures for 1986 probably includes school children from Camp in Stanley. Adjustment would show population in Stanley 1187: Camp, 693. (See Storey, Unpublished Draft Report, April 1988).



Table 1.8  
Economic participation rates in the Falkland Islands

	Stanley		East Falkland		West Falkland		Total	
	1980	1986	1980	1986	1980	1986	1980	1986
<u>MALE</u>								
Economically active	405	461	197	202	135	116	737	779
Population	550	626	255	228	187	140	992	994
PARTICIPATION RATE	73.6%	73.6%	77.3%	88.6%	72.2%	82.9%	74.3%	78.4%
<u>FEMALE</u>								
Economically active	134	273	36	71	30	40	200	384
Population	500	605	186	158	135	121	821	884
PARTICIPATION RATE	26.8%	45.1%	9.4%	44.9%	22.2%	33.1%	24.4%	43.4%

Source: FIG Census Reports, 1980, 1986

rates have risen significantly, particularly in Camp, and female participation rates have moved up very sharply throughout the Islands from an average of 24.4 per cent to 43.4 per cent. Some of the implications of this are discussed more fully in Working Paper 7 but for the present purposes it underlines the sharp increase in economic activity which was demonstrated in the estimates of National Income shown above.

Table I.9 presents a more detailed breakdown of economic occupation, from which it is possible to identify quite clearly the main sectoral shifts in the Falkland Islands.

The biggest increase in occupations is in the category of managers, administrators and government staff in Stanley (from 111 to 194, a rise of 75 per cent). More detailed analysis reveals that the sharpest increase has been among managers (12 to 32) and clerical positions (59 to 93), a fact which may reflect increased economic activity with a number of new businesses starting up. There was also a significant increase among certain types of professionals; nurses and medical staff show an increase which is attributable to the opening of the new hospital. Other professionals, such as accountants and book-keepers also show an increase; again this is a range of activity associated with increasing economic activity.

The other major shift has been within the agricultural sector. Overall, the number of people who describe themselves as agricultural workers has increased by 17 per cent in East Falkland and 12 per cent in West Falkland. In particular, the category of 'farmers' has nearly trebled from 19 to 56, a clear result of the programme of subdividing large farms. The apparent decline in certain types of 'other workers' - notably catering staff and drivers in Camp, also reflects a changing economic structure.

With subdivision of farming, households (i.e. husband and wife take on the roles as drivers, caterers etc., whereas in the days of the large estate and bunk houses full of single male labourers, cooks and drivers were employed as a separate category.

The figures must be treated with caution and at best can be seen as indicators of change; they should certainly not be seen as statements of the number of jobs by sector. Nonetheless some broad conclusions about the pattern of economic activity can be drawn from these figures:

- firstly, although growth in economic activity has been concentrated in Port Stanley, farming (strictly defined) has held its share in the employment pattern of the Islands through the rapidly changing period of subdivision and despite an overall shift of population from the Camp rural sector to Stanley;
- secondly, much of the increase in activity in Stanley is linked with construction activity - for example, the number of tradesmen occupations in Stanley increased from 68 to 92, an increase of 35 per cent;
- thirdly, an equal share of the increase in activity in Stanley has been in professional and managerial roles,



Table 1.9  
Falkland Islands: Occupation And Economic Activity. 1980, 1986

	STANLEY					EAST FALKLAND					WEST FALKLAND					TOTAL				
	1980 Total	%	1986 Total	%	Change %	1980 Total	%	1986 Total	%	Change %	1980 Total	%	1986 Total	%	Change %	1980 Total	%	1986 Total	%	Change %
1.																				
Teachers	20		26			7		7			6		6			33		39		
Medical (incl veterinary)	15		27			-		2			-		-			15		29		
Scientists	8		10			-		-			-		4			8		14		
Accountants	1		10			3		-			4		-			8		10		
Other	31		25			-		6			-		3			31		34		
Total professional & technical	75	15.2	98	15.3	30.7	10	4.3	15	5.7	50.0	10	6.1	13	8.7	30.0	95	10.7	126	12.0	32.6
2.																				
Managers	12		32			3		-			3		-			18		32		
Civil Servants	17		32			-		1			-		1			17		34		
Clerks, Typists	59		93			-		5			-		-			59		98		
Other	23		37			1		6			1		-			25		43		
Total managerial, admin, government	111	22.5	194	30.3	74.8	4	1.7	12	4.6	200.0	4	2.5	1	0.7	-75.0	119	13.4	207	19.7	73.9
3.																				
Sales Workers	35	7.1	40	6.2	14.3	6	2.6	-	-	-	1	0.7	-	-	-	42	4.7	40	3.8	4.8
4.																				
Farm managers	-		-			11		14			9		11			20		25		
Farmers	2		3			14		25			5		31			21		59		
Other agric.workers	14		10			89		94			62		43			165		147		
Total agric, cultural workers	16	3.2	13	2.0	-18.8	114	48.9	133	50.8	16.7	76	46.6	85	57.0	11.8	206	23.2	231	22.0	12.1
5.																				
Supervisors, foremen, contractors	14		15			9		8			9		5			32		28		
tradesmen	68		92			11		19			9		8			88		119		
General builders/ handyman	20		28			15		12			7		9			42		49		
Apprentices	11		11			-		-			1		-			12		11		
Total Craft, Trade & Production	113	22.9	146	22.8	29.2	35	15.0	39	14.9	11.4	26	15.9	22	14.8	15.4	174	19.6	207	19.7	19.0
6.																				
Catering Staff	21		17			12		11			8		9			41		32		
Caretakers, stores- men	14		23			3		9			1		1			18		33		
Drivers	18		26			12		10			17		10			47		48		
Navvies, general labourers	50		42			35		31			19		6			104		79		
Other	40		40			2		2			1		7			43		49		
Total other workers	143	29.0	150	23.4	4.9	64	27.5	63	24.0	0	46	28.2	28	18.8	-39.1	253	28.5	241	22.9	-4.7
Total Economically Active	493	100.0	641	100.0	30.0	233	100.0	262	100.0	12.4	163	100.0	149	100.0	- 8.6	889	100.0	1052	100.0	18.3

Source: Falklands Islands Report of Census, 1986,1980.

92, an increase of 35 per cent;

thirdly, an equal share of the increase in activity in Stanley has been in professional and managerial roles, which probably reflects the substantial technical assistance programme in the Falkland Islands since 1982: however it may also be an indication of a general shift in the mix of skills towards the greater level of specialisation which is characteristic of a modern economy.

What is unquestionably the case is that the changing pattern of economic activity reflects a society undergoing rapid economic change and development, a change which was already underway before the declaration of the FICZ.

## 2.5 Imports and Exports

The Falkland Islands import virtually all consumer and capital goods and over 95 per cent of imports originate in the UK. During the 1970's some 10 per cent of the imports were sourced from Argentina but this ceased after 1982.

Table I.10 presents the official statistics for imported goods to the Falkland Islands. However, the data almost certainly underestimates the volume and value of imports because there are no import duties payable, other than on alcohol and tobacco and the method of collection of statistics requires importers to complete and return a form voluntarily, some time after the goods have been received. This is frequently not done and Customs and Harbour Department do not have the resources available to follow this up.

Table I.10  
Value of Declared Imports to the Falkland Islands (£'000)

Items	1985	1986
Food	740.0	546.7
Beverages and tobacco	599.2	471.6
Crude materials inedible	140.1	155.9
Mineral fats, lubricants	131.6	178.6
Animal and vegetable oil & fats	17.9	17.7
Chemical products	98.6	66.9
Manufactured goods	962.8	1789.5
Machinery & transport equipment	664.4	1442.8
Miscellaneous manufactured goods	318.9	472.2
TOTAL	3673.6	5141.9
Percentage ex-UK	96.9	96.5

Source: FIG



The exports of the Falkland Islands consist virtually entirely of wool. The value fluctuates on a year to year basis, but as Table I.11 shows, the actual volumes of exports have remained remarkably consistent over ten years. The vulnerability of the economy to fluctuations in the wool price however, has been extreme. Table I.12 shows average prices for Falkland wool between 1981-87.

Trade is a fundamental problem in the Falkland Islands. Imports arrive in four quarterly shipments by the AES through the FIC. In addition there are some 12 sailings per year of a Hogg Robinson (Government Freight Agent) ship which carries civilian cargo as well as supplying MOD needs. The distance and infrequency make goods landed in the Falkland Islands quite expensive; internal transport costs can double the freight costs for certain items. The question of external communications is discussed in more detail in Working Paper 6: suffice it to say that the consequent insecurity of supplies and high costs of transportation have a significant economic impact.

It should also be noted that it is not possible to make an assessment of the balance of payments in the Falkland Islands as there are no data on capital flows other than official aid flows into and out of the islands; nor are there data on current transfers, on spending abroad by Falkland residents, on private sector investment income from abroad nor on private sector money balances held abroad.

However, it is clear that the Falkland Islands has long had an unfavourable balance of visible trade, with wool exports being insufficient pay for the imported goods required. This difference has been made up to some extent by invisible earnings (philately being very important for a while) and, more latterly, by aid flows. Now, earnings from the sale of fishing licences far than exceeds any balance of visible trade permitting reserves to build up at a substantial rate.

