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**QUARTERLY ECONOMIC COMMENTARY**

by

J. DURKAN, S. SCOTT  
D. MADDEN

MAY 1983

# THE ECONOMIC AND SOCIAL RESEARCH INSTITUTE

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## SUMMARY

The domestic economy is expected to perform poorly again this year. GNP is likely to show little change this year — essentially a continuation of the poor growth of recent years. Private consumer expenditure is expected to decline by about 1 per cent compared with a fall of 6 per cent last year. Government consumption expenditure may increase marginally. Investment, however, is expected to decline by a further 9 per cent, following a 9 per cent decline in 1982. Industrial exports are likely to grow by  $8\frac{1}{4}$  per cent.

The decline in consumption and the decline in investment will together exert a significant downward pressure on imports. Imports of materials for further production for export will increase, import penetration will continue and cross border trade both legal and illegal is expected to increase. Import prices, however, will increase very much less rapidly than in 1982 as inflation in industrial countries and declining oil prices are reflected in import prices — modified for exchange rate changes.

The rate of increase in consumer prices is expected to moderate sharply. Between November 1982 and November 1983 the rate of increase could be  $8\frac{1}{2}$  per cent at present exchange rates with further declines in the annual rate possible. Even assuming indirect tax increases next January, there might be an increase of  $6\frac{1}{2}$  per cent in consumer prices between May this year and May next year.

The balance of payments deficit on current account is expected to be between  $2\frac{3}{4}$  and  $3\frac{3}{4}$  per cent of GNP, reflecting the weakness of internal demand.

**TABLE I: NATIONAL ACCOUNTS 1981-82**  
**A: Expenditure on Gross National Product**

	1981 £m	1982 £m	Change in 1982				
			£m		%		
			Total	Volume	Total	Price	Volume
Private Consumer Expenditure ...	6628	7300	672	-397	10¼	17¼	-6
Public Net Current Expenditure ...	2271	2670	399	+68	17½	14¼	3
Gross Domestic Fixed Capital Formation	3089	3085	-4	-279	¼	9¾	-9
Exports of Goods and Services ...	5513	6520	1007	+275	18¼	12¾	5
Physical Changes in Stocks:							
Agriculture ...	-3	20	23	+20	—	—	—
Intervention ...	-70	140	210	+187	—	—	—
Other ...	-15	-100	-85	-80	—	—	—
Final Demand ...	17413	19635	2222	-206	12¾	14	-1¼
Imports of Goods and Services ...	7024	7345	321	-254	4½	8½	-3½
GDP at market prices ...	10389	12290	1901	+48	18¼	17¾	½
Net Factor Payments ...	-340	-600	-260	-215	76½	08	63¼
GNP at market prices ...	10049	11690	1641	-167	16¼	18¼	-1¾

**B: Gross National Product by Origin**

	1981 £m	1982 £m	Change in 1982	
			£m	%
Agriculture, Forestry, Fishing ...	880	1090	210	23¾
Non-Agricultural: Wages ...	6155	7000	845	13¾
Other ...	1177	1510	333	28¼
Net Factor Payments ...	-340	-600	-260	76½
National Income ...	7872	9000	1128	14¼
Depreciation ...	940	1100	160	17
GNP at factor cost ...	8812	10100	1288	14½
Taxes less Subsidies ...	1237	1590	353	28½
GNP at market prices ...	10049	11690	1641	16¼

**C: Balance of Payments on Current Account**

	1981 £m	1982 £m	Change in 1982
			£m
X—M + F ...	-1851	-1425	+426
Net transfers ...	+419	+455	+36
Balance on Current Account ...	-1432	-970	462

**TABLE II: NATIONAL ACCOUNTS 1982-83**
**A: Expenditure on Gross National Product**

	1982 £m	1983 £m	Change in 1983					
			£m		%			
			Total	Volume	Total	Price	Volume	
Private Consumer Expenditure ...	7300	7950	650	-73	9	10	-1	
Public Net Current Expenditure ...	2670	3056	386	27	14½	13¼	1	
Gross Domestic Fixed Capital Formation	3085	3050	-35	-277	-1¼	8½	-9	
Exports of Goods and Services ...	6520	7620	1100	+620	16¾	6¾	9½	
Physical Changes in Stocks:								
Agriculture ... ..	20	25	5	0	-	-	-	
Intervention ... ..	140	-140	-280	-280	-	-	-	
Other ... ..	-100	-25	75	78	-	-	-	
Final Demand ... ..	19635	21535	1900	95	9¾	9¼	½	
Imports of Goods and Services ...	7345	7870	525	73	7¼	6	1	
GDP at market prices ... ..	12290	13665	1375	22	11¼	11	¼	
Net Factor Payments ... ..	-600	-665	-65	-27	10¾	6	4½	
GNP at market prices ... ..	11690	13000	1310	-5	11¼	11¼	0	

**B: Gross National Product by Origin**

	1982 £m	1983 £m	Change in 1983	
			£m	%
Agriculture, Forestry, Fishing ...	1090	1250	160	14¾
Non-Agricultural: Wages ... ..	7000	7720	720	10¼
Other ... ..	1510	1695	185	12¼
Net Factor Payments ... ..	-600	-665	-65	10¾
National Income ... ..	9000	10000	1000	11
Depreciation ... ..	1100	1200	100	9
GNP at factor cost ... ..	10000	11200	1100	11
Taxes less Subsidies ... ..	1590	1800	210	13¼
GNP at market prices ... ..	11690	13000	1310	11¼

**C: Balance of Payments on Current Account**

	1982 £m	1983 £m	Change in 1983
			£m
X-M+F ... ..	-1425	-915	510
Net transfers ... ..	+455	+550	95
Balance on Current Account ...	-970	-365	605



## I THE INTERNATIONAL ECONOMY

### *Introduction*

The downturn in world trade that took place in the second half of 1982 proved very much more marked than expected with world export and import volumes declining by  $3\frac{1}{2}$  and  $2\frac{1}{4}$  per cent respectively compared with a forecast decline of 1 and  $\frac{1}{2}$  per cent used in the December *Commentary*. The decline was so great that even modest growth in 1983 compared with 1982 implies a fairly significant increase between end 1982 and end 1983. The poor pattern of world trade essentially mirrored the very weak output and demand situation in the major economies so that an improvement in world trade in 1983 is conditional on growth in the major economies. It is possible to feel slightly more optimistic now than at the time of the December *Commentary* that the first very tentative signs of positive growth factors are emerging.

### *Developments and Prospects*

At the heart of this slightly more optimistic view for world output is the situation in the U.S. and in the U.K.. GNP in the U.S. increased in the first quarter of 1983 after declining for over a year. The official forecast is now that GNP will be running  $4\frac{3}{4}$  per cent higher at end year than at end 1982. The basis for this view is the effect of the fall in oil prices on consumer demand, the increase in industrial production and GNP in the first quarter, more buoyant auto sales, declining nominal interest rates (helped by a less restrictive monetary policy stance) and increased housing starts. The initial impact is expected to be strengthened in the second half of the year, particularly through consumption, as the July tax cut takes effect.

The situation in the U.K. is also potentially more favourable. In the second half of 1982 consumer expenditure was increasing at an annual rate of  $4\frac{1}{2}$  per cent. This increase in demand led initially to a reduction in stock levels. The fear was that restocking would be reflected primarily in imports given the overvalued exchange rate and the loss in capacity over the recession. In fact, industrial production did increase, helped to some extent by the depreciation of sterling. The most recent CBI surveys of expectations of heads of enterprises indicate continued optimism about future production. The stance of policy in the U.K. remains restrictive, though less so than last year, and this will strengthen demand. Insofar as autonomous factors were at work there was a decline in the savings rate in the second half of last year to 9.9 per cent of disposable income from 10.7 per cent in the first half of the year, though it is difficult to see how this will go this year and next.

For the remaining main industrial countries the positive signs are not quite so obvious. While survey data point to an improvement in business expecta-

tions, forecasts for individual countries remain pessimistic. Policy remains continuously restrictive with governments concerned about the size of budget deficits. Budget deficits will remain high in 1983 because of rising unemployment. Governments are seeking to contain deficits by absorbing some of the oil price decrease and by modifications in the social welfare system. In West Germany the stance of policy is such that at full employment there would be a budget surplus in 1983 compared with a small deficit in 1982. In other EEC countries policy also remains restrictive. Full employment deficits exist but they are being reduced significantly, and actual deficits are also being reduced in some cases. As a consequence growth rates are not expected to be significant though in general a modest pick-up from the depressed levels of end 1982 seems to be underway.

Table 1 summarises the most important features of developments in the world economy in 1982 and 1983.

**TABLE 1: Short-term Outlook**

Country	GNP % change		Consumer Prices % change		Monthly Earnings % change		Unemployment Rate		Budget Deficit % GNP	
	1982	1983	1982	1983	1982	1983	1982	1983	1982	1983
U.S.	-1.8	3	6	5½	6	5	9½	10	3¾	4½
Canada	-5	1	11	8	11½	8	11	13	6½	6½
Japan	3	3	3	2½	5	4½	2½	2½	3¼	2¼
W. Germany	-1.1	0	5.3	3½	4.1	3½	8.2	10½	4	3¾
France	1.6	0	11.8	9½	16.3	10	11.4	12¾	3	3
U.K.	0.5	1½	8.1	7	7.8	7¼	12.0	13	2¼	3¼
Italy	-0.4	0	16.5	13½	15.6	14½	9	9½	13½	11¾
Belgium	-1.1	0	8.7	7	8	5	16.6	18½	15½	16
Denmark	1.9	1½	10.1	7½	10.8	8	10.7	11½	8½	7¾
Netherlands	-1.5	0	5.5	2½	6½	3½	12.4	17	9½	11
Sweden	-0.1	1	10	12½	6.7	7½	3.3	3¾	12½	13¼

Source: Individual Country Forecasts, using individual country definition not necessarily comparable between countries.

As can be seen, growth rates in general are more favourable than in 1982. The biggest turnabout has been in the U.S. where the recovery is expected to be most marked. The data would not suggest a recovery as strong as that experienced after the 1974-75 recession and this should help to contain inflationary pressures. Consumer price increases in general are expected to be less than in 1982, a consequence of falling oil prices, weak commodity prices and slower growth in hourly earnings as a result of weak labour market conditions. Unemployment is expected to grow on average in 1983, with the possible exception of the U.S. where unemployment fell in the first few months of the year.

The turnabout in growth rates is reflected in an increase in world exports and imports. The pattern of imports by country is given in Table 2 overleaf.

For the most important market — the U.K. — the expected growth in imports is less than in 1982. However, the 3 per cent forecast includes some growth during 1983, in contrast with 1982 when U.K. imports by end year were less than at end 1981.

**TABLE 2: Volume of Imports by Country**

Country	Import Growth	
	1982	1983
U.K.	6	3
U.S.A.	-5	5
W. Germany	1	1
France	3	1
Japan	0	0
Benelux	1	1½
Italy	1	1
Others	—	—

The recovery is very tightly confined within the U.S. and the U.K. in its early stages. Other industrial countries see the growth in the U.S. as providing the possibility for the easing of their external constraints with increased exports to the U.S. given the present overvaluation of the U.S. dollar. If the demand growth in the U.S. is met from imports through competitive losses, then this growth will very soon tail off — particularly if export growth by other industrial countries meets further restrictive policies as governments seek to maintain or achieve budget balance.

Even the muted pick-up in the U.S. could run into difficulties. An increase in consumer demand financed in part by increased credit could push up interest rates given the size of the federal deficit. This could weaken the increase in consumer demand and the increase in production.

The fall in inflation rates has been very marked in late 1982—early 1983. The proximate reason for this has been the decline in oil and other commodity prices along with declines in the rate of increase in hourly rates of pay. Non-oil commodity prices could very easily turn up with any modest increase in industrial production — though oil prices may not, as supply still seems to be ahead of demand at current prices. Against this any conceivable increase in output could easily be accommodated with present levels of capacity. Productivity gains and unit cost reductions are likely to accompany any output increase and this could outweigh commodity price increases.

The real difficulty with the modest upturn that is underway is that it is unlikely to be sustained without positive concerted action by governments of the major industrial countries. Recent experience suggests that individual action is likely to prove unsuccessful given balance of payments considerations and exchange rate changes. For this reason and given the size of budget deficits, governments have turned resolutely from reflationary action. It would require a degree of unprecedented international cooperation to realise concerted action.

## II THE DOMESTIC ECONOMY

### *Fiscal Assumption for 1983*

The stance of fiscal policy in 1983 as outlined in the recent budget is restrictive. Among the objectives for fiscal policy in 1983 the Minister for Finance listed a reduction in the overall Exchequer Borrowing Requirement and the reduction and control of the Current Budget Deficit. On the basis of the budget figures the expected Exchequer Borrowing Requirement for 1983 is 13 per cent of GNP compared with 16½ per cent in 1982 and the expected Current Budget Deficit is 6¾ per cent of GNP compared with 8½ per cent of GNP in 1982. The reduction in the relative importance of both aggregates is not expected to occur as a result of a significant increase in output. Prior to the specific measures introduced in the actual budget GDP growth was expected by government to be above 1 per cent. Rather the reduction is to be achieved by a combination of expenditure reductions and taxation increases.

In looking at the Exchequer Borrowing Requirement and the Current Budget Deficit it is necessary to get behind the figures as in recent years there has been a significant difference between budgeted figures and outturns. This difference is more evident for the Current Budget Deficit than for the two gross magnitudes — current revenue and current expenditure — that go to make up the deficit, as quite minor differences in both can lead to a very large difference in the Current Budget Deficit. In some cases differences can result in a budget being significantly more expansionary than expected, in others the outturn could reflect an unanticipated worsening of the general economic situation as in 1982.

### *Expenditure: Current and Capital*

Government current expenditure is classified into Central Fund Services, consisting mainly of interest payments on debt, and Supply Services, comprising the greater part of government current expenditure — covering expenditure on the civil service, health, education, social welfare, security etc.

Supply services account for far and away the greater part of current expenditure — accounting for almost £4,500 million out of a total of almost £5,900 million in 1982. The budget figures, classified somewhat differently from the budget classification, are given below:

**TABLE 3: Supply Services 1982-1983**

	1982 Actual	1983 Budgeted	% Change
	£m	£m	
Pay Expenditure	2187	2435	11.3
Social Welfare Expenditure	897	997	11.1
Subsidies	493	502	1.8
Other Expenditure	919	1071	16.5
Total Supply Services	4496	5005	11.3

The figure for pay expenditure in 1983 consists of the cost of existing agreements plus an allowance of £60 million for special awards. No allowance was made for any increase in basic rates of pay beyond this. However, it was noted in the budget speech that if there were increased expenditure on pay this year it would be necessary "for the Government to take appropriate measures in order to fund the cost". The implication of this is that if a new public service agreement is reached there will be further tax increases or expenditure reductions (including reduction in employment or pay) or some combination of these. At this point it is impossible to predict the likely outcome of negotiations between the Government and public service trade unions. In framing our forecast, however, it is necessary to make a specific assumption about pay and the consequent reaction of government if total pay looks like exceeding the amount set out in the budget. The difficulty about a specific assumption is that it tends to be taken as a recommendation — in which case the tendency would be to assume no further increases in basic rates of pay. The form in which any increase in pay might be funded is not immaterial to a final outcome on pay. For instance, it is possible to imagine an increase in basic rates of pay "funded" by reduced employment in those areas in the public sector where contractual rights are relatively weak. The possibility of this would affect the attitudes of some public sector employees towards increased basic rates of pay. It is also possible that increases in basic rates of pay be "funded" by reductions in other expenditure through, for instance, cash limits on Departments and agencies. The associated reduction in output and services to the public could affect the present perceived return from public services and hence even the present limited willingness to pay taxes.

The assumption we are making is that basic rates of pay will increase by 5 per cent from the Autumn and that the net cost will be met from increased taxation. The net cost once direct and indirect taxes are considered would be about £20 million. The total pay figure is thus likely to be about £2,475 million. An overrun could occur depending on any new public service agreement providing increases above 5 per cent. On the other side, factors which might cause the pay bill to be less are (i) the effect of the restriction on recruitment biting more deeply than anticipated, (ii) savings on pay in 1982 not fully reflected in the revised 1983 estimates, (iii) special awards and retrospection being less than the £60 million allocated.

The allocation for non-pay social welfare was increased by £31 million in the budget from the original estimate contained in the November "Estimates for the Public Services". The increase was due primarily to the rise in unemployment that occurred in December and January and the level of payment for unemployment benefit and assistance is based on an average level of 193,000 unemployed for the year. The figure assumed represents a rise of over 23 per cent on the average level of 1982. In 1982 the average level increased by 22½ per cent. However, the rise in December was particularly marked so that the rise through 1982 (i.e. December 1981-December 1982) was 27½ per cent. Looking at this year, if the March level were maintained for the remainder of the year (seasonally corrected) the average level would be 183 thousand. However, unemployment will continue to rise during the year with the end year figure 200-210 thousand. The assumed average of 193 thousand is

thus reasonable and the derived total for social welfare expenditure is also reasonable. Shifts in family composition could affect the total expenditure in either direction by marginal amounts. The weakness of this estimate is more likely to arise from a sudden further deterioration in employment. During the present recession the rise in unemployment has been very much greater than anticipated even on a quarterly basis, so that this possibility cannot be ignored.

For the remainder of current expenditure, the lack of functional detail in the data causes some difficulty. The danger is that on the subsidies the CIE subvention could be more than that allocated, and the shortfall on grants to local authorities to be made up from charges will not be fully met this year because of the delay in bringing in charges. Against these is the possibility that the lower than expected real level of expenditure in 1982 might not be fully reflected in the estimate. for 1983.

The foregoing would suggest that supply service expenditure on average this year is likely to be very much as indicated in the budget with the total being somewhat higher because of increases in basic rates of pay. The first quarter figures provide a partial indicator of likely trends and they seem to be running higher than we would have expected given the fourth quarter level of expenditure.

The situation with regard to central fund services is still somewhat uncertain. In our December *Commentary* a total National Debt figure of £11,370 million was assumed and our estimates of debt interest were based on this. However, our estimates of interest payments were too low as the split between domestic debt and foreign debt were incorrect and total debt was greater than we had assumed. The interest estimate was necessarily incorrect as interest rates on foreign and domestic borrowing differ significantly. In addition, we had made no allowance for the rollover cost of domestic borrowing — which could raise interest payments but makes little difference to the current deficit as non-tax revenue is also increased somewhat.

Finally, the exchange rate has not been as favourable as assumed, the relationship between the decline in interest rates internationally and the decline applicable to Irish debt was not as clearcut as we had assumed, and domestic interest rates have been running at levels higher than we had assumed.

Capital expenditure as outlined in the "Revised Public Capital Programme 1983" is due to fall from £1,898 million in 1982 to £1,890 million in 1983. In some areas this represents deliberate policy to slow down expenditure — as in the case of the Farm Modernisation Scheme — whereas in others it reflects the effects of the recession — as in the case of the IDA grant and building programmes. There may, however, be further claims on the exchequer for more equity participation in state companies.

#### *Current Revenue*

The forecasting of current revenue has become extraordinarily difficult over the past 1½-2 years. The changes in indirect taxes, both in relation to rates and structures, has been so great that it has been impossible to predict with any certainty the likely outcome of changes. The changes in the rate of indirect taxes in the July 1981 Supplementary Budget and in the March 1982 Budget

were so great as to be outside the range of previous experience. The imposition of VAT on imports at the point of entry represented a structural shift, again difficult, if not impossible, to quantify.

There have also been major structural shifts in expenditure and this can affect tax receipts quite sharply. In the December *Commentary* we referred in particular to the impact on excise duties and VAT of the fall in car sales in 1982. In the calendar year new car sales fell to 73 thousand from 105 thousand the year before — a fall of 30 per cent. The revenue loss from this was very substantial. A very rough guess would put the loss at £75 million in 1982. It is possible, of course, that the decline in car sales and hence in state revenue was predicted perfectly and the shortfall in revenue occurred elsewhere. Even a modest recovery in car sales could increase revenue significantly in 1983.

In addition to the direct measurement problems the level of taxation has induced a response on the part of the household and corporate sector to avoid and evade taxation. This is most evident in cross-border activity where trade is taking place reflecting differences in VAT and other indirect taxes between Northern Ireland and the Republic. This is both legal and illegal trade and covers a wide range of products (drink, household electrical goods, tyres, petrol, postage). The amounts involved are not trivial.

The difficulties experienced by the corporate and household sector because of the recession has resulted in an increase in indebtedness to the exchequer as a means of easing the cash flow problems associated with falling or weak demand. This applies across a broad range of taxation.

Finally, the fall in employment numbers has led to some growth in the informal sector. Income in this case is higher than official estimates but the amounts are unknown. The extent of the informal sector is important for taxes on household expenditure.

Turning to expected receipts in 1983, our forecasts for revenue are higher than budget estimates under the three main headings of taxes on income, excise duties and VAT, before any allowance is made for increases in taxes to finance the net cost of the increase in public sector pay that we have assumed. So far as we can see the differences arise primarily though not wholly from the difference in the assumption with regard to private sector average earnings. The assumption made here is that average earnings in the private sector would increase by more than was assumed in the budget projections. There is further uncertainty caused by the introduction of new taxes and the extension of the tax system where yields are essentially unknown. This applies to Farm Tax, the Residential Property Tax, the Duty-Free Restriction and the yield from Tax Evasion and Avoidance Measures. Total Revenue could be significant once these are fully introduced but the start up may prove to be disappointing.

It should be apparent, given the foregoing, that any revenue estimates are likely to be subject to an unusual degree of uncertainty. Table 4 summarises the forecast compared with the official estimate. Increased tax to finance increased pay appears in the forecast in both taxes on income and taxes on expenditure. The columns are thus not strictly comparable as the budget figures made no allowance for the funding of increased pay. While the first quarter figures for revenue merely provide a pointer, they are significantly increased on the first quarter level of 1982. They were disappointing in the

context of the third and fourth quarter levels of 1982 (seasonally corrected) when allowance is made for the VAT on imports at the point of entry.