## 2.6 Savings, Investment and the Financial Sector

The financial sector remains rudimentary in the Falkland Islands. Until 1983, the only financial institutions were FIC and the Government itself which provided some housing finance and a simple savings scheme. Strenuous efforts were made after the conflict to attract a bank to Stanley and in 1983, the Standard Chartered Bank established a branch, having secured a monopoly position for five years. They offer only basic high street banking services, having taken over the Government held savings accounts and offering current accounts and fixed and short call deposit accounts. The bank opened with 1890 accounts and by 1986 this had risen to over 2800, as Table I.13 shows. The daily number of transactions undertaken shows a similar growth.

Source : D. Sand & Co. (Falkland Islands) Ltd.

Table I.11  
Exports of Falkland Islands Wool (Tonnes)

YEAR	VOLUME	Approximate VALUE (fob) <sup>(1)</sup>
	tonnes	£000
1977/78	2110	N/A
1978/79	2124	N/A
1979/80	2223	N/A
1980/81	2117	2100
1981/82	N/A	N/A
1982/83	2282	2900
1983/84	2104	3000
1984/85	2252	3400
1985/86	2279	2575
1986/87	2260	3050

Source : Falkland Islands Farming Statistics

Note: <sup>(1)</sup> Valued at 23p/kg. less than average prices realised to allow for ex-Falkland Island cost.

Table I.12  
Average Prices of Falkland Wool  
pence per kilo

YEAR	GREASY	CLEAN
1981	122	185
1982	140	212
1983	150	227
1984	165	250
1985	174	264
1986	136	206
1987	158	240

Source : D. Sand & Co, (Falkland Farming) Ltd.



Table I.13  
Growth in banking activity

	1983	1984	1985	1986	1987 (To Sept)
Value of all deposits (£'000)	4426	6027	6432	6198	6455
Number of Accounts	1890	2448	2063	2849	2859
Average Daily Transactions	131	264	365	443	522

Source: Standard Chartered Bank

The close links with the UK mean that individual financial links are equally close. Many businesses have accounts both in the Falkland Islands and overseas, and it was estimated that 60 per cent of account holders at Standard Chartered also have accounts in the UK.

The bank is offering loans for homes and farm purchase, offering 80 per cent of the market value (or 90 per cent to first time buyers) to a value up to 2.5 times gross annual income. The interest charges will be 2 per cent over base.

The bank does not see its role as making venture loans, leaving this function to FIDC, but it will lend for working capital between £20-50,000 and will provide loans for capital purchases.

The growth in banking activity is a clear reflection of the increasing economic activity. It also demonstrates the leakages of revenues earned from fishing, out of the Falkland Islands. Almost no fisheries money is deposited in the Falkland Islands and clearly the financial sector at present is not structured to offer any type of investment scheme in the fisheries sector for Falkland Islanders. The financial sector has little relevance at present to the levels of saving or investment.

## 2.7 Public Sector Finance

### 2.7.1 Overview

The pattern of public expenditure between the end of the Conflict in 1982 and the declaration of the FICZ in 1986 was quite clear. Revenues rose sharply over the period from £3.6 million in 1982/3 to £6.0 million in 1985/6, an average rate of 18 per cent a year. But current expenditure rose equally fast, inspite of the considerable technical assistance being provided by ODA. Nevertheless, prudent budgeting and a reasonably tight control of expenditure meant that there was a small surplus on current account in every year, even though this was tiny in relation to the very substantial programme of development expenditure which was going on, averaging some £7 million a year over this period. This was almost entirely financed by external aid flows, very largely coming from ODA.

This pattern was totally changed after 1986. Fishing revenues transformed the total revenue base of the FIG Budget which from £6.0 million in 1985-6, £27 million in 1987-88 and an anticipated £34 million in 1988-89. But this should not be seen as pure gain. The cost of the Fisheries Department alone in 1987-88 is expected to approach £7 million and the Development Budget (previously largely financed by ODA) has now become the sole responsibility of FIG.

Even so, the financial position of FIG is now potentially very healthy and with a current expenditure of less than £18.0 million a year, and a Development Budget of, say, £8.0 million, there is still room for a substantial transfer to reserves. It is the strategy to be adopted with regard to this money which may be said to be the major subject of this Report.

### 2.7.2 Revenue

The growth of Government Revenues since the Conflict is set out in Table I.14. It will be noted that non-fishing revenues have grown steadily in their own right over the period. However, this is to a certain extent illusory: firstly because one of the main growth areas has been Customs Services and Harbour Dues (where growth was largely fishing orientated even before the declaration of the FICZ); and secondly because 'Other Trading Income,' another dynamic element, reflected growing volumes of inter Governmental transactions, and changing accounting conventions. Nevertheless, there clearly was some underlying buoyancy of revenue, reflecting the prosperity stemming from the major capital expenditure programme going on at this time.

In 1986/7, nearly £12 million was added to Revenues from Fishing Licenses. The level of license fees was bound to be somewhat exploratory in the first year as the market was tested. In 1987-8 it has been found possible to increase the general level of licence fees to the extent that total revenue for the year is now expected to be £27 million. In future years a further £7 million may be expected as Joint Venture Premiums are abolished as a separate item and incorporated into the Licence Fee itself.

Therefore, any further buoyancy in licence revenue cannot be expected to occur automatically. Indeed, it may even fall, if it is discovered necessary to reduce the number of licenses issued as a conservation measure, or if the Licence Fee has to be reduced in the face of market forces.

### 2.7.3 Current Expenditure

Current public expenditure has risen even more rapidly than revenue since 1982-3. Even discounting expenditure on fisheries, current expenditure more than tripled between 1982/3 and the 1987/8, equivalent to a compound rate of some 25 per cent a year, as Table I.15 shows. Clearly such a rate of increase is unsustainable, and a great deal of disquiet has been expressed about the phenomenon. Partly as a result, one of the authors of this Report participated in the preparation of the 1988-89 Budget and had an opportunity to look very carefully at expenditure patterns over the past few years. One of the major determinants of overall expenditure is rates of pay. These have risen relatively rapidly in recent years, both in an



Table I.14

Falkland Islands Government Revenue 1982/3 - 1987/8

£000

	1982-3	1983-4	1984-5	1985-6	1986-7	1987-8 Estim- ated (3)
Fishing Licenses	-	-	-	-	11995	
Customs Services and Harbour Dues	164	356	491	692	1863	
Taxes	944	958	1667	1736	1183	
Duties	188	258	322	268	298	
Sale of Stamps	972	609	411	415	330	
Seignorage on Coins	318	95	108	95	107	
Stanley Rates	38	47	56	68	85	
Rent	23	44	94	137	129	
Sales of Electricity	251	509	426	607	903	
Other Trading Income <sup>(1)</sup>	407	1795 <sup>(2)</sup>	1018	1171	1395	
Interest on Investments	169	221	366	491	908	
Miscellaneous Revenue	180	422	204	323	450	
<b>Total Ordinary Revenue</b>	<b>3654</b>	<b>5314</b>	<b>5163</b>	<b>6003</b>	<b>19646</b>	<b>27140</b>

SOURCE: FIG, Consultants Estimates

## NOTES:

(1) Includes some internal sales from one department to another.

(2) Includes final profit from savings bank.

(3) Detailed breakdown not yet available.

attempt to catch up on past backlogs and as a response to the rising prosperity of the Islands. Similarly, welfare and pension payments have also been increased. There had also been a general increase in services provided and establishments to provide them, as previous financial shackles were released.

All this is understandable and far from dangerous. However, it is equally clear that the process has gone far enough and that it is now necessary to take a relatively tight grip on current expenditure so as to ensure efficiency in expenditure, the elimination of waste, and to secure the future surpluses from which development will be financed. A number of proposals were made and accepted in the 1988-89 budget which should enhance the ability of Treasury to control expenditure in future and enable future budgeting to take place on a realistic basis.

#### 2.7.4 Development Expenditure

Estimates have been made of the total expenditure on development in the Falkland Islands since the conflict and the results are set out in Table I.16 below.

As can be seen this amounts in total to nearly £40 million in the five years up to June 1987.

However a word of caution is required in interpreting these figures which contain a wide variety of different types of items, for example:

- o Loans - loans extended to small farmers to purchase the subdivided farms are included here, as well as loans to small businesses made through FIDC.
- o Current expenditure - the figures include some financing for current expenditure, that of FIDC, for example, and some payments to ARC.
- o Rehabilitation - the total includes the £15 million specifically earmarked to rehabilitation by ODA immediately after the conflict, as well as the funds made available for the reconstruction of the hospital after its tragic destruction by fire.

Thus, while large sums of money have been flowing into the Falkland Islands economy on capital account, only a proportion of it has been spent on 'Development' narrowly defined, ie new capital works designed to strengthen the future earning power of the economy.

#### 2.7.5 Overall Balance

The clear picture which emerges is of a public sector expenditure programme which has been heavily in deficit since the conflict and which, even now, requires injection of funds from outside (See Table I.17).