**TABLE 4: Tax and Non-Tax Revenue 1982-1983**

	Outturn 1982 £m	Budget Estimate 1983 £m	Forecast 1983 £m
Customs, Excise, VAT	2141	2415	2525
Income and Company Taxes	1725	2072	2150
Other Taxes	187	243	225
Total Tax Revenue	4053	4730	4900
P.O. Receipts	350	431	420
Other Receipts	505	597	580
Total Non-Tax Revenue	855	1028	1000
Total Revenue	4908	5758	5900

Table 5 summarises the forecast for both the current and capital budgets.

**TABLE 5: Current and Capital Budgets (£m)**

	Actual 1982	Budget 1983	Forecast 1983
<i>Supply Services</i>			
Pay Expenditure	2187	2435	2475
Social Welfare Expenditure	897	997	1000
Subsidies	493	502	500
Other	919	1071	1075
Total Supply Services	4496	5005	5050
<i>Central Fund Services</i>			
National Debt Interest	1143	1353	1360
Sinking Funds	106	115	115
EEC	144	174	175
Total Central Fund Services	1400	1650	1650
Total Current Expenditure	5896	6655	6700
<i>Current Revenue</i>			
Tax Revenue	4053	4730	4900
Non-Tax Revenue	855	1028	1000
Total Current Revenue	4908	5758	5900
Current Deficit	988	897	800
<i>Capital Expenditure</i>			
Public Capital Programme	1903	1890	1890
Other	97	123	123
Total Capital Expenditure	2000	2013	2013
Capital Receipts	1043	1188	1188
Capital Borrowing	957	825	825
Total Exchequer Borrowing	1945	1722	1625
Total Exchequer Borrowing % GNP	16.6	13.2	12.5

The difference between our figures for the current deficit in 1983 and official figures are not significant, as official figures for revenue and expenditure lie within 1 per cent of those given here. The first quarter figures on balance would suggest that expenditure might be slightly more than we have forecast and that revenue might be slightly less in which case the deficit could be in the range £800 million to £1,000 million.



### *Gross Fixed Capital Formation*

The latest trade statistics show imports of capital goods to have increased by nearly 4 per cent in 1982 over 1981. Given that the price index for capital goods has increased by about 9 per cent, this amounts to a volume decline of nearly 5 per cent.

It is difficult even at this stage to give a reasonably accurate account of activity in the building and construction industry for 1982. While data are available for the year as a whole for a variety of indicators the sources of information are disparate and what follows is an attempt to draw together these various strands to form a reasonably coherent picture. Overall, however, it is estimated that activity in the industry declined by about 12½ per cent in 1982.

The construction of dwellings represents over one-third of the industry's output and the total number of completions of dwellings for 1982 shows a decrease of 7⅓ per cent. Completions of private dwellings declined by just over 9 per cent while the completion of local authority dwellings showed a marginal increase over 1981. There was an increase of over 15 per cent in local authority house starts while those in progress showed a decline of nearly 2 per cent. The best indicator of private house starts is the number of Building Society approvals and applications. Approvals and applications showed a minor recovery in the last quarter of 1982 but they have still declined by about 17 per cent over the 1981 figures despite no lack of investment funds in the Building Societies. The fall in approvals and applications is obviously a reaction to the decline in real disposable income in 1982 and also the expected decline in 1983. A further indication of the weakness in demand is the rise in new house prices of only 8½ per cent, though this could reflect a composition shift in new housing.

On the input side, total cement sales for 1982 were estimated to be about 15 per cent less than in 1981. The trend of cement sales has been downward since January 1981, with a slight levelling off around December 1981 being followed by a further decline since March 1982. In the first quarter of this year sales of home produced cement were about 15 per cent below their level in the first quarter of 1982 and seasonally corrected almost 5 per cent below the final quarter level of 1982.

A noticeable trend in cement sales is the rise in imports despite the total market being in decline. They constituted an estimated 5-6 per cent of total sales in 1982 as against 2 per cent in 1981. The market for cement is expected to contract further this year with the decline in private housing having a particularly adverse effect on sales.

The volume index of production of non-metallic mineral products for 1982 shows a decline of about 8 per cent from 1981. The trend for this particular index has been downward since October 1981.

On the employment side, the number out of work in building and construction appears to have increased substantially from 1981. The number unemployed in December 1982 was over 24 per cent higher than that in 1981 while the number on short time work almost doubled in the same interval. Similarly, the index of employment in private (i.e. non-State) building and construction for 1982 shows a decline of 9.2 per cent over 1981 and a January

1982 to January 1983 decline of 17 per cent. This index has consistently fallen since August 1981.

Turning to 1983, the situation with regard to investment is likely to continue to remain very weak. In our December *Commentary* a decline of 5 per cent in investment was forecast with public investment falling by 6 per cent. The decline in public investment is somewhat greater at 7½ per cent, and the latest investment survey reveals a very large fall in private industrial investment by existing firms. Foreign investment may continue to decline and excess capacity in agriculture coupled with falling real prices will continue to depress agricultural investment. Total investment could fall by about 9 per cent in 1983.

Expenditure on building and construction in volume terms is expected to decline by 10 per cent. Within this broad sector, however, there are likely to be some major differences. While the local authority housing allocation has been increased by 12 per cent in the public capital programme the level of activity is expected to be reduced on that of 1982. In "Public Capital Programme 1982" £167.5 million was allocated to Local Authority Housing. This was expected to result in an average building programme of 7,600 houses, completions of some 5,700 houses and average employment of about 6,200. In the March budget this allocation was increased to £186 million — £14 million of the increase going to Dublin Corporation for house construction for urban renewal and £4.5 million further for local authority housing. The 1983 allocation of £208 million is expected to result in an average building programme of 7,000 houses (a decline of 8 per cent on the initial 1982 figure), about 5,700 completions (i.e. about the same as the initial 1982 figure) and average employment of 5,900 (a decline of 5 per cent on the initial 1982 figure). It seems clear that there will be a very significant fall in local authority housing activity in 1983 in spite of the increased 12 per cent allocation and this implies a very large price effect for local authority housing. The answer in some respects is contained in the revised public capital programme where it is stated that the cost of each completed local authority house this year will be in the region of £35,000.

The outlook for private housebuilding is more problematic. There has been an easing in interest rates and in the availability of finance — though finance through local authorities is only marginally increased. The uncertainty about job prospects may limit people's willingness to undertake the long-term commitment that house purchase involves. New household formation continues, however, and there may be some increase in house completions at the lower end of the price range and in the total of completions. Activity levels, however, could fall further.

The remainder of the industry's output is heavily influenced by the Public Capital Programme. Taking into account the cuts in the Public Capital Programme outlined in the recent budget, real expenditure in the PCP affecting building and construction (excluding local authority housing and loans already considered) will fall by about 12½ per cent. While expenditure on roads and hospitals is expected to increase in real terms, agriculture, industry, telecommunications and energy will suffer significant cuts. In agriculture the major cutbacks are in the Farm Modernisation Scheme while in industry the decline in demand for IDA factory space due to the depression has

**TABLE 6: Summary of Building and Construction Indicators 1981-82**

	Local Authority Housing			Private House Completions	Total House Completions	Building Society Applications	Building Society Approvals	Cement Sales (K Tonnes)	Non-Metallic Minerals Production (1973 = 100)	Average Number Unemployed in Building and Construction	Employment Index for Non-Government Building and Construction (1979 = 100)
	Starts	In Progress	Completions								
1981	5186	7490.5	5681	23236	28917	27578	7471	1813.5	117.1	27774	102
1982	6000	7348.75	5686	21112	26798	21306	6163	1486.2	107.45	33466	92.5
% change	15¼	-2	0	-9¼	-7¼	-22¼	-17½	-18	-8¼	20½	-9¼

resulted in a fall of over 11 per cent in industrial capital expenditure affecting the building and construction industry. In the energy sector the completion of the Dublin/Cork gas pipeline has resulted in a significant fall in expenditure while the fall in telecommunications is due mainly to the particular stage reached in the Department of Posts and Telegraphs investment programme.

Expenditure on machinery and equipment is expected to decline in volume terms by 7½ per cent. The forecast for investment is given in Table 7.

**TABLE 7: Gross Investment 1982-1983**

	1982 £m	1983 £m	% Change	
			Price	Volume
Building and Construction	1620	1600	10	-10
Machinery and Equipment	1465	1450	7	-7½
	3085	3050	8¾	-9

#### *Prices, Incomes and Costs*

There is likely to be a very significant reduction in the rate of increase in consumer prices during 1983. The increases in the consumer price index in the final quarter of 1982 and in the first quarter of this year were very low, at 1.6 per cent and 2.5 per cent respectively (the latter figure would have been about 1 per cent if there had been no increases in indirect taxes in January). In the second quarter the rate of increase in consumer prices will be rather more as the full effects of the budget measures take effect but thereafter the rate of increase should moderate sharply. By November we expect the consumer price index to be running about 8½ per cent above the November 1982 level. Looking into 1984, this decline in the rate of increase in consumer prices is likely to be maintained. If it is assumed that indirect taxes are indexed in the first quarter, then the increase in prices between May 1983 and May 1984 will still be significantly reduced to 6½-7½ per cent.

This reduction and the expected reduction in the rate of increase in consumer prices has been due to (i) a decline in the rate of inflation in industrial economies; (ii) the fall in the dollar and Irish pound price of oil; (iii) the timing of pay increases in the last (22nd) pay round; (iv) the prospect of reductions in the rate of increase in basic rates of pay; (v) smaller increases in agricultural prices than in 1982; (vi) lower increases on average in indirect taxes in 1983 than in 1982 and (vii) lower interest rates. In the early part of the year it looked as if these factors would be reinforced by an effective appreciation of the pound but the present level if maintained would mean a slight fall on average in 1983 compared with 1982.

The forecast for consumer prices is given in Table 8.

While this is the situation with regard to consumer prices, wholesale prices are likely to increase less rapidly. Wholesale prices of the output of manufacturing industry may increase by about 7½ per cent this year. There is, of course, very wide disparity between sectors so that pay settlements are likely to have a significant effect on profitability, output and employment. The size of pay settlements influences and is itself influenced by the actual and expected rate of inflation. It is necessary, therefore, to make some judgment

**TABLE 8: Consumer Prices 1982-1983**

	Index (Nov 1975 = 100)	% Change	
		Quarterly	Annual
1982	264.2	—	17.1
1983	290.4	—	10.0
1982			
Mid-February	249.5	2.4	18.9
Mid-May	263.9	2.1	17.0
Mid-August	269.5	2.1	17.0
Mid-November	273.8	1.6	12.3
1983			
Mid-February	280.6	2.5	12.5
Mid-May*	290.0	3.3	9.9
Mid-August*	294.0	1.5	9.1
Mid-November*	297.0	1.0	8.5
1984			
Mid-February*	306.0	3.0	9.0
Mid-May*	309.0	1.0	6.5

\*Forecast

about the likely outturn on pay for the year in the light of the forecast for consumer prices.

In 1982 average earnings in manufacturing industry increased by 12½ per cent. Basic rates of pay on the other hand increased by 15½ per cent, the difference being accounted for by a decline in hours worked. The quarterly pattern was slightly different from what we had expected with an increase in basic rates in the third quarter of 2¾ per cent, followed we think by an increase of 3 per cent in the final quarter. The carryover on basic rates of pay into 1983 at 4½ per cent is thus less than we had previously forecast (5-5½) and is about 1 per cent above the carryover on consumer prices. In looking to 1983 the scale and timing of increases is very important. Unfortunately it is not possible to be in any way certain of either the scale or the timing. The agreements at firm and industry level in 1982 were very different so that the determination of an average or even the average timing of new agreements is almost impossible. For some firms awards on final stages of 1982 agreements overlapped with new awards in other firms. There is not a simple pattern during the year and into next emerging. Indeed, this pattern was rarely there even when National Pay Agreements were the norm.

Some of the agreements already negotiated for 1983 have been very large while in other cases no changes in basic rates have been made at all almost by default. The pattern that could emerge is one of differences between sectors depending on the degree to which sectors are open or sheltered, the importance of pay and other domestic costs in total costs and the extent of unemployment. In the December *Commentary* we had assumed a 5 per cent increase in basic rates of pay from the late Summer/early Autumn in manufacturing but developments to date suggest a different pattern. For industry as a whole the increases are likely to be spread fairly evenly throughout the year, though not of course at the firm level. Because of this and the carryover from 1982 the increase in basic rates of pay will again be very large on average this year, though significantly below that of 1982.

**TABLE 9: Manufacturing Costs, Prices, Employment and Output**  
(% change)

	1980	1981	1982	1983**
Basic Rates of Pay	22.4	16.6	15.4	11
Wholesale Prices*	10.9	16.7	11.9	7½
Employment	-1.0	-3.3	-3.5	-3½
Average Earnings	18.2	16.7	12.5	11
Output per head	-1.0	5.9	3.7	3½
Consumer Prices	18.2	20.4	17.1	10
May 1983 — May 1984	—	—	—	6½
Real Average Earnings	0	-3.1	-3.9	+1
QII 1983 — QII 1984	—	—	—	+1

\*Includes excise duties, but not VAT (1983 figure excludes excise duties).

\*\*Forecast.

### *Private Consumer Expenditure*

Private Consumer Expenditure is estimated to have declined by 6 per cent in volume terms in 1982. Real disposable income is estimated to have fallen by 2½ per cent but the savings rate increased from 20 per cent in 1981 to 22¾ in 1982. As we had expected, the July level of retail sales marked the very low point — thereafter retail sales picked up with the average level towards the end of the year about the same as the yearly average.

In looking to this year it is necessary to bring together income transfers and taxes on incomes. The total pay bill is expected to rise by about 10 per cent. Average earnings in industry may increase by about 11 per cent but with employment falling the total pay bill in industry will rise by very much less. In the remainder of the private sector (the sheltered private service sector) average earnings may rise by rather more but employment may fall through natural wastage. The situation with regard to the public service pay bill has already been discussed in some detail.

Agricultural incomes are expected to grow by 14-15 per cent following a rise of 24 per cent in 1982. Gross output may increase by 2 per cent with prices rising by 7½ per cent on average. The increase in income comes from an expected decline in inputs of feedingstuffs, particularly cattle feed, as a result of the very much milder weather in the first quarter of this year, and a slight decline in fertiliser inputs.

Total transfer income is expected to increase by 13 per cent. This is less than we had forecast previously (20 per cent) and seems to be due to the timing of the increase in payments and the effects of changes in schemes. The increase in basic rates of payment works out at about 11½ per cent on average between 1982 and 1983, or just above the expected rate of annual inflation.

Personal income is expected to increase by 10 per cent. However, taxes on income are likely to grow by more than 20 per cent so that nominal disposable income may increase by just 8 per cent. Taken in conjunction with an expected rise of 10 per cent in consumer prices this implies a fall of about 2 per cent in real disposable income.

Given our poor knowledge of the factors which cause large variations in the savings rate it is not possible to do much more than make an assumption, the

validity of which can be tested during the year as data on consumption provide some information on what is happening.

Table 10 summarises the data on consumption and personal savings for recent years.

**TABLE 10: Savings and Disposable Income 1974-1983**

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Personal Disposable Income % Change	17.2	27.9	15.2	19.2	18.0	18.8	13.9	17.8	14.1	8.0
Personal Consumption % Change	11.8	16.8	21.7	18.9	16.6	17.2	17.8	19.0	10.1	9.0
Personal Savings Rate	18.3	25.4	21.2	21.5	22.4	23.5	20.8	20.0	22.5	22.0

Farmers' incomes and instability in farmers' incomes are influencing variations in the savings rate, though the quantification of these influences remains very uncertain. The maintenance of farmers' real incomes at least at last year's levels might lead to some increase in consumption out of income. The changes in the system of benefits and the continuation of the recession could lead to a run down of savings by those unemployed. Finally, the fall in real disposable income even for those in employment is quite different across sectors and people may try to hold the reduced consumption levels reached last year. We are assuming a slight fall in real consumption of 1 per cent this year with the savings rate falling to 22 per cent of disposable income.

The pattern of consumption in 1983 will be very uneven. Seasonally corrected, the first quarter may be about the same as the final quarter of 1982. The second and third quarters will both be less than this as the change in the taxes on income and PRSI contributions bite on disposable income. However, towards the Autumn there could be some recovery as incomes increase, social welfare payments rise, and farmers' cash from sale of produce begins to be felt. In looking at individual items of expenditure, we expect domestic food sales to continue to grow, drink and tobacco sales to decline, electrical goods sales to decline, car sales in total to rise and expenditure abroad to decline. The volume index of retail sales could go on a quarterly basis 112, 110, 112, 115.

#### *Exports of Goods and Services*

In 1982, merchandise exports were £5,670 million, an increase of 18½ per cent on the previous year, or an increase of 5½ per cent in volume terms. There was some variation in the rate of change between the particular categories of exports by industrial origin.

Manufactured exports, SITC 5-8, rose in value terms by 23½ per cent to £3,488 million. There was a fall in these exports in the third quarter of the year both in volume and value terms. While this decline was concentrated in SITC 5 (Chemicals) it mirrored very accurately the decline in trade that was going on internationally. There was a recovery in total manufactured exports in the fourth quarter with SITC 7-8 growing most rapidly. Growth during the year, however, was poor with the fourth quarter level of manufactured exports only 5½ per cent higher than a year earlier.

Other industrial exports rose in value terms by  $21\frac{1}{2}$  per cent. The volume increase here was about 7 per cent — price rises being higher than for manufactured exports because of drink and zinc prices which seem to have increased very rapidly.

Agricultural exports as recorded in the trade statistics reached some £1,330 million in 1982 compared with £1,235 million in 1981. Live cattle exports declined by 18 per cent in number, while tonnages of beef exports declined by about 4 per cent. Dairy product exports were also reduced (11 per cent for the year). Overall the volume of agricultural exports as measured in the trade statistics fell by  $5\frac{3}{4}$  per cent. It must be said once again that the situation with regard to agricultural exports recording is not satisfactory. The trade statistics include flows across borders that are recorded. Intervention products going abroad for storage are treated as an export in the trade statistics, while no allowance is made for sales out of intervention stores abroad in the trade statistics. In effect it is impossible to say from published trade data what the value of agricultural exports is, and what are the relevant prices and quantities. Of course, there is the further problem of cross-border trade in agricultural goods which is not recorded. In 1981 the net effect was believed to be substantial whereas in 1982 less so, but the gross flows are large.

Turning to 1983, the situation with regard to exports is still very uncertain. The situation for industrial products can be looked at from the demand and the supply side. On the demand side the main influence is the extent of the world recovery and imports of our trading partners. The world economic situation has already been discussed. Forecasts for world GNP and individual country imports currently available are likely to prove somewhat too pessimistic, given the decline in oil prices and the apparent earlier recovery in the U.S. economy. On the supply side, the dominant influences are capacity and competitiveness. Clearly there is excess capacity at the moment, so that a recovery in demand could lead to a substantial increase in the volume of exports of industrial products, other things being equal. The extent of this is difficult to quantify as many new firms were established here in the period following the recovery from the first recession and in the last 3 years with an expectation of market demand as yet unrealised. The experience in 1976 is instructive. Then industrial exports grew in volume terms by 17 per cent although world trade grew by just 12 per cent, though competitive gains were also made. In their end-year 1982 report the IDA state that there was a substantial increase in the number of expansions by overseas firms already located in Ireland, though the number of approvals of new overseas greenfield projects declined. There is also the question of the Aughinish plant and how it will be treated in the Trade Statistics. If gross exports and imports are taken then there will be a significant boost to exports and imports whereas if net exports are taken the effect will be minor.

Turning to competitiveness, there are several aspects to this. There is first the question of costs at constant exchange rates. Domestic costs (wage rates, other labour costs, other taxes) are likely to increase more rapidly here than in competing countries and will require their absorption in profits. The effect on output and exports then depends on the level of profitability. For foreign firms with branches in other countries the decision on output will depend on the



relative profitability of different locations. For foreign firms with but the single location and for domestic export firms the decision to continue production depends on whether it is profitable now and likely to be so in the medium term. A lack of profitability in the short run may not reduce industrial exports in the short run, but if continued would lead to a contraction in output.

The second aspect of competitiveness is the effect of short term movements in the exchange rate. The appreciation of the currency vis-a-vis sterling in late 1982-early 1983 clearly led to a loss of competitiveness for firms competing in the U.K. market against U.K. firms, though the situation has now eased slightly.

The influences on industrial exports in 1983 are market growth, capacity growth and excess capacity providing some stimulus, but these effects are dampened by cost factors and the exchange rate. These are summarised in Table 11. The net effect, however, will be continued growth with industrial exports growing by 8¼ per cent. Of this manufactured exports could grow by 9 per cent while other industrial exports grow by 5 per cent.

**TABLE 11: Exports of Manufactures 1980-1983 % change volume**

	1980	1981	1982	1983**
1. Export Market Growth	2¼*	2*	5½	5
2. Other growth factors	4	8½	5¾	4
3. Total export growth	6¼	10½	11¼	9

\*OECD Estimate

\*\*Forecast

The figures for January, February and March point to the maintenance of the recovery in manufactured exports.

In the forecast for agricultural exports we are assuming that all of domestic supply plus purchases in 1982 of intervention stocks are sold this year. The assumption that all intervention stocks are sold has no effect on the overall GDP forecast. It does, however, reduce the payments deficit, the price of agricultural exports as intervention stocks have tended to be sold at less than intervention prices, and the size of EC transfers.

The situation with regard to tourism receipts is not likely to be quite as favourable as we had previously forecast. In particular, receipts from tourists from France are likely to be seriously affected as a result of restrictions on expenditure abroad recently introduced by the French authorities. It is, however, still very early so that an assumption of no change in the volume of expenditure is possibly the best that can be made at this stage.