Prior to the declaration of the FICZ in 1986, the small overall surplus accumulated by FIG on its own budget insufficient to pay even for the technical assistance given by ODA, let alone make anything other than a token contribution to the very substantial development programme.



Table I.15  
Falkland Islands Public Expenditure on Current Account 1982/3 - 1987/8  
£000

	1982-3	1983-4	1984-5	1985-6	1986-7	1987-8 Estim- ated
Ordinary expenditure (ex fishing)	3119	3876	4358	5044	6312	9744
Fisheries Department	-	-	-	-	2401	6593
Total Ordinary Expenditure	3119	4189	4358	5044	8713	16337
Technical Assistance (ODA)	857	1396	1587	1646	1414	1818
Total Public Expenditure	3866	5585	5945	6690	10127	18155

Source : FIG

Table I.16  
Development Expenditure 1982/3 - 1987/9  
£000

	1982-3	1983-4	1984-5	1985-6	1986-7	1987-8 Estimated
FIG Development Revenue	147	420	125	205	258	1294
FIG Funding from current surplus	121	136	253	475	1501	6761
Total Locally financed	268	556	378	680	1759	8055
External aid financed <sup>(1)</sup>	9519	4641	5418	6866	8089	6217
Total Development Expenditure	9787	5197	5796	7546	9848	14272

Source: FIG, Consultants Estimates

Notes: (1) Including rehabilitation grant

Table 1.17  
 Overall Surplus/Deficit on Public Expenditure in Falkland Islands  
 1982/3 - 1987/8  
 (£million)

	1982-3	1983-4	1984-5	1985-6	1986-7	1987-8 Estim- ated
FIG Ordinary Revenue	3.7	5.3	5.2	6.0	19.6	27.1
FIG Development Revenue	0.1	0.4	0.1	0.2	0.3	1.3
Total FIG Revenue	3.8	5.7	5.3	6.2	19.9	28.4
FIG Current Expenditure	3.1	4.2	4.4	5.0	8.7	16.3
Technical Assistance	0.9	1.4	1.6	1.6	1.4	1.8
Total Development Expenditure	9.8	5.2	5.8	7.5	9.8	14.3
Total Expenditure	13.8	10.8	11.8	14.1	19.9	32.4
Overall Surplus (Deficit)	(10.0)	(5.1)	(6.5)	(7.9)	-	(4.0)

SOURCE: FIG, Consultants Estimates

NOTES : Includes such exceptional items as the purchase of FIPASS from MOD and the purchase of a building in London to house FIGO on a permanent basis.



With the addition of the fishing revenue, the situation is completely different, but not yet to such a favourable extent as many members of the public may have imagined. That was why the 1988-89 Budget session was so important. By restraining the growth of current expenditure, even in the face of substantial wage and salary increases and by setting clear limits on the Development Programme, room was created for making the vital strategic choices which are the subject of this Report. The future development of public finances is returned to in Section 3.4 below.

## 2.8

Implications for the Future

The Falkland economy has seen some profound changes during the 1980's but despite serious attempts through development agencies, only a little had been achieved in terms of economic diversification and the level of dependency remained high. The declaration of the FICZ changed all that, and offers the prospect of a future where capital resources are no longer dependant on aid flows and where the islands can see continued 'real' economic growth deriving from a resource attached to the Islands themselves. The issue is now to evolve from a dependant albeit growing economy into one with a sure economic base while maintaining core values and priorities which relate to the Falkland Islands. This forms the basis for discussion in the next section.

The period between 1982 and 1987 saw economic growth calculated at almost 10% per annum in real terms.

Now these developments are overlaid by the second and potentially even more far reaching event, the declaration of the FICZ and the economic freedom that this brings.

Despite the turnaround in the post 1982 economy, it is debatable whether the Islands would have survived for long, economically, without continuing flows of external aid. The FICZ squarely enables them to do so. The fishery revenue makes possible a level of investment considerably in excess of that which has been enjoyed including the £31 million development aid. Between 1982/3 and 1985/6, investment averaged £4.5 million; in 1986/7 the inflows of revenues from the fishery sector totalled £12 million in licence fees plus £7.3 million in joint venture fees, a total of nearly £20 million. The aid disbursed in 1986/7 for all activities was estimated at £3.1 million.

This represents a real shift in the scale of economic activity, a genuine leap into a new sphere, which raises choices and constraints which have not been possible hitherto.

## 3.1.1

Choices

In the Interim report, November 1987, we expressed some of these choices in terms of three scenarios, selected as offering a wholly different set of priorities and outcomes. They were never to be seen as real forecasts but as representing three pictures, models perhaps, of the logical outcome of alternative policy decisions.

It was always recognised that in the real world, policy making and the conflicts of economic priorities would lead to a preferred strategy which included aspects of each rather starkly drawn option, and

3

## FUTURE DEVELOPMENT

3.1

### Introduction: Alternative Growth Strategies

The Falkland economy has faced two major shocks to its historic pattern. The first was the substantial inflow of resources made to the islands after the 1982 conflict, which effectively trebled the level of investment compared with the latter part of the previous decade. The second was the declaration of the FICZ and the inflow of funds from fishing licences which has allowed the economy to be financially self sufficient.

The first change has in itself had an enormous impact on the well being of Falkland Islanders and on day to day life in the islands. Per capita incomes rose by over 30 per cent: population rose slightly for the first time for decades: despite this, there is evidence that people are taking more jobs, and in particular many more women are entering the formal workforce. Most of the farms on West Falkland have been purchased from their absentee owners, subdivided and sold on to young, enthusiastic Falklanders, many of whom now perceive that they have a stake in the Island's future in a way which would have been impossible before. Wages have risen and there have been new pressures on housing and other social infrastructure in Stanley. The period between 1983 and 1987 saw economic growth estimated at almost 10% per annum in real terms.

Now these developments are overlain by the second and potentially even more far reaching event, the declaration of the FICZ and the economic freedom that this brings.

Despite the turnaround in the post 1982 economy, it is debatable whether the Islands would have survived for long, economically, without continuing flows of external aid. The FICZ assuredly enables them to do so. The fishery revenue makes possible a level of investment considerably in excess of that which has been enjoyed including the £31 million development aid. Between 1982/3 and 1985/6, investment averaged £4.5 million; in 1986/7 the inflows of revenues from the fishery sector totalled £12 million in license fees plus £7.2 million in joint venture fees, a total of nearly £20 million. The aid disbursed in 1986/7 for all activities was estimated at £9.1 million.

This represents a real shift in the scale of economic activity, a genuine leap into a new sphere, which raises choices and constraints which have not been possible hitherto.

3.1.1

#### Choices

In the Interim report, November 1987, we expressed some of these choices in terms of three scenarios, selected as offering a widely different set of priorities and outcomes. They were never to be seen as real forecasts but as representing three pictures, models perhaps, of the logical outcome of alternative policy decisions.

It was always recognised that in the real world, policy making and the conflicts of economic priorities would lead to a preferred strategy which included aspects of each rather starkly drawn option, and



indeed, the rest of this report is concerned with putting more consistent and realistic flesh on the visionary bones presented in the Interim report. But it was a useful exercise, allowing policy makers and Falkland Islanders other than Councilors an opportunity to air views and become involved in setting priorities for their own future. It is worth restating the three scenarios and reviewing briefly the thinking that developed, and the emergence of a preferred strategy.

## 3.1.2

## The Three Scenarios

Scenario I: Maximum development in the fisheries sector

The main features of this scenario were:

- maintain income from fishing licenses at about the current level;
- extract maximum 'economic rent' from fishing through joint venture fees, up to say £10 million per annum from 1988 onwards, for say five years;
- invest this income (via Stanley Fisheries and joint venture partners) in:
  - o the development of on-shore fishing related activities: and
  - o the purchase or charter of trawlers and jiggers at around £2.5 million each.
- the investment programme would concentrate on high yielding projects, earning a return of as much as 20 per cent subsequently over the first five years, declining to 12-15 per cent;
- because of the intense pressure on housing it is proposed that the fishery companies continue to invest a certain proportion of funds in housing at a rate of perhaps 20 units per year;
- the balance of the fishing license revenues was to remain in the government sector, as at present, and could be used, if available, for development expenditure or for revenue account transfers;
- total private sector investment over the next five years would be of the order of £47 million, net of housing, and about £30 million of this would be in the fisheries sector;
- this level of investment would generate between 400 - 500 new jobs in the Falkland Islands over the first five year period, resulting in a population of about 3,000 (excluding contract construction workers).

Scenario II: Maintain fisheries as an enclave/offshore activity: concentrate investment on other economic sectors.