#### *Imports of Goods and Services*

Merchandise imports in 1982 increased in value terms by 3.7 per cent. Among the categories of imports, producers capital goods increased by 3½-4 per cent, consumption goods rose by 2½-3 per cent and materials for further production in industry increased by just over 4 per cent. Import prices are estimated to have increased by 8 per cent, giving a volume fall of 4 per cent to imported goods. Expenditure abroad by Irish tourists is estimated to have

**TABLE 12: Exports of Goods and Services**

	1981 £m	1982 £m	% change Volume	1983 £m	Price	% change Volume	Value
Manufactured Exports	2824	3490	11	4070	7	9	16½
Other Industrial	666	810	7	900	6	5	11¼
Agricultural	1326	1390	-6	1725	4½	18¾	24
Other	49	60	-	65	-	-	-
Balance of Payments Adj.	-78	-80	-	-90	-	-	-
Merchandise Exports	4787	5670	5½	6670	6¼	10¾	17½
Tourism	416	500	2¾	560	11¾	0	11¾
Other Current Receipts	310	350	-	390	11¾	0	11¾
Total	5513	6520	5	7620	6¾	9½	16¾

increased by 19 per cent to £380 million. Imports of goods and services are estimated to have fallen in volume terms by just over 3½ per cent.

The fall in the rate of increase in import prices was due to a decline in the rate of inflation worldwide and a relatively constant effective exchange rate in 1982 compared with 1981. The effective exchange rate index declined by just over ½ per cent in 1982 following declines of 8½ per cent and 4 per cent in 1981 and 1980 respectively.

Turning to 1983 we expect some increase in the volume of imports, mainly of materials for production in industry. There was a good deal of destocking in industry in 1982 and if stock levels have reached normal levels then imports of materials should pick up. There is the further impetus in the continued growth expected in industrial exports. The volume of imported capital equipment is forecast to decline further with the continued weakness in investment. Against this imports of consumer goods may show some growth, not least because of the effects of the loss in competitiveness experienced by domestic firms on the home market. Total merchandise imports may grow by 1-2 per cent. Expenditure abroad by Irish tourists could fall in volume terms by 5 per cent given the decline in disposable income, but expenditure by day trippers could increase rather dramatically in response to cross-border price differences. Imports of goods and services as a whole are expected to increase by about 1 per cent in volume terms with the value of imports reaching £7,870 million.

### *The Balance of Payments*

Table 13 summarises the position with regard to the balance of payments on current account in 1982 and 1983.

**TABLE 13: Balance of Payments (£m)**

	1982	1983
Imports of Goods and Services	-7345	-7870
Exports of Goods and Services	+6520	+7620
Net Factor Payments	-600	-665
Net Transfers	+455	+550
Current Deficit	-970	-365

The size of the current deficit is conditional on the assumption made with regard to the sale of intervention stocks. This is most important for EEC transfers as, if end 1982 stocks are not sold and no new additions made to stocks during the year, EEC transfers would decline by over £100 million. The value of exports would also be less so that the current deficit could be about £500 million. A priori we have no way of knowing what will happen to intervention stocks. While the treatment of these stocks in the National Accounts seems technically correct, the fact that there is an ultimate purchaser at intervention values suggests that it might be appropriate to consider all purchases into intervention as exports in the year in which the purchases are made. This gets over the difficulty raised by the effect on stocks, the loss on sales and the measurement of subsidies.

The size of the payments deficit, no matter which way intervention stocks are treated, is significantly reduced on the 1982 and 1981 deficits. Given that Government net external borrowing may be about £900 million, external reserves will be significantly higher than otherwise. The precise play out of the factors is difficult to see in the absence of data on Central Bank swops.

#### *GNP, GDP and Employment*

GDP using expenditure data is forecast to increase marginally 0.2 per cent while GNP remains static. At this stage while there is consistency within the forecast it is only possible to present orders of magnitude. The general picture that emerges for the fourth year in succession is of an economy showing little or no change on average and this is perhaps as far as one can go.

This very weak picture is reflected in the forecast for employment and unemployment given in Table 14.

**TABLE 14: Employment and Unemployment 1982-1984 (000's mid-April)**

	1982	1983	1984
Agriculture	196	190	185
Industry	352	330	318
Services	598	602	603
Total Employment	1146	1122	1106
Unemployment	137	177	212
Labour Force	1283	1299	1318
Unemployment Rate	10.7	13.6	16.1
Live Register	148	187	222

#### *Appraisal*

The picture presented in this *Commentary* is of an economy still in recession. While there has been an improvement in the international situation domestic demand remains weak because of the international recession and domestic deflation. The extent of the domestic deflation is so great that at current tax rates the current budget deficit would be eliminated if unemployment were about half its present level, and eliminated at lower tax rates if unemployment were about the 1973 rate. It should be noted, however, that at full employment the major industrial EC countries would be running budget surpluses, as governments nullified automatic factors at work to

prevent budget deficits from increasing and to force labour market adjustments that government felt could not be realised through existing institutional arrangements. To note that the budget deficit reflects the stage of the cycle may be just a curiosity if there has been a structural shift internationally.

Within this context — an improvement in the world economy and the possibility that, if sustained, future growth will be less than in the pre-1973 era — it follows that future developments for this economy will depend on the ability to switch unutilised or underutilised resources (labour and capital) into production for export. The extent to which this happens will determine changes in the level of output, employment, the balance of payments and the public finances. Switching resources into export in the short run where there are unused resources is primarily a matter of profitability and profitability is determined for a given level of demand by the relative cost structure at constant exchange rates. In the medium term, the ability to develop new products (whether by innovation or marketing) is equally important. There may have been excessive concentration on the short term — particularly with respect to wages — at the expense of the medium term, yet it is success in the medium term that will provide more lasting income and employment increases.

The short term situation as we have described it repeatedly is one where income developments are important. In the short-run policy should be directed towards directly influencing income developments through a social consensus approach as outlined elsewhere.\* To the extent that this is difficult, policy should be directed towards indirectly influencing income developments by affecting those factors that push up the supply price of labour relative to product prices, i.e. direct and indirect taxes. In the December *Commentary* we identified shortening lags in the payment of taxes as the means whereby the necessary finance could be obtained to hold the rate of price inflation down to single figures. This whole area has been covered exhaustively.

An element not covered was the influence of short term exchange rate movements. Recent months have highlighted the need for an active exchange rate policy, in particular in regard to sterling. The conventional wisdom is that exchange rate movements do not affect real magnitudes (e.g. output, employment) in the long run. This is clearly not so in the short run and the adjustment process can be very destabilising, particularly if exchange rate movements are as volatile and as large as in the past six months.

Turning to the medium term the need is for the introduction of a development strategy. For an open economy such as this, development requires continuous adjustment both in response to and in anticipation of changes in the pattern of supply and demand internationally. Such structural adjustments require a set of policies in all areas of government concern with regard to the economy — covering industrial policy, capital market policy, labour market policy, public sector corporation policy, regional policy, agricultural policy, innovation policy, social policy (education, health, housing) etc. For some of

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\*P. Bacon, J. Durkan, J. O'Leary, "The Irish Economy: Policy and Performance 1972-1981" (ESRI 1982).

\*A Review of Industrial Policy NES 64.

these areas the preliminary work is already available — for instance, the “Telesis Report” provides the bones of a strategy for industrial development. It is a matter of translating a strategy into a specific set of measures. If the economic situation were more buoyant then of course these adjustments would take place in themselves or be more easy of implementation. The need for greater adjustment is more pressing now.

## PRIVATE SECTOR CREDIT, POLICY AND ENFORCEMENT: 1978-1982

Anthony Leddin\*

### *Introduction*

This paper is concerned with examining certain aspects of the Central Bank's quantitative credit guidelines over the period 1978 to 1982. The sectoral or personal lending guidelines are not considered in this paper. The approach is to consider first the policy aspects to the guidelines and in particular the relationship between the guideline and the external reserve objective. Secondly, the issue of neutralization of interest rates is discussed and some evidence is presented on this matter. Finally, the paper examines how Central Bank enforcement may act as an indicator of the existence and timing of credit rationing and concludes by demonstrating how policy and enforcement combined to cause a reduction in the Associated Banks' relative lending share.

### *Policy*

Credit guidelines were first issued in Ireland in 1965. During the period 1965-1977 the Central Bank's credit policy was on the whole passive with the probable exception of the years 1965, 1973 and 1974 when attempts were made to restrain the growth of domestic credit. Table 1 presents the guidelines and the outcomes for the period 1978 to 1982. It is evident from the Table that the first two guidelines were not successful in restricting lending to the private sector whereas the remaining three guidelines were successful in this regard. The first guideline was, in fact, terminated in August 1978 when it became apparent that the guideline would be breached and a six-month guideline was introduced with the intention of moderating credit in the final months of 1978. An interim guideline was introduced from 1979 onwards and, most significantly, foreign currency based lending (FCBL) was allowed exemption from the 1979 and 1980 guidelines.

The basic rationale for the credit guideline is not to control the money supply in the economy but to influence its composition between its domestic and external sources. By this means an external reserve objective can be achieved. This may be illustrated by reference to the following identity which is derived from the consolidated balance sheet of the banking system.

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My thanks to Joe Durkan for comments. The usual disclaimer applies.

**TABLE 1: Private Sector Guidelines 1978-1981**

No.	Period	Guideline %	Outcome %	Foreign Currency Based Lending £m	Excess Lending £m
1	Dec 77 — Dec 78	20	33		320.7
2	Sep 78 — Mar 79	10	14.7		158.1
3	Feb 79 — Feb 80	18	19.3	129.1	46.8
	Interim	10	13.3		
4	Feb 80 — Feb 81	13	13.3	323.6	16.5
	Interim	7	1.3		
5	Feb 81 — Feb 82	15	15.3		15.5
	Interim	8	4.1		

Source: Various Central Bank Bulletins

Notes: 1. Guideline 1: Terminated August 1978

2. Guideline 3: Backdated one month on date of issue

3. Guideline 4: Foreign Currency Base Lending (FCBL) exemption terminated in October 1980

$$1. \quad R + \text{NEALBs} = M^s - (\text{NGL} + \text{BLG} + \text{OTHERS})$$

where R = External Reserves; NEALBs = Net External Assets of the Licensed Banks;  $M^s$  = Money Supply; BLG = Bank Lending to the Government; NGL = Non Government Lending. The 'OTHERS' variable is closely related to the banks' net non monetary assets. The sum of the terms in the bracket is referred to as Domestic Credit (DC).

The money supply is determined by the demand for money which in turn is assumed to be a stable function of a few variables.<sup>1</sup> If the Central Bank's objective is to have no change in the external reserves, then the Central Bank must ensure that the change in DC is in line with the change in the money supply. The NGL variable within the overall DC variable is controlled by the quantitative credit guideline. Thus in setting the guideline the Central Bank must estimate correctly the likely change in each variable in identity 1 and then set the guideline as a residual to achieve a certain external reserve objective.<sup>2</sup> While the ability of monetary policy to achieve growth and employment is severely limited in a small open economy, an expansionary guideline would tend to facilitate growth at the expense of a reduction in the external reserves.<sup>3</sup>

Table 2 presents the data on each of the variables in identity 1 and in particular shows the external reserve outcome associated with the credit guidelines and the other variables in identity 1. It will be observed that the decreases in the external reserves in 1979 and 1981 were offset by increases in 1978 and 1980 so that over the period a marginal increase of £68m was recorded.

With regard to the question of whether the credit guideline achieved the desired external reserve outcome, no precise answer can be given as forecasts for the BLG, NEALBs and the 'other' variables are not published. However, by comparing the available published estimates with the actual outcomes some indication can be given. This approach may also indicate some of the difficulties involved.

<sup>1</sup>See, for example, Laidler (1981).

<sup>2</sup>For an outline of how the Central Bank calculates the guidelines, see Murray (1979).

<sup>3</sup>See, for example, Murray (1980).

**TABLE 2: External Reserves, Money Supply and Domestic Credit:  
1978-1981 (£m)**

Period	Change in External Reserves	Change in Net External Assets of Licensed Banks	Change in Money Supply (M3)	Private Sector Credit Subject to Guideline	Foreign Currency Based Lending	Bank Lending to Government	Other
	R	+ NEALBs =	M <sup>a</sup>	— (PC	+ FCBL	+ BLG	+ Others)
Dec '77 — Dec '78	51.2	4.5	934.5	814		176.9	—112.1
Feb '79 — Feb '80	—262.6	—42.4	678.5	673	129.1	230.3	—48.9
Feb '80 — Feb '81	331.5	—319.4	1,125.1	573.1	323.6	433.7	—217.4
Feb '81 — Feb '82	—50.7	—71.8	953.8	792.3		298.6	—14.6
Dec '78 — Feb '79	—1.4	—41.4					
Change over Period	68.0						

*Source:* Derived from consolidated balance sheet of banking system  
Various Central Bank Bulletins

*Note:* (a) Data from January and February 1978 are added to obtain R over period  
(b) External reserves are exclusive of gold revaluations

In 1978, the stated intention was that “. . . the import cover afforded by the official external reserves is high at present by international standards and . . . some reduction can be tolerated”.<sup>4</sup> However, a £320.7m breach of the guideline was more than offset by a £348.2m underestimate of the change in the money supply and a £233.1m overestimate of BLG (1978 is the only year a forecast is available for this variable). Thus, contrary to expectations, the expansionary credit guideline was associated with an increase in the external reserves of £51m.

In 1979, the decrease in the reserves of £262.6m would seem to be at odds with the stated objective of having “. . . little change in the external reserves”.<sup>5</sup> The increase in oil prices and the subsequent change in the terms of trade would seem to largely explain the fall in reserves. (The effect of increased prices on the demand for money does not seem to have materialized until 1980.) A contributory factor was that the increase in FCBL was not matched by an equal decrease in NEALBs. This implies that some banks were borrowing abroad and on lending to the private sector while they or their non-resident customers were simultaneously using domestic resources to repay foreign indebtedness. An underestimate of the change in the money supply of £53.7m was almost offset by a £46.8m breach of the guideline. Finally, speculative capital inflows associated with entry into the EMS may have contributed to an increase in the external reserves.

In setting the quantitative credit guideline for 1980 the Central Bank temporarily avoided a decision between the growth and reserve objectives by encouraging the private sector to borrow abroad. Commenting on its reserve objective, the Bank stated that it was “. . . seeking to avoid introducing a deflationary element into economic policy. The broad approach adopted is that maintenance of reserve adequacy this year would be achieved by external

<sup>4</sup>Q.B. 1, 1978, p. 25.

<sup>5</sup>Q.B. 1, 1979, p. 24.



borrowing by the private as well as the public sector".<sup>6</sup> This was achieved by issuing a restrictive 13% credit guideline which would "... induce some recourse by the private sector to external financing".<sup>7</sup> In the event this approach was particularly successful with the external reserves increasing by £331.5m. It may not, however, have been entirely expected as the money supply was underestimated by a considerable £301.7m. Also, despite the termination of the FCBL exemption in October 1980, this variable was underestimated by approximately £184m. It is noticeable that, unlike 1979, the NEALB's variable moved closely with the FCBL variable.

Finally, in 1981 the intention was that the reserves would be maintained at an 'adequate level' and concern was expressed at the growing level of foreign indebtedness. Little information is available for this period but it is likely that the outcome was relatively more in line with intentions.

The above discussion omits considerations of Government Monetary Financing (GMF) simply because Central Bank estimates are not available for this variable. However, for the three guidelines between February 1979 and February 1982, the Central Bank underestimated the Exchequer Borrowing Requirement (EBR) by £230m, £317m and £383m respectively. Assuming these underestimates reflect underestimates in GMF and allowing for Government Foreign Borrowing (GFB) which adds initially to the external reserves, the unpredictability in government finances clearly contributed to the difficulties in achieving the reserve target.

Overall, the policy stance of the Central Bank would seem to have been towards accommodating the growth objective with perhaps 1981 being the exception. It is noticeable that a decrease of £470.5m in the net external assets of the Licensed Banks combined with an increase of £2,620m in Government Foreign Borrowing led to a £3,022.5m decrease in external finance. Thus, the maintenance of reserve adequacy over the period was largely achieved by increased foreign indebtedness.

### *Liquidity*

The literature on the monetary approach to the balance of payments (MAB) asserts that a balance of payments disequilibrium reflects money market disequilibrium and that an adjustment mechanism exists whereby changes in the monetary base will tend to rectify imbalances in the external account. If in a fixed exchange rate system the Central Bank can neutralize the effect of changes in the external reserves on the monetary base, then the adjustment process is broken and monetary base control of the money supply may be feasible in the short run.

Neutralization is, however, not possible except under certain conditions. (One important condition is the existence of imperfect substitution between foreign and domestic financial assets in investors' portfolios.<sup>8</sup>) But controls such as exchange controls and quantitative credit guidelines, which are not usually discussed in this context, significantly increase regulation in the money markets and consequently should increase the degree of independence the

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<sup>6</sup>Q.B. 1, 1980, p. 13.

<sup>7</sup>Q.B. 1, 1980, p. 13.

<sup>8</sup>See, for example, M. Obstfeld (1982).

**TABLE 3: Central Bank Balance Sheet — Change over Period (£m)**

	Assets					Liabilities			
	1978	1979	1980	1981		1978	1979	1980	1981
External Reserves (R)	51.0	-262.7	331.5	-50.7	Currency (Cu)	89.7	96.3	94.8	68.8
Central Bank Lending to Licensed Banks (CC <sub>B</sub> )	44.1	69.5	-176.5	47.7	Licensed Banks Reserves (RE)	119.7	-58.6	211.5	-63.1
Central Bank Lending to Government (CC <sub>C</sub> )	-3.8	74.3	144.7	51.6	Government Deposits (G.D.)	-103.3	-173.2	-48.8	-26.4
Other	-6.9	20.8	37.7	19.4	Other	-21.7	37.4	79.9	88.7
	84.4	-98.1	337.4	68.0		84.4	-98.1	337.4	68.0

Source: Various Central Bank Bulletins

- Notes: 1. 1978 is from December to December. Remaining years are from February to February  
 2. CC<sub>B</sub> = Exchequer Bills rediscounted for banks + ACIBs + secured advances to banks + short term credit facility  
 3. CC<sub>C</sub> = Exchequer Bills + Irish Government Securities + Exchequer overdraft facility  
 4. RE includes statutory deposits  
 5. External Reserves are exclusive of gold revaluations  
 6. CC<sub>B</sub> does not include foreign currency swaps, data for which is not available

Central Bank has in monetary policy. In particular, since credit guidelines control lending to the private sector and exchange controls can be expected to modify capital flows through the external account, the Central Bank can use additional instruments to influence liquidity and hence interest rates in the economy. Instruments such as Central Bank credit to the Licensed Banks ( $CC_B$  is defined in Table 3 to include the rediscounting of Exchequer bills, secured advances and the short term credit facility<sup>9</sup>), changes in the primary reserve ratios and the discount rate can be used to remove or inject liquidity into the system and therefore enable the implementation of a type of stabilization policy in interest rates. This is a major advantage from using credit guidelines in that the disadvantages of flexible interest rates such as the implications for Exchequer financing, industrial investment, inflation and expectations are avoided. However, as is demonstrated below, the Central Bank can also neutralize interest rates in the short run by accepting a lower level of external reserves and a lower primary reserve ratio.

Table 3 shows a categorization of the Central Bank balance sheet which emphasises the  $CC_B$  variable. The generally inverse relationship between the external reserve changes and  $CC_B$  is evident. Also it is noticeable that the Licensed Banks recorded a lower reserve base in 1979 and 1981 despite increases in lending.

Table 4 gives quarterly figures for  $CC_B$ . The 1978 figures would suggest a form of stabilization policy in interest rates. If the first three quarters of 1979 are compared with the remaining quarter in 1979 plus the four quarters in 1980 the data again suggests a stabilization policy in interest rates. However, in October 1979 the Central Bank reduced the primary and secondary reserve ratios for the Associated Banks and decreased the primary but increased the secondary ratio for the Non-Associated Banks. These changes combined with a £118m increase in the external reserves in the fourth quarter of 1979 largely explain the reduction of £252m in  $CC_B$  in this fourth quarter. Moreover, the repayment of  $CC_B$  in 1980 reflects an increase in the external reserves which in turn is largely explained by banks borrowing abroad under the foreign currency based lending exemption.

**TABLE 4: Central Bank Credit to the Licensed Banks (£m)**

	Q1	Q2	Q3	Q4
1978	34.8	115.7	-61.0	-45.4
1979	128.1	177.0	16.8	-252.4
1980	-57.2	-61.8	-65.0	7.5

*Note:* For 1978, Quarters are from December to March and for 1979 and 1980, from February to May.

*Source:* Central Bank Bulletins

This reduction of indebtedness and the injection of liquidity via the foreign currency exemption effectively amounts to a neutralization of interest rates. The implications are that, firstly, the external reserves are at a lower level since

<sup>9</sup>The  $CC_B$  variable does not include foreign currency swaps which is an important short run liquidity instrument. No data are available on this variable.

if interest rates had been allowed to increase, capital inflows would have occurred. Referring to the year 1979, Murray (1980) comments: ". . . there was a conscious decision to take action to prevent (interest) rates going even higher, in recognition of the burden this would have placed on the economy; it was, however, at the cost of a larger fall than we would have liked in the external reserves".<sup>10</sup> Secondly, the primary reserve ratio is lower and private sector credit is likely to be higher than if the authorities had not intervened. Finally, the lower interest rates have implications for income distribution and the allocation of resources. (An intensification of credit rationing, for example.) This latter point is also true for any stabilization policy in interest rates.

A similar situation emerged in 1981 as the Central Bank extended £47.7m in credit to the banks and reduced the primary reserve ratio from 12% in February 1981 to 10% in January 1982. In addition, most categories of banks had a shortfall in their secondary reserve ratio. As in 1979, the reserve base was also lower at the end of the period.