In place of investment in the fisheries sector through Stanley Fisheries or similar mechanism, the equivalent funds are channelled into private sector productive investment in other economic sectors. The main features of this scenario were:

- the level of fishing license charges are adjusted upwards in place of the joint venture fee. The equivalent value to the joint venture fee is disbursed as investment funds for the private sector through an appropriate mechanism - such as FIDC or perhaps a Development Bank;
- the yield on investment would be lower than in Scenario I, reflecting the longer term nature of investment in say, agriculture, but it should still be possible to obtain real yield of 10 per cent, perhaps declining to 8 per cent over the decade;
- the balance of fisheries revenue accrues to the government sector, and the residue after other outgoings represents the potential fund for development expenditure;
- the total productive investment over five years would generate perhaps 400 new jobs; parallel to Scenario I, some of the housing need would be met by the private sector, again at a rate of about 20 dwelling units per year.
- over the period, some additional £29 million would be available for investment into traditional sectors: it is difficult to be precise about a sectoral split at this stage, but at least half this resource should be reinvested in agriculture. The areas and types of investment could include:
  - subsidies on inputs particularly associated with re-seeding (fertiliser etc);
  - higher grant assistance on capital equipment, from tractors to fencing;
  - financial support for employing labour associated with increased productivity or diversification;
  - investment in new products (market gardening, chickens, other products to supply off shore fishery market);
  - improvements and subsidy on internal transport;
  - direct investment in new products.



### Scenario III: Investment fund placed in international markets

This scenario moved sharply away from the first two:

- fishing license fees would be increased to replace the joint venture premium; a sum of about £10 million per year is invested overseas in international markets, and the balance retained in the economy for infrastructure investment or direct redistribution through revenue account, welfare supports, tax cuts etc;
- the international investment fund assumed to earn a return of 8 per cent;
- because of the underlying momentum in the economy and the fisheries investment of 1986-87, there would still be an increase in employment of about 200, over the first five years. Housing would be provided through Government funds;
- with the increase in employment, the population in the Islands would rise to about 2,500 by 1992;
- over the period 1992-97, the same underlying patterns would be maintained, but generally there would be a slowing down in growth, a declining yield on productive investment and a slowing down of population growth.

#### 3.1.3 Implications

The main features of each of the three scenarios are summarised in Table I.18 taken from the Interim Report.

Scenario I, the so called high growth option with development centered around the investment in onshore fishery facilities and associated activities, foresaw GNP growing to £52.1 million and population rising to 3500. Under Scenario III, a more cautious strategy which would see a substantial portion of the economic rent taken from the fisheries sector being invested in long term securities to provide a nest egg for the Islands future, population growth would be slower, and the driving force of economic development remains in the public sector, Government hands rather than with the private sector.

At the time of writing the Interim Report, we favoured a blend of Options II and III, taking the view that excessive investment onshore in the fisheries sector could lead simply to another form of single product vulnerability in place of the dependency on sheep. Our favoured strategy was concerned to maximise investments in other productive sectors, where viable opportunities could be found: to build a Falklands fishing fleet and concentrate local interest in fishing in offshore rather than onshore activities: to pursue a series of options which would limit population growth to a level where it could be accommodated without detriment to the Falklands population in terms of both infrastructure provision and less tangible but no less important social tensions and to pursue positively a policy of investing a certain proportion of fishing revenue in a reserve fund to provide a nest egg.

Table 1.18  
Estimated Impact of alternative growth scenarios

	Actual 1985-6	Actual 1986-7	Scenario I		Scenario II		Scenario III	
			1992	1997	1992	1997	1992	1997
GNP £m	11.2	30.8	44.0	52.1	38.8	45.8	43.2	44.7
Population	1900		2800	3500	2800	3300	2500	2700
Average wages/ earnings £/pa	6000		12500	13100	12300	13400	11800	12100
Annual housing programme (units)			70	40	70	40	30	15
Investment funds for development and infrastructure p.a <sup>(1)</sup> £m	10.0		3.5	4.4	4.2	3.0	4.0	7.0
Development expenditure £ per capita p.a	5250		1250	1250	1500	910	1600	2600

SOURCE: Consultants Estimates

NOTES:

- (1) After investment in housing and basic infrastructure to keep pace with population growth.



Broadly speaking, this balance of policies was endorsed by the Falkland Islanders during the period of discussion of the Interim Report and the options it contained. The Consultants too, continue to favour that particular balance but one or two changes have altered some parameters subsequently. Most notably the revenues earned from fishing licenses are higher than had been foreseen and should this pattern continue then the level of investment and the implications for population and workforce growth may be slightly higher than originally anticipated. On the other hand, higher revenues means that there are likely to be more resources for infrastructure and housing investment. Also, the actual outturn of some investment in the fisheries sector have led us to modify the highly enthusiastic returns on investment originally anticipated from investment in fishery related projects.

The philosophies underlying the preferred development strategy are discussed in the Main Volume of the Final Report. The rest of this chapter is concerned with preparing more detailed forecasts of economic activity in terms of the preferred strategy, outlining some of the implications in terms of population and infrastructure need, investible resources and the balance between the sectors. The next section presents the economic model in greater detail and discusses the key assumptions and dynamics of it. The section then goes on to consider the implications for sectoral growth, for development expenditure and for public sector finance.

### 3.2 The Development Strategy

#### 3.2.1 Fundamentals

The model for economic growth which is described here is essentially the same as that used in the Interim report to explore the social and economic implications of the three policy scenarios, although the availability of additional data, (for example, we now have financial data for a full year subsequent to the declaration of the FICZ) and the fact that some important policy decisions have been taken since the writing of the Interim report, has enabled us to refine the model somewhat to reflect actual events more closely.

As at the time of the Interim report, the model is based on the assumption that growth in the economy results from productive investments which yield a surplus, which can in turn be reinvested. Each investment will in turn generate jobs which will have an impact on the population of the islands and the level of infrastructure required to support it. Private sector investment has been estimated as equal to the value of retained profits in the islands, in the absence of any balance of payments data or information on capital and current account transfers which might otherwise be used to estimate the investible resources in the economy, this provides a suitable proxy.

In addition to private sector investments through reinvested profits, the public sector has an investment resource which may be used for productive or developmental investment. In the case of the Falkland Islands, most of the identifiable productive investment of the past seven years has been generated via the public sector, through FIDC.

A strictly private versus public sector view of investment (productive versus developmental) is therefore an oversimplification, and this is one area where we have refined the basic growth model recognising the importance of public sector investment in wealth creation. Resources transferred from government to private sector via FIDC are also included in private investment, since productive investment via FIDC is recognised as generating employment. The direct employment implications of development investment are less easy to identify; and no formal assumptions have been made in this context.

In May 1988 it was formally decided by FIG to abolish the joint venture scheme with Stanley Fisheries and foreign fishing fleets. The revenues which would have accrued in the private sector through SFL now will become part of the Government revenues and when reinvested will have an impact on output in the economy and employment. This too has implications for the economic forecasts.

### 3.2.2 Elements of the strategy

The overall development strategy, expressed as a blend of Scenarios II and III envisages a mix of investment across all sectors to include some investment in offshore fishery development (i.e. own vessels) but to concentrate on a balanced investment programme across all sectors. A proportion of Government surplus is to be allocated to reserves to build up a security net for the islands. The fishing windfall is seen as an opportunity for diversifying and broadening the economic base, allowing more investment in the important agricultural sector than has hitherto been feasible; allowing for the build up of other activities such as tourism and encouraging organic growth throughout the economy rather than going for a series of mega-projects, in one, potentially vulnerable sector, ie fishing.

Within this strategy it is clearly perfectly sensible to invest in onshore support services for the fishing sector; machine tools, some boat repair or electronics repair workshops which will help the fleets to maximise their effort and thus enhance the role of the Islands as a fishing centre. This has clear political benefits as well as being economically sensible.

Given the backlog of development investment still needed in the islands; airstrips, camp tracks and telecommunications, considerable emphasis should be placed in early years in bringing the Falkland Islands up to date with the end of the twentieth century, at least in terms of basic infrastructure.

An organic approach to development, rather than a strategy of 'going for the big one' will have the additional advantage of allowing the Falklanders to develop suitable training and skill enhancement programmes to ensure that their present different skill endowments do not act to exclude them from the benefits that development will bring. This is particularly important for the youth of the Falkland Islands.



The central features of the proposed development strategy may be summarised as follows:-

- o The main sources of government revenue will be the sale of fishing licenses. The joint venture system is to be abolished (a policy decision which we endorse) and direct revenues associated with fisheries will accrue directly to Government.
- o A portion of the revenues thus generated will be transferred to reserves; of the balance of the surplus after ordinary expenditures, the major proportion will be for development expenditures while a proportion should be redistributed to the directly productive sector via FIDC.
- o Building a healthy and diversified economy remains a high priority; activities in Camp should be supported through subsidies if appropriate and suitable opportunities sought for investment and further subdivision. Development in all other productive sectors should be encouraged - tourism, other services, industry and fishery support - and investments in these sectors assessed on a sound economic basis.
- o Use of revenues for development expenditure and a continuing high level of investment will enable the Falkland Islands to move forward in terms of both social and physical infrastructure.

The detailed formulation of the economic development model is shown in Appendix II, but the core assumptions are outlined below.

### 3.2.3 Fishing License revenues

Fishing license revenues received by the Government in 1987-88 totalled £16.5 million. In addition, joint venture fees to SFL totalled £9 million. We have estimated that in future fishing license revenues will average about £23 million as it is unlikely that the full value of joint venture contributions could be levied as license fees; the difference is that the payment of a joint venture fee enabled investors to have access to 'soft' finance and to earn a reasonable return on an investment in the fisheries sector. If the Government takes the full value of the 'rent' for fishing in the FICZ, then the joint venture partner loses the investment opportunity. Nonetheless, Government will undoubtedly realise more in license fees than it has done hitherto. (The impact of reduced license fees is discussed in section 3.5).