There is a floor, set by the need to maintain prudent primary reserve ratios, to this type of interest neutralization. However, over the period, the data indicate that interest rates have not been increased to the extent called for by a policy to achieve external balance and that the broad thrust of policy has been to accommodate the credit guidelines.

#### *Enforcement*

It is informative to examine Central Bank enforcement of the credit guidelines over the period as this may indicate the existence and timing of credit rationing. Also it is important because, as is demonstrated at the end of this section, policy and enforcement combined to change the Associated and Non-Associated Banks' relative lending base and therefore their relative long-run profits.

Assuming credit rationing exists, the main incentive to breach a credit guideline is the extra profit that can be earned on excess lending. It requires two distinct measures to remove this incentive. Firstly, it is necessary to impose a special deposit measure which requires a bank to place on deposit with the Central Bank an amount equivalent to the excess lending. The interest paid on this deposit is calculated so that an immediate loss is incurred on excess lending. Secondly, because a bank's lending base is increased by excess lending, which in turn is used to calculate next period's guideline, the bank increases its (long run) profit. To remove this incentive it is necessary to make an appropriate deduction from the bank's permitted growth of credit so that the bank returns to the correct lending base at the end of the period. These two enforcement measures — special deposits and market base deductions — are consistent and sufficient to obtain compliance with the guideline. It was not, however, until the end of 1981 that the Central Bank implemented both measures.

In 1978, a 50% capital inflow requirement and a temporary penal rediscount policy used in June proved ineffective and, given the demand for credit, as a consequence the credit guideline was abandoned after nine months.

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<sup>10</sup>Murray (1980), p. 117.

For the second six-month guideline, a special deposit requirement was introduced along with a penal rediscount policy and the 50% capital inflow requirement. Ironically, the data indicate that those banks liable for special deposits (mainly the Associated Banks) were also responsible for the 4.7% breach of the guideline and that those banks who faced essentially the same enforcement measures as in the previous unsuccessful guideline actually complied with the guideline. Perhaps the reason why the special deposit measure did not moderate Associated Bank lending lies in the ambiguous criterion on which it was based. The deposits were non interest bearing, but the extent of the overlending and the length of time to the end of the period would determine the effect on excess lending profit. No measure was introduced to remove the long-run profit incentive. The special deposits which were reinforced by a progressively penal rediscount policy were not sufficient to act as a deterrent.

The year 1979 gives an opportunity to examine the relationship between enforcement and credit rationing. It is useful to refer to the following data in Table 5 for non-government lending (NGL) which, although it includes foreign currency based lending exempt from the guideline, can still be used to illustrate the main points.

**TABLE 5: Non-Government Lending (NGL) Monthly % change  
1979/1980**

	Base £m	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
NGL	3,571.1	6.2	1.0	2.1	3.6	-0.1	0.3	4.7	0	0.9	1.3	-0.9	2.0

The guideline was initially enforced by a special deposit requirement and was backdated by one month to February 1979. The Associated Banks had increased lending by 8.3% during March compared to a 0.5% increase by the Non-Associated Banks and their lending capacity for the remainder of the period was therefore reduced. Redebiting of interest in March would partly explain this large increase in Associated Banks' lending. As the NGL data indicate, lending moderated in April and May but began to accelerate again in June.

At this point the Central Bank introduced additional enforcement measures to curtail lending. Given the increasing indebtedness to the Central Bank, the penalty on rediscounting was to be increased. The special deposit criterion was redefined to explicitly account for profits earned on excess lending. The interest paid on special deposits or, equivalently, the interest on a tranche of bank deposits would be varied so that the "cost to a bank of either measure would outweigh any profit on the corresponding amount of excess lending".<sup>11</sup> Moreover, nine banks were required to place special deposits with the Central Bank at "rates substantially below those which the bank normally pays on deposits".<sup>12</sup> As reflected in the NGL Table, credit expansion now moderated in July and August but the interim guideline was breached by 4.6% by the

<sup>11</sup>Q.B. 2, 1979, p. 21.

<sup>12</sup>Q.B. 3, 1979, p. 18.

Associated Banks and their indebtedness to the Central Bank increased to £375m, reflecting falls in the external reserves.

Credit continued to increase in September and the Central Bank reiterated its intention to require special deposits and warned that "any such excess might be taken into consideration in the application to a particular bank of monetary policy for 1980".<sup>13</sup> This was the first indication that the market base incentive would be removed. Credit expansion now moderated with virtually no change in NGL in October and November.

By the end of the third quarter, the Associated Banks had already exceeded the guideline for the year and their indebtedness to the Central Bank had increased to £437m, reflecting the continued fall in the external reserves. As discussed in the section on liquidity, the changes in the required reserves in October 1979 significantly contributed to reducing this indebtedness. In the final quarter, as the data below in Table 6 indicates, the Associated Banks decreased their lending to bring their cumulative increase within the guideline limits. The Non-Associated Banks, on the other hand, were much more consistent in lending over the period.

**TABLE 6: Private Sector Credit, Subject to the Guideline  
Quarterly % Change 1979/1980**

	Q1	Q2	Q3	Q4	Year
Associated Banks	11.9	3.7	3.4	-0.9	17.5
Non-Associated Banks	4.7	6.2	5.7	4.0	22.4

Source: Central Bank Bulletins

Although the Non-Associated Banks and foreign currency based lending may have acted as alternative sources of finance, the data indicate that the Associated Banks conducted non price credit rationing in the fourth quarter of 1979/'80.

Moreover, an examination of the Associated Banks' analysis of advances table in this quarter shows that the non prime borrowers experienced large decreases in lending.<sup>14</sup> Lending to the non prime, Financial, Total Personal, Housing and Other personal lending categories all decreased, by 10.1, 4.7, 7.6 and 0.8 percentage points respectively,<sup>15</sup> whereas lending to the prime sectors such as Manufacturing, Building and Construction and the 'Others' categories increased by 8, 3 and 13.4 percentage points respectively. This may indicate differential effects from credit rationing. In general, the Central Bank enforcement efforts over the period suggest that credit rationing did exist and the neutralization of interest rates (as discussed in the previous section on Liquidity) would have intensified the extent of this rationing.

There is some evidence that rationing was continued into the 1980/81 period. As the data below in Tables 7 and 8 show, the banks made full use of

<sup>13</sup>Q.B. 3, 1979, p. 19.

<sup>14</sup>See Browne and O'Connell (1979).

<sup>15</sup>Total Personal lending equals lending to the Housing and Other personal sectors. The analysis is complicated by the existence of sectoral guidelines on lending to the Financial and Other personal categories. Lending to Housing is not subject to a sectoral guideline.

the foreign currency lending exemption while pursuing conservative domestic lending policies. It is noticeable that lending bases were only maximized in the final quarter.

**TABLE 7: Sector Credit, Subject to the Guideline  
Cumulative % Change 1980/1981**

	Q1	Q2	Q3	Q4
Associated Banks	2.4	-0.5	5.1	12.7
Non-Associated Banks	1.6	4.0	8.1	14.3

**TABLE 8: Foreign Currency Based Lending, Exempt from the Guideline  
Quarterly Change 1980/1981 (£m)**

	Q1	Q2	Q3	Q4	Year
Associated Banks	5.5	32.4	13.3	35.1	86.3
Non-Associated Banks	78.4	29.6	9.4	119.9	237.3

Source: Central Bank Bulletins

The Central Bank's approach was to issue a restrictive credit guideline in order to encourage the Licensed Banks to borrow abroad and this approach obviously succeeded. It also indicated the Central Bank's confidence in its ability to enforce the guideline. However, the enforcement measures consisting of a special deposit requirement were less forceful than in the previous period given the reduction in indebtedness to the Central Bank. In the event, no additional measures were required as at no stage were the guidelines likely to be breached. The above data indicate a conservatism in lending and this could be interpreted as an over-reaction to the experiences in 1979. On this the Central Bank comments: "The surge in the extension of credit toward the end of the . . . year may have owed something to the scope for increased lending within the guideline; this, in turn, may have been attributable partly to the pursuit by the banks of conservative lending policies earlier in the year in order to avoid the danger of breaching the guideline".<sup>16</sup> If this were the case, an intertemporal reallocation of resources occurred which would have been only partly alleviated by the FCBL exemption.

Finally, in 1981 the Central Bank was again obliged to enforce the credit guideline. All Licensed Banks were within the guideline at the interim stage but in the third quarter the Associated Banks increased lending by 7.1% to bring their cumulative increase to 14.6%. The Central Bank reiterated its intention to call for special deposits and, in addition, warned that "any excess (lending) . . . would be taken into consideration in the application of monetary policy in the next credit policy year".<sup>17</sup>

In the final quarter, the Associated Banks reduced the rate of increase in lending to 1.6% to give an overall increase of 16.3%. In contrast, there was a marked acceleration in Non-Associated Bank lending in the fourth quarter when a 9.2% increase was recorded. A very marginal increase in the earlier

<sup>16</sup>Q.B. 1, 1981, pp. 23, 24.

<sup>17</sup>Q.B. 4, 1981, p. 19.

part of the year, however, brought the Non-Associated Banks' cumulative increase to only 14.8%.

The overall breach of the guideline was considered marginal by the Central Bank and no calls were made for special deposits. However, for banks which exceeded the guideline "a corresponding deduction was made from the growth of credit permitted in 1982".<sup>18</sup> The 14% credit guideline for 1982/83 will not therefore be standard across Licensed Banks.

An examination of the analysis of advances table for the Associated Banks again indicates a reduction in lending to the Total Personal sector in the final quarter although there was a marginal increase in lending to the Financial sector. Other prime categories such as Agriculture, Services and Manufacturing all recorded relatively large percentage increases in lending. Thus, there is again evidence of a movement away from non prime borrowers when rationing is necessary. Unlike 1979, no personal lending guidelines were issued in this period. With regard to the Non-Associated Banks, the increase in lending in the final quarter was largely to the Service, Manufacturing and Agricultural categories, which may suggest an excess demand for credit and therefore the existence of credit rationing.

#### *Licensed Banks' Lending Base*

Table 9 shows the various bank categories share of total lending over the period. It will be observed that the Associated Banks initially increased their share of total lending from 59.9% in December 1977 to 63.5% in March 1979 and that by February 1982 their share was reduced to 58%. Since the amount of lending largely dictates a bank's profitability, Table 9 is an indication of relative profitability between the bank categories. These shifts in lending can be largely explained by Central Bank credit policy and by how the guidelines were enforced.

**TABLE 9: Banks' Share of Total Lending: 1978-1981 (%)**

	Dec 1977	Sep 1978	Feb 1979	Mar 1979	Feb 1980	Feb 1981	Feb 1982
Associated Banks	59.9	62.0	61.8	63.5	60.1	57.7	58.0
Non-Associated Banks	40.1	38.0	38.2	36.5	39.9	42.3	42.0
of which:							
North American	8.0	6.3	6.5	6.2	6.7	8.2	8.2
Merchant	11.9	12.0	12.1	11.4	12.1	12.3	12.3
Industrial	15.4	15.5	15.7	15.2	15.1	14.3	14.1
Other	4.8	14.1	4.0	3.7	5.9	7.4	7.3
All Licensed Banks	100	100	100	100	100	100	100
Base £m	2538.7	3195.8	3418.7	3665.0	4281.9	5178.7	5989.2

*Source:* Compiled from data given in various Central Bank Bulletins

*Note:* Certain banks in the 'other' category were allowed exemptions from the guidelines. No information is available on these exemptions.