### 3.2.4 Wages and employment

Wages in the Falkland Islands have been given a major boost in the present financial year in the Government sector which has allowed government employees to benefit from the upward pressures on wages which have been felt in the private sector. It is anticipated that real wages will continue to rise by about 3 per cent per annum over the next 5-7 years, the rate of increase subsequently falling off to 2 per cent.

This will reflect continuing constraints on the workforce and a steady improvement in the skill mix of the labour force over time.

It is assumed that in the private sector, each £100,000 invested will generate one full time job (direct and indirect). The ratio may change over time, and is forecast to increase over time, as the skill levels in society improve, to £145,000 per job after 5 years.

### 3.2.5 Allocation to reserves

A proportion of Government's current account surplus each year is added to the Falkland Island reserves, not as special fishery related fund but as part of the Islands general reserves. The balance of the Government surplus can be used for developmental and productive investment. The proportion of the surplus allocated to reserves is taken to be exogenously determined, as a policy decision within EXCO. It has been agreed within the Falkland Islands to work to a target of between £7-8 million transfer to reserves although if the revenue earnings changes substantially, this might have to be amended.

## 3.3 Projected Economic Activity

Using this simple growth model and the assumptions outlined above, the level of activity in the economy has been forecast and the developments are shown in Table 1.19<sup>(1)</sup>.

### 3.3.1 Growth in GNP

In 1986/7 GNP was estimated at just under £31 million. By the following year it is estimated to have increased by 32 per cent to £40.5 million. Following this major leap in economic activity, growth is expected to stabilise, and by 1991/2, GNP is forecast to reach £44 million, an increase of 2.4 per cent per annum (10 per cent overall) from 1988. The cessation of the system of joint venture fees is likely to have a dampening effect on growth in the coming two years and GNP is forecast to show little change in 1988/9, possibly even a slight drop. This is partly because a higher proportion of revenues will be spent on non-productive development expenditure: partly because the gross value of fishing related monies flowing into the economy is likely to be slightly reduced, as noted in para.3.2 above<sup>(2)</sup>. In 1987/8 the inflow from fisheries, joint venture fees and fishing licenses was £25.5 million, but the fishing license revenues alone are forecast only to reach £23.5 million and to remain constant thereafter in real terms.

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<sup>(1)</sup> The structure of the forecasting model and key assumptions, are presented in Appendix I.4

<sup>(2)</sup> The impact of the ending of joint venture premiums is also demonstrated in the decline in GDP. The revenue flows now show up entirely as income from abroad and consequently affect GNP only.



Table I.19  
Forecasts of Economic Activity (£000)

	1986/7	1987/8	1991/2	1996/7	1986/7-1987/8-1991/2	1987/8	1991/2	1996/7
Wages and Salaries	6500	7890	10865	15950				
Payments in kind	315	330	400	515				
Pension contribution	150	180	250	365				
Trading profits								
- fisheries	7200	9520	)					
- other	2200	2275	)	4280	6315			
Rents	430	475	695	1115				
GDP	16795	20670	16490	24260	23.0	-5.5	8.0	
Less - Net investment and other income to abroad	1145	1160	720	1095				
Plus - Fishing licenses	11995	16500	23500	23500				
Other income from abroad	3130	4500	5295	7930				
GNP	30775	40510	44565	54595	31.6	2.4	4.1	

Sources: Consultants Estimates  
See Appendix I.3

SOURCE: Consultants Estimates

NOTES: (i) Assumes a sex spread of 1.0 people per job - some immigrants are single, many households have more than one adult in employment.

This stabilisation also reflects conservative public expenditure policies where the emphasis is, rightly, on containing government expenditure within non-inflationary limits and ensuring a regular transfer of funds to reserves. The development of a offshore reserve fund is an integral component of the recommended economic development strategy. Public sector finances are examined more closely in Section 3.4 but it is planned that Government transfer to reserves should rise from £4 million in 1987/8 to between £7-8 million from 1989/90 and thereafter.

The subsequent five years from 1992 to 1997, will be a period of consolidation. As the capital stock in the islands increases and perhaps there is a relative shift away from infrastructure investment to increased productive investment, the economy is forecast to grow by about 22.5 per cent between 1992- 1997, an average annual increase of just over 4 per cent.

### 3.3.2 Population and labour force

The continuing economic growth will stimulate a growth in population and the likely levels of population and size of the workforce are shown in Table I.20.

At the time of preparing the interim report, it was assumed that even if Stanley Fisheries and the joint venture schemes were to be ended, such a move would be phased over a few years. The sudden cessation of the system has the immediate effect of channelling more resources into the public sector, less into the productivity investing private sector. For this reason the forecast population increase is more conservative than had been thought earlier. But the dampening effect on growth and profits is compensated for at a macro-economic level by the higher revenues which it seems it should be possible to raise through fishing licenses. Under the new situation, a higher proportion of revenues are available for infrastructure and development investment.

Table I.20  
Projected Employment and Population

	1987	1991/92	1996/7
Population <sup>(1)</sup>	1960	2440	2965
Resident labour force	1090	1355	1650

SOURCE: Consultants Estimates

NOTES: <sup>(1)</sup> Assumes a low average of 1.8 people per job - some immigrants are single, many households have both adults in employment.



Table I.21  
Estimated total investment in the Falkland Islands £million (current prices)

	1976-80	1982/3- 1986/7	1987/8- 1991/2	1992/3- 1996/7
Infrastructure and development <sup>(1)</sup>	7.4	17.0	39.4	42.6
Productive investment				
- Public <sup>(2)</sup>		7.4		
- Private <sup>(3)</sup>	0.8	9.9 <sup>(3)</sup>	28.5	42.4
TOTAL	8.2	34.3	67.9	85.0
Average investment p.a.	2.1	6.9 <sup>(3)</sup> (1982/3 - 1985/6 £4.5m)	£13.6	£17.0
Aid <sup>(4)</sup>	5.8	18.9	3.0	None

Source: Falkland Islands Economic Study 1982, HMSO  
FIDC, FIG, Consultants Estimates

Notes:

- (1) Excludes FIDC
- (2) Minimum, private sector joint funding with FIDC only
- (3) Heavily weighted towards 1986/7. Between 1982/3 and 1985/6 investment averaged £4.5 million p.a.
- (4) Excluding technical assistance, land transfers and rehabilitation. See also Appendix 1.3
- (2) Principally investments made through FIDC.

## 3.3.3

## Likely levels of investment

Earlier in this paper it was argued that the injection of funds into the Falkland Island economy since 1982 had supported investment levels two or three times as high as in the previous decade. The continuing economic rent raised from fishing licenses can sustain twice that level of investment, even ignoring the contribution of capital aid flows as Table I.21 shows. Between 1982-83 and 1986-87 total investment including aid flows was estimated at around £34 million. Net of aid the figure falls to about £14 million. Now with a sustained annual income of over £20 million from fishing licenses, total investment, without any support from capital aid is forecast at around £13 - £17 million per annum.

Of this total, public sector investments are likely to be around £10 million per annum, including a public sector contribution to private sector investment (through FIDC). This level of total investment, at around 30 per cent of GNP, is high but reflects the recess in this economy resulting from sustained period of negligible investment. It is assumed that investment in the productive sectors will be able to yield an average return of about 8 per cent per annum.

## 3.3.4

## Structural Changes

The sectoral pattern of investment will have implications for the structure of the economy. It is possible to make some tentative projections. The employment implications of investment and the sectoral and urban-rural splits which may be inferred from these forecasts are discussed in greater detail in Working Paper VII, but some of the main changes which may develop are shown in Table 1.22.

Table 1.22  
Possible Employment Structure for the Falkland Islands

	1986	% OF TOTAL	1991/2	% OF TOTAL	1996/7	% OF TOTAL
Agriculture	270	26	285	21	295	18
Fisheries, Manufacturing and Tourism	190	19	340	25	460	28
Commercial Services	105	9	150	11	205	12
Government Services	305	30	380	28	445	27
Others	<u>155</u>	<u>15</u>	<u>200</u>	<u>15</u>	<u>245</u>	<u>15</u>
TOTAL	<u>1025</u>	<u>100</u>	<u>1355</u>	<u>100</u>	<u>1650</u>	<u>100</u>

SOURCE: Consultants estimates. See Table VII.2



A shift in the pattern of employment is likely to follow the changing investment pattern of the coming decade, as the relative importance of agriculture declines in the face of her economic activities. The share of government services may also be expected to decline.

## 3.4

Public Sector Finances

The 1988/89 Budget marks a turning point in the development of the Falkland Islands public finances, and, in many ways incorporates the ideas set out in this Report and establishes a framework for the achievement of most of the rest.

Three key decisions were embodied in the 1988/89 Budget:

- o Joint Venture Premiums were abolished and all money extracted from fishing fleets is now channelled directly to FIG through licence fees. This has now provided Government with sufficient revenue to achieve all its objectives.
- o The inexorable rise in current expenditure has been contained and contained at a level which gives more than adequate scope for funding the Development Programme. Furthermore, administrative measures have been adopted which should make it easier to control the level of expenditure in future.
- o The Development Programme has been carefully and consciously designed at a level which is within the ability to implement it effectively and which can be financed without strain.

The Budget Estimates for 1988/89 have been reproduced in Table I.23, together with the official projections for the succeeding two years. While most of the work underlying these projections had been undertaken very thoroughly, the decision by Executive Council to abolish Joint Venture Premiums, was made so late in the Budget preparation process, that there was insufficient time available to think through all the consequences of this decision and incorporate them in the Estimates.

Table 1.23  
FIG Budget Estimates 1988/89

	£million		
	1988/89	1989/90	1990/91
Operating Revenue	34.5	34.9	35.6
Capital Revenue	0.7	0.6	0.6
Total Revenue	35.2	35.5	36.1
Operating Expenditure	17.5	17.4	17.0
Capital Expenditure	10.6	8.0	8.0
Total Expenditure	28.1	25.4	25.0
Overall Surplus	7.1	10.1	11.1

Source: Financial Secretary, FIG

We have, therefore, amended them in a number of ways:

- o The withdrawal of the Joint Venture Fees will create short term financing problems for SFL. As a transitional measure, therefore, we have allocated £20 million to FIDC in 1988/89, which can be used by FIDC to meet SFL's legitimate funding commitments.
- o In accordance with our general thesis concerning the role of FIDC as the conduit for recycling funds for the private sector development in both fishery and non-fishery sectors, we think that FIDC funding should be increased to £3.0 million a year. We understand that ODA has already agreed to fund FIDC for the next year and a half at the rate of £20 million a year. We have thus shown the additional funding required as a separate item.
- o Revenue is likely to be somewhat more buoyant than shown because the increased amount transferred to reserves will earn interest at growing amounts each year. Equally, the take from taxes and duties will rise with growing real incomes.
- o Equally current expenditure is likely to grow more rapidly than expected. Even if the establishment can be contained, and this may be possible with the growing population, real wage rates will rise and this will effect not only payments to Government employees, but the level of social services and welfare payments reasonably to be expected by the population.



Thus, we would expect public sector finances to develop more in the way shown in Table I.24

## 3.5

Vulnerability of the Economy

The forecasts presented in this working paper are predicated on the assumption of high continuing income to the Falkland Islands from fishery licences at about £23 million. It is important to note that this is a somewhat vulnerable source of earnings, although we consider that it is unlikely to disappear totally. Nonetheless, this season (1987/8) has seen a cyclical drop in the price of squid which if sustained may affect the overall economics to the fishing fleets and therefore the ability to charge licenses. The implications of reductions in fishing license revenues are summarised in Table I.25 below, in terms of GNP and of net governmental revenues. It is this sum which is allocated to development investment, to productive investment through FIDC and to reserves.

Three possibilities are considered:

- A. Firstly, if after this year, revenue from license fell to £20 million per year and did not recover. The economy would continue to grow strongly, although the level of development investment and contribution to resources would probably be reduced.
- B. This example considers the possibility that fishing license revenues drop sharply next season, to just £15 million, but over two years recover to their present levels. This would, over a decade, have virtually no impact on growth, although in the short term it would of course affect either the amount transferred to reserves or the amount invested in development.
- C. The third example paints a gloomier prospect, and shows the broad implications if a drop next season was not followed by a recovery and the yield from fishing licenses stabilised at around £15 million. This would have a deeply depressing effect on the economy with little growth beyond 1986/7 level of activity until well into the decade. The level of Government revenues would be much reduced and the level of development investment and of transfers to reserves would be about half the level forecast in this paper.

Nevertheless, life would be sustainable, and while transfers to reserves would suffer, the overall level of development investment could still match that of the 1983 to 1986 period at around £4.5 million per year, while still making some transfer to reserves, and maintaining some financial flows to FIDC.

Quite clearly, an economy dependant for the major source of its earnings on one commodity is vulnerable to shocks arising from that commodity. But the strength of the economy is such that it can comfortably weather a short term reduction in revenue; and even if revenues fell by a third or so from present levels, the economy would still be as well off as during the years of growth between 1982-1986. Prudent budgetary management is an essential element of policy; but the Falkland Islands economy is still much stronger than it was a decade ago.

Table 1.24

## Recommended allocation of financial resources

£'000

	1985/6 Actual	1986/7 Actual	1987/8 Est.	1988/9 Est.	1989/90 Proj.	1990/1 Proj.	1991/2 Proj.	1992/3 Proj.
Revenue(1)								
- Current	6003	19646	27139	34500	35000	35900	36800	37750
- Development	205	258	1294	700	500	500	500	500
- Total	6208	19904	28433	35211	35550	36400	37300	38250
Expenditure								
- Current	5044	8713	16337	17478	18000	18500	19000	19600
- Capital	680	1773	8055	10520	8000	8000	8000	8000
- Financial (FIDC)	-	-	-	2000(1)	2000	2000	3000	3000
- Total	5724	10486	24392	30000	28000	28500	30000	30600
Transfer to Reserves	484	9418	4041	5200	7500	7900	7300	7650
Total Reserves			17200	22400	29900	37800	45100	52750

Source: FIG, Consultants Estimates

- Notes: (1) Derived from Economic Model forecasts from 1989/90 onwards  
 (2) Transitional assistance for SFL following cessation of Joint Venture Premiums.  
 Not allowed for in Budget estimates.



Table I.25

## Impact of Reduced Fishing Revenues

£'000

	1989/90	1990/91	1991/92	1996/7
<u>Base projections</u>				
Fishing revenues	23500	23500	23500	23500
GNP	41090	42900	44600	54600
Net Gov't. Revenue	16900	17250	18000	20000
A. Fishing revenue	20000	20000	20000	20000
GNP	37240	39000	40700	50300
Net Gov't. Revenue	13900			
B. Fishing revenue	15000	20000	23500	23500
GNP	31740	39000	45000	55000
Net Gov't Revenue	7585	13400	18000	20000
C. Fishing Revenue	15000	15000	15000	15000
GNP	31740	33500	35200	44100
Net Gov't Revenue	7585	7900	8600	9600

## APPENDIX 1.1

Aid Flows  
Disbursements/Outturn  
(million)

## APPENDICES

	1982/3	1983/4	1984/5	1985/6	1986/7	Unspent	TOTAL
Rehabilitation	0.4	4.0	0.7	0.3	0.3		15.0
Capital aid	0.1	0.7	4.7	4.1	4.5	8.3	22.4
Technical cooperation	0.0	1.4	1.4	1.2	1.5	-	5.5
Total Capital aid	1.0	2.1	6.1	5.7	6.0	8.3	25.2
Hospital			0.2	2.4	2.1	0.5	0.3
TOTAL (a)	1.0	2.1	6.3	8.7	9.1	8.8	35.5
Less FIDC			0.7	1.5	2.3	3.0	7.5
Less IMF transfer		0.4	0.2	0.2	0.1	0.4	2.4
CAPITAL AID & TECHNICAL ASSISTANCE (b)	1.0	1.7	5.7	10.9	6.1	5.4	25.6

Source: FIG

Notes: (1) Excluding Rehabilitation fund



## APPENDIX I.1

Aid Flows  
Disbursements/Outturn  
(£million)

	1982/3	1983/4	1984/5	1985/6	1986/7	Unspent	TOTAL
Rehabilitation	9.4	4.0	0.7	0.3	0.2		15.0
Capital aid	0.1	0.7	4.7	4.1	4.5	8.3	22.4
Technical cooperation.	0.9	1.4	1.4	1.6	1.5	-	6.8
Total Capital aid	1.0	2.1	6.1	5.7	6.0	8.3	29.2
Hospital			0.2	2.5	3.1	0.5	6.3
TOTAL <sup>(1)</sup>	1.0	2.1	6.3	8.2	9.1	8.8	35.5
Less FIDC	-	-	0.7	1.5	2.3	3.0	7.5
Less land transfer		0.4	0.2	0.7	0.7	0.4	2.4
CAPITAL AID & TECHNICAL ASSISTANCE <sup>(1)</sup>	1.0	1.7	5.4	10.0	6.1	5.4	25.6

Source: FIG

Notes: (1) Excluding Rehabilitation funds

## APPENDIX 1.2

## Estimated Investment in productive activities (FIDC) (£'000)

	1984	1985	1986	1987	TOTAL
<b>A. FIDC FINANCIAL ASSISTANCE <sup>(1)</sup></b>					
Agriculture					
FIDC	54.6	60.0	183.7	221.8	520.1
Private	76.1	87.0	199.2	579.9	942.2
TOTAL	130.7	147.0	382.9	801.7	1462.3
Fisheries					
FIDC	-	-	15.0	231.0	246.0
Private	-	-	43.0	-	43.0
TOTAL	-	-	58.0	231.0	289.0
Tourism					
FIDC	-	8.6	64.5	394.8	467.9
Private	-	17.2	77.5	387.3	482.0
TOTAL	-	25.8	142.0	782.1	949.9
Industrial and other services					
FIDC	6.7	229.9	274.6	191.2	702.4
Private	5.4	190.4	559.3	179.7	934.8
TOTAL	12.1	420.3	833.9	370.9	1637.2
All Sectors					
FIDC					
<b>B. FIDC DIRECT INVESTMENTS</b>	<b>105.3</b>	<b>693.4</b>	<b>905.0</b>	<b>4000.0</b>	<b>5703.7</b>
Total FIDC	166.6	991.9	1442.8	5038.8	7640.1
Total Private	81.5	294.6	879.0	1146.9	2402.0
<b>Grand Total</b>	<b>248.1</b>	<b>1286.5</b>	<b>2321.8</b>	<b>6185.7</b>	<b>10042.10</b>

Source: Falkland Islands Development Corporation

Notes: (1) Refers only to funds actually disbursed loans, grants and equity  
 (2) Excludes Stanley Fisheries Ltd in 1987, estimated at £7.2 million.



# APPENDIX I.3

## Macro Economic Forecasts

Table 1. Forecasts of GNP

	1986/7	1987/8	1988/9	1989/90	1990/1	1991/2	1992/3	1993/4	1994/5	1995/6	1996/7
Wages & Salaries	6500	7888	8274	9158	10097	10863	11850	12897	13870	14887	15951
Payments in kind	315	331	347	365	383	402	422	443	465	489	513
Pension contribution	150	181	190	211	232	250	273	297	319	342	367
Trading profits											
- Fisheries	7200	9520	1190	1237	1286	1337	1390	1445	1503	1562	1624
- Other	2200	2277	2358	2441	2687	2941	3205	3557	3923	430	4692
Rents	430	473	520	572	630	693	762	838	922	1014	1116
<b>GDP</b>	<b>16795</b>	<b>20670</b>	<b>12879</b>	<b>13983</b>	<b>15314</b>	<b>16485</b>	<b>17902</b>	<b>19478</b>	<b>21001</b>	<b>22595</b>	<b>24263</b>
Less net investment & property income to abroad											
- Fish	706	706	117	121	126	131	136	142	147	153	159
- Other	440	445	472	488	537	588	641	711	785	860	938
Plus Fishing License fees	11995	16500	23500	23500	23500	23500	23500	23500	23500	23500	23500
Other income from abroad	3131	4500	3854	4218	4743	5296	5807	6320	6845	7382	7932
<b>GNP</b>	<b>30775</b>	<b>40509</b>	<b>39645</b>	<b>41091</b>	<b>42894</b>	<b>44562</b>	<b>46432</b>	<b>48445</b>	<b>50415</b>	<b>52454</b>	<b>54597</b>

Table 2  
Public Sector Revenues and Expenditure

	1986/7	1987/8	1988/9	1989/90	1990/1	1991/2	1992/3	1993/4	1994/5	1995/6	1996/7
Income from abroad											
Fishing licenses F <sup>0</sup> t	11995	16500	23500	23500	23500	23500	23500	23500	23500	23500	23500
Harbour dues etc <sup>(1)</sup>	1865	3000	2100	2350	2350	2350	2350	2350	2350	2350	2350
Stamp, coins	359	300	300	300	300	300	300	300	300	300	300
Investment income (Yfund <sup>0</sup> t)	921	921	1204	1568	2093	2646	3157	3670	4195	4732	5282
<b>Total income from abroad</b>	<b>15140</b>	<b>20721</b>	<b>27104</b>	<b>27718</b>	<b>28243</b>	<b>28796</b>	<b>29307</b>	<b>29820</b>	<b>30345</b>	<b>30882</b>	<b>31432</b>
Domestically raised revenues											
Personal taxes	500	860	631	662	733	808	869	948	1032	1110	1191
Corporation taxes	685	1185	1596	1655	1788	1925	2068	2251	2441	2638	2842
Other revenues Rg <sup>0</sup> t	3579	5384	5516	4900	4989	5432	5657	5890	6126	6371	6625
<b>Total domestic revenues</b>	<b>4764</b>	<b>7429</b>	<b>7743</b>	<b>7217</b>	<b>7509</b>	<b>8165</b>	<b>8594</b>	<b>9089</b>	<b>9599</b>	<b>10118</b>	<b>10659</b>
<b>Total Government Revenues</b>	<b>19904</b>	<b>28150</b>	<b>34847</b>	<b>34935</b>	<b>35752</b>	<b>36961</b>	<b>37901</b>	<b>38909</b>	<b>39944</b>	<b>41001</b>	<b>42090</b>
Government Expenditure (1)											
General Expenditure	6200	12637	12503	12590	12620)						
Wages & Salaries	2500	3700	4475	4610	4780)	19000	19570	20157	20762	21385	22026
T/A, OSAS, ARC	0	0	500	800	1100)						
<b>Total General Expenditure</b>	<b>8700</b>	<b>16337</b>	<b>17478</b>	<b>18000</b>	<b>18500</b>	<b>19000</b>	<b>19570</b>	<b>20157</b>	<b>20762</b>	<b>21385</b>	<b>22026</b>
Government Revenues LESS general expenditure	11204	11813	17369	16935	17252	17961	18331	18752	19182	19616	20064
Contribution to reserves	9420	4040	5200	7500	7900	7300	7332	7501	7673	7847	8026
Investment resources of which	1784	7773	12169	9435	9352	10661	10998	11251	11509	11770	12039
Productive investment (FIDC)	0	0	2000	2000	3000	3000	3000	3000	3000	3000	3000
Development investment	1784	7773	10169	7435	7352	7661	7998	8251	8509	8770	9039



## APPENDIX 1.4

### Calculations of GNP and Investment Projections

#### 1 Calculation of GNP

- 1.1 GNP in year  $t$  is calculated as:
- |   |          |                              |
|---|----------|------------------------------|
| Wages and salaries                                    | $W_t$    |                              |
| + Wages in kind                                       | $W^k_t$  |                              |
| + Pension contribution from employers                 | $P^e_t$  |                              |
| + Imputed rental income                               | $R^e_t$  |                              |
| + Trading profits                                     | $P_t$    |                              |
| Less Overseas remittance                              | $r(P_t)$ | where $r$ is remittance rate |
| Plus Government income from abroad - fishing licenses | $F_t$    |                              |
| other   | $Y_t$    |                              |

$$\text{ie. } NI_t = W_t + W^k_t + P^e_t + R^e_t + P_t - r(P_t) + F_t + Y_t$$

1

1.50

#### 1.2 Investment in the economy

- Total investment  $I_t^T$  = Reinvestment of retained profits  $(1 - r)P_t$  after tax
- + government investment  $I_t^G$
  - + personal savings  $sW_t^t$  where  $s$  is propensity to save. and  $s=t_p$
  - + resources invested via FIDC
- $K_t$  is the capital stock in period  $t$ .
- $I_t$  is incremental.

1.2.3 Personal savings are calculated as  $sW_t$ , where  $s$  is the marginal propensity to consume personal savings + Government revenues from personal taxation.

### 1.2.1 Trading profits $P_t = [p.K_{t-1} + JV_t]$

ie. Profits in year  $t(P_t)$  are a function of the yield obtained on capital invested in period  $(t-1)$  where  $K_{t-1}$  is capital stock in year  $t-1$  and  $p$  is the rate of return plus contribution from joint venture fees in period  $t (JV_t)$

$P_t$  can be further broken down to distinguish between profits generated in the fisheries sector ( $P_t^f$ ) and profits in other sectors ( $P_t^o$ ). These may or may not show the same return so we have  $P_t^f = [p^f K_{t-1}^f + JV_t]$  and  $P_t^o = [p^o K_{t-1}^o]$  where  $p^o, p^f$  are the yields obtained in different types of investment. It is the inverse incremental capital output ratio. 2

Assuming corporation tax is paid at a rate of  $t_c$  (say 42%) on retained profits, and the remittance rate for profits is  $r$  (see identity no. 11 overleaf) then the gross investment resource after tax on retained profit is:

$$\begin{aligned} I_t^f &= (1 - t_c)(1 - r)(p^f K_{t-1}^f + JV_t) \text{ or } (1 - t_c)(1 - r)P_t^f & 3 \\ I_t^o &= (1 - t_c)(1 - r)(p^o K_{t-1}^o) \text{ or } (1 - t_c)(1 - r)P_t^o & 4 \\ K_t^f &= (1 - t_c)(1 - r)P_t^f + K_{t-1}^f, K_t^o = (1 - t_c)(1 - r)P_t^o + K_{t-1}^o \end{aligned}$$

### 1.2.2 Government Investment

is calculated as a residual from government revenues from all sources less revenue expenditure. Total government revenue is calculated as: -

personal taxes ( $t_p W_{t-1}$ ) where  $t_p$  is the average personal taxation rate (and is assumed to equal marginal propensity to save) and  $W_{t-1}$  is the total wage bill of previous period

- + Fishing license revenues  $F_t$
- + Other government income from abroad  $Y_t^o$
- + Corporation tax on retained profits  $t_c(P_t^f + P_t^o)(1-r)$
- + Internal government revenues  $R_t^G$  (excluding taxes)

LESS revenue expenditure ( $C_t^g$ )

LESS contribution to reserves

ie.  $I_t^g = t_p W_{t-1} + t_c(P_t^f + P_t^o)(1-r) + F_t + Y_t^o + R_t^G - C_t^g - xI_t^g$  where  $x$  is proportion of surplus allocated to reserves. 5

1.2.3 Personal savings are calculated as  $sW_t$  where  $s$  is the marginal propensity to consume: personal savings = Government revenues from personal taxation.



### 1.3 Wages and Earnings

Wages are a function of wage rates paid to the existing labour force and wages to new jobs generated by investment in the economy.

ie.  $W_t = f(W_t, W_{t-1}, I_t^T, g_w)$  where  $I_t^T$  is total net incremental, investment  
 $W_t$  is wage rate earned by newly created jobs  
 $W_{t-1}$  is level of wages paid in previous year, and  
 $g_w$  is underlying trend for increase of wages

The key assumption is the number of jobs generated by net additional incremental investment- the incremental capital labour ratio (ie by new investment, not replacement investment)

$L = f(I_t^T)$  where  $f$  is defined by  $K/L$  and  $L$  is number of new jobs generated  
 $L = I_t^T/n$  where  $n = K/L$  or the cost per job

6

Therefore, the level of wages of salaries in year  $t$  is:

$W_t = g_w W_{t-1} + I_t^T/n \cdot W_t$   
 $W_t = g_w W_{t-1} + W_t/n (1-t_c)[P_t^f + P_{10}] + G_{(t-1)}^p + W_t/n \cdot I_t^g$   
 Where  $G_{t-1}^p$  is allocation by government to FIDC for investment. This value  
 and  $g_w W_{t-1}$  are lagged to avoid circularity in the calculation.

7

1.3.2 Payments in kind calculated as a function of payments in kind in the year  $t_0$

ie.  $W_t^k = W_0^k(1 + g_{wk})$  assume increase of  $g_{wk}$  % per annum

8

1.3.3 Pension Contribution from Employers calculated as  $f(W_t)$

$P^{te} = p_e(W_t)$

In 1986,  $p_e$  was 2.3%, assumed constant

9

1.4 Other elements of GNP: imputed rental values calculated as

$R_t^e = f(R_0^e)$  where  $R_t^e = R_0(1 + 0.1)^t$

10

1.5 Payments made Abroad remittances are calculated as a function of profits

$$R_t = f(P_t) \text{ or } R_t^o = nP_t^o, R_t^f = rP_t^f$$

1.6 Government Revenue from overseas comprise

Fishing license  $F_t$  + other income from abroad  $Y^o$ ,



## 2 VALUES USED IN PROJECTING GNP

2.1 Definitions, Identities and Values

<u>Algebraic</u>	<u>Computer</u>		<u>Values</u>
$t_c$	$t(c)$	Average rate of taxation on retained people	
$r$	$r$	Proportion of company profits distributed (assumed remitted overseas) ( $r < 1$ )	$r^f = 0.10$ $r^o = 0.20$
$p^f p^o$	$p(f)p(o)$	Rate of return on productive investment	$p = 0.08$
$K_t^f$	$Kf(t)$	Value of capital stock in fisheries at end of period $t$ (£'000)	$Kf(86)=0$
$K_t^o$	$Ko(t)$	Value of capital stock in other sectors	$Ko(86)=27500$
$t^p$	$t(p)$	Average rate of personal taxation	0.08
$W_t$	$W(t)$	Level of wages and salaries in year $t$	
$F^t$	$F(t)$	Value of fishing licences in year $t$	See 2.2
$Yo_t$	$Yo(t)$	Yield of Government investment overseas, including a constant value for stamps and coins, plus other overseas earnings	See 2.2
$R_t^g$	$Rg(t)$	Government revenues excluding revenues and earnings from overseas and tax revenue	See 2.2
$C_t^g$	$Cg(t)$	Government current (not investment) costs	See 2.2
$Xg^{fund}$	$X(gfund)$	Proportion of government revenue invested overseas	0.2 unless specified
$p^{fund}$	$p(fund)$	Rate of earnings on overseas reserves	See 2.2
$K_t^{fund}$	$Kfund(t)$	Cumulative value of overseas fishing reserves (£'000)	$Kfund(87)=13160$
$Y_t^{fund}$	$Yfund(t)$	Income from overseas fund	See 2.2
$g^w$	$g(w)$	Underlying trend growth rate in wages and salaries	See 2.2

$n$	$n$	Value of constant which generates 1 full time (equivalent) job (£'000)	See 2.2
$w_t$	$w(87)$	Average wage per annum for newly generated jobs (£'000)	See 2.2
$g^{wk}$	$g(wk)$	Annual growth in value of wages in kind	
$W_t^k$	$Wk(t)$	Value of wages paid in kind	
$p_1^e \quad p_t^e$	$p(e) \quad p_e(t)$	Rate of employers pension contribution applied to $w(t)$ to give $p_e(t)$	
$r_1^e \quad r_t^e$	$r(e) \quad r_e(t)$	Growth in imputed value of rents used to generate total value	

## 2.2 Value of Variable

Actual values have been used where possible; calculated values are shown in the following table.

Year	Average Wage (ult.) Increase (1)	Wage Increase P.A. (2)	Fishing Licences (3)	Government Revenue and Costs p (thous) (4)	Yield (5)	$p_e(t)$ (£) (6)
1985/87	14.09	1.03	11953	521	3920	3575
1987/89	11.53	1.03	12500	531	4080	3654
1989/91	11.01	1.03	28900	1204	3854	3516
1991/93	11.80	1.03	25820	1808	4318	4082
1993/95	12.20	1.03	23940	2083	4743	4493
1995/97	12.51	1.03	22500	2646	5206	4957
1997/99	12.83	1.03	20500	3157	5607	5400
1999/01	13.14	1.03	23060	3679	6030	5840
2001/03	13.24	1.02	23500	4105	6345	6196
2003/05	13.54	1.02	20100	4748	7384	6771
2005/07	13.74	1.02	20000	5282	7822	7422

Notes:

1. Average value of wage for newly generated jobs
2. Average rate of increase of wages
3. Value of yield on government overseas funds
4. Income from various funds
5. Total government earnings from abroad excluding fishing licence revenues (includes harbour dues) calculated at 1990/91 prices
6. Based on given FIC budget estimates to 1990/91; thereafter based at a per cent per year
7. Based on given FIC budget estimates to 1990/91; thereafter based at a per cent per year
8. Projection of government surplus transferred to reserves. Actual FIC projections used in model to 1990/91
9. Value of investment which generates 1 job.



## 2.2 Values of Variables

Actual values have been used where possible calculated values are shown in the following table.

Year	Average Wage (wt) (1)	Wage increase p.a. (2)	Fishing license	Government p (fund) (3)	Revenues Y(fund)t (4)	and costs Yo(t) (5)	Rg(t) (6)	Cg(t) (7)	xgfundt (8)	L <sup>(1)</sup> £'000 (9)
1986/87	11.00	1.03	11995	0.07	921	3220	3579	17413	N/A	100
1987/88	11.33	1.03	16500	0.07	921	4500	5384	16337	N/A	100
1988/89	11.61	1.03	23500	0.07	1204	3854	5516	17478	N/A	100
1989/90	11.90	1.03	23500	0.07	1568	4218	4900	18000	N/A	100
1990/91	12.20	1.03	23500	0.07	2093	4743	4989	18500	N/A	145
1991/92	12.51	1.03	23500	0.07	2646	5296	5432	19000	0.40	145
1992/93	12.82	1.03	23500	0.07	3157	5807	5657	19570	0.40	145
1993/94	13.14	1.03	23500	0.07	3670	6320	5890	20157	0.40	145
1994/95	13.34	1.02	23500	0.07	4105	6845	6126	20762	0.40	145
1995/96	13.54	1.02	23500	0.07	4732	7382	6371	21385	0.40	145
1996/97	13.74	1.02	23500	0.07	5282	7932	6625	22026	0.40	145

### Notes.

1. Average value of wage for newly generated jobs
2. Average rate of increase of wages
3. Rate of yield on government overseas funds
4. Income from overseas funds
5. Total government earnings from abroad excluding fishing license revenues. Includes harbour dues estimated as 10 per cent of license fees.
6. Based on given FIG budget estimates to 1990/91: thereafter grown at 4 per cent per year.
7. Based on given FIG budget estimates to 1990/91: thereafter grown at 3 per cent per year.
8. Proportion of government surplus transferred to reserves. Actual FIG projections used in model to 1990/91
9. Value of investment which generates one job.

3.

Table 3  
Investment and employment in the Falkland economy (£'000)

Employment Implications of Investment

Year	Total Investment		Investment/job	Number of jobs
	Private	Public	Private	generated
1986/7	7462	1784	100	75
1987/8	9378	7773	100	94
1988/9	1628	10169	100	16
1989/90	5687	7453	100	57
1990/91	5820	6352	100	58
1991/2	5957	7661	145	41
1992/3	8100	7998	145	56
1993/4	8282	8251	145	57
1994/5	8471	8509	145	58
1995/6	8667	8770	145	60
1996/7	8870	9039	145	61
TOTAL	78323	83742		633