Between December 1977 and September 1978 (the termination date of the first guideline) the Associated Banks increased lending share by 2% due to

<sup>18</sup>Q.B. 1, 1982, p. 27.



greater excess lending relative to the Non-Associated Banks. As already stated, the guideline in this period was not effectively enforced and the Associated Banks had increased lending by 30.3% by September 1978 compared to the Non-Associated Banks' 19.3%. For the second guideline period (September 1978 to March 1979) the Associated Banks increased their share by a further 1.5% for the same reason. On this occasion the relative figures are 17.5% increase in lending for the Associated Banks compared to the Non-Associated Banks lending exactly the stipulated 10%. Between February 1979 and February 1980 (the third guideline period) the Associated Banks' share of lending was reduced by 3.4% due to a number of factors. Firstly, the guideline was backdated by one month and this reduced the lending share by 1.7%. (The Associated Banks increased lending by £179.5m in March relative to the Non-Associated Banks' £6.6m.) Secondly, the Associated Banks did not perfectly maximize their lending base over the period (a 0.4% deficiency) compared to the Non-Associated Banks' excess lending of 4.4%. Thirdly, the Non-Associated Banks had greater FCBL relative to the Associated Banks (£86.3m as compared to £48.7m). These combined to reduce the Associated Banks' lending share by 3.4%.

For the fourth guideline period, the Associated Banks' share continued to fall as they failed to perfectly maximize their lending base by 0.3% compared to the Non-Associated Banks breaching the guideline by 1.3%. As in the previous period, the Non-Associated Banks also had greater FCBL (£237.3m) relative to the Associated Banks (£86.3m). For these reasons the Associated Banks' lending share was eroded by a further 2.4%.

The Associated Banks regained 0.3% of the lending market in the final guideline period by having excess lending relative to the Non-Associated Banks but the stated intention of the Central Bank to impose market base deductions may remove this gain. The Non-Associated Banks did not in fact maximize their lending base in this period and were clearly more concerned to reduce their net external liabilities.

No attempt is made here to account for the effect of the special deposit measures on profits. The data in Table 4 is therefore an indicator of long-term profits. Also it cannot be demonstrated what the relative shares would have been in the absence of credit guidelines. However, with the introduction of market base deductions in 1981 and the increasing concern of the Central Bank for external indebtedness, shifts in the lending base are not likely to be so pronounced in the future.

### *Conclusion*

The compliance by the Licensed Banks to the credit guidelines indicates the close degree of control the Central Bank can exert on private sector credit. This control in turn should facilitate the attainment of an external reserve objective but, as the data in this paper suggest, variables such as the EBR, the money supply and exogenous shocks to the system may have led to the external reserve outcomes not being entirely in accord with the Central Bank's intentions. An important aspect of policy over the period was the FCBL exemption which effectively allowed a reprieve from an overly restrictive monetary policy.

A major advantage of credit guidelines is that interest rates are not required to regulate the demand for credit. Given exchange controls, this allows scope for the Central Bank to conduct a type of stabilization policy in interest rates. The evidence in this paper suggests that interest rates were more stable and lower than if the Central Bank had not intervened. This has several advantages in terms of exchequer financing, industrial investment and the EMS obligation but there are also disadvantages in that the external reserves are lower and there are income and resource allocation effects.

An examination of Central Bank enforcement suggested that credit rationing did exist but although no evidence was presented on the extent of this rationing, some evidence was given on the differential effects. Finally, the paper showed how policy and enforcement combined to reduce the Associated Banks' relative lending share by £120m since 1978 and £330m since March 1979.

A more complete evaluation of credit guidelines will require more evidence on the above issues but this is likely to be forthcoming as credit guidelines are certain to remain an integral part of monetary policy in Ireland in the foreseeable future.

#### References

- BROWNE, F.X. and O'CONNELL, T. (1979). "A Preliminary Study of Credit Rationing in Ireland." *ESR*, Vol. 10, No. 2, Jan., pp. 103-122.
- LAIDLER, D. (1981). "Some Policy Implications of the Monetary Approach to the Balance of Payments and Exchange Rate Analysis", in Eltis W.A. and Sinclair P.J.N. eds. *The Money Supply and the Exchange Rate*, Oxford.
- MURRAY, C.M. (1979). "Monetary Policy." Speech to the National Council of the Confederation of Irish Industry, reprinted in *Central Bank Quarterly Bulletin*, No. 4.
- MURRAY, C.M. (1980). "Monetary Policy." Speech to the Galway Chamber of Commerce, reprinted in *Central Bank Quarterly Bulletin*, No. 1.
- OBSTFELD, M. (1982). "Can We Sterilize?: Theory and Evidence", *American Economic Review*, May, pp. 45-50.

**STATISTICAL APPENDIX**

	Output Indicators				Employment		Output per Head	
	1	2	3	4	5	6	7	8
	Manufacturing	Transportable Goods	Electricity Output	Cement Sales	Manufacturing	Transportable Goods	Manufacturing	Transportable Goods
	1973=100	1973=100	G.W.H.	000 Metric Tons	000's	000's	1973=100	1973=100
1977	115.9	115.4	9127	1516.5	202.9	213.9	118.1	117.0
1978	125.6	125.1	9815	1751.7	208.8	219.9	124.4	123.3
1979	133.3	132.9	10853	2067.8	217.4	229.1	126.8	125.8
1980	131.9	131.6	10733	1814.9	215.1	227.1	126.8	125.6
1981	135.7	134.1	10767	1812.5	207.7	219.6		
1982								
Quarterly Averages or Totals								
1980 I	131.8	130.3	3022	424.8	217.9	229.3	125.1	123.1
II	141.4	142.2	2502	495.0	216.2	229.1	135.3	134.5
III	123.5	124.3	2358	476.9	214.1	226.2	119.3	119.1
IV	128.6	127.4	2851	418.2	212.1	223.6	125.4	123.5
1981 I	128.1	126.5	2885	410.2	208.2	219.8	127.3	124.7
II	143.3	141.4	2546	516.6	207.0	219.5	143.1	139.6
III	130.4	131.1	2408	488.8	207.5	220.1	129.2	129.1
IV	136.1	133.0	2928	396.9	207.8	219.0	135.5	131.6
1982 I	131.1	128.4	2954	335.2	203.8	215.1	133.1	129.4
II	143.9	143.3	251.4	436.2	201.8	214.3	147.5	144.9
III	127.4	128.7	242.5	405.9				
IV								
1983 I								
II								
III								
IV								
Quarterly Averages or Totals Seasonally Corrected								
1980 I	136.4	136.2	2681	498.0	218.9	231.0	128.9	127.8
II	132.7	133.5	2755	452.9	216.5	228.4	126.8	126.7
III	129.1	127.6	2745	458.1	213.8	225.7	124.9	122.5
IV	127.5	127.3	2580	412.4	211.1	223.1	124.9	123.6
1981 I	132.0	131.6	2560	480.9	209.2	221.4	130.5	128.8
II	134.2	132.4	2738	461.7	207.2	218.8	134.0	131.1
III	136.2	134.5			207.4	219.7	135.9	132.7
IV	135.5	133.3			206.8	218.6	135.5	132.1
1982 I	134.5	133.1			204.8	216.6	135.9	133.2
II	134.8	134.2			202.0	213.7	138.1	136.1
III	133.4	132.4						
IV								
1983 I								
II								
III								
IV								

Unemployment	Prices						
	9	10	11	12	13	14	
Live Register Av. Monthly	Consumer Price Index	Agricultural Price Index	Import Unit Value	Export Unit Value	Terms of Trade	Price of Stocks + Shares	
000's	Nov. 1975 = 100	1975 = 100	1975 = 100	1975 = 100	1975 = 100	1953 = 100	
106.4	130.0	153.9	139.3	142.3	102.1	572.9	1977
99.2	139.9	174.0	146.2	151.6	103.7	867.3	1978
89.6	158.5	184.2	165.9	165.5	99.8	928.0	1979
101.5	187.3	179.3	195.6	180.8	92.4	912.5	1980
127.9	225.6	213.1	232.4	210.3	90.5	946.6	1981
148.2	264.2	232.3				774.4	1982
Quarterly Averages or Totals							
92.0	173.5	180.4	183.6	174.9	95.3	888.3	1980 I
94.0	186.3	186.3	192.6	181.0	94.0	887.3	II
103.9	191.8	176.2	194.8	183.4	94.1	909.5	III
116.0	197.7	179.0	205.3	185.9	90.6	964.9	IV
125.8	209.9	202.9	221.4	194.1	87.7	942.3	1981 I
124.3	218.1	213.2	231.3	206.2	89.1	1012.8	II
126.8	230.4	213.9	236.8	213.7	90.3	960.5	III
134.5	243.8	220.0	236.6	218.2	92.2	872.6	IV
146.8	249.5	237.0	243.5	224.9	93.0	827.6	1982 I
149.0	263.9	235.3	248.4	232.2	93.5		II
159.0	269.5	230.3	254.0	236.5	93.1		III
171.6	273.8	229.7	255.6	239.8	93.8		IV
188.2	280.6						1983 I II III IV
Quarterly Averages or Totals Seasonally Corrected							
87.5	172.8	178.8					1980 I
95.1	183.4	180.5					II
106.8	193.3	179.4					III
116.6	200.1	183.2					IV
121.7	209.1	201.2					1981 I
125.5	214.7	205.0					II
129.5	230.9	217.8					III
134.7							IV
142.6							1982 I
150.3							II
161.6							III
171.7							IV
184.1							1983 I II III IV

	Money Earnings Weekly Averages		Real Earnings		20	Consumption Indicators		
	16	17	18	19		21	22	
	Manufac- turing	Trans- portable Goods	Manufac- turing	Trans- portable Goods	New Cars Regis- tered	Retail Sales Value	Retail Sales Volume	
	1973 = 100	1973 = 100	1977 = 100	1977 = 100	Total	1975 = 100	1975 = 100	
1977	206.3	206.1	100.0	100.0	82310	143.0	106.9	
1978	236.2	235.7	106.4	106.3	105582	170.2	116.3	
1979	271.3	271.1	107.9	107.9	95938	197.7	120.3	
1980	321.2	321.0	108.1	108.1	91032	226.8	119.3	
1981	373.6	372.7	104.3	104.2	103922	268.2	118.6	
1982						293.6	112.2	
Quarterly Averages or Totals								
1980	I	302.3	301.5	109.8	109.5	34241	205.3	122.8
	II	318.3	318.6	107.6	107.7	23589	223.7	118.5
	III	318.8	318.2	104.7	104.5	20517	223.5	115.7
	IV	345.2	345.6	110.0	110.3	12592	258.4	120.5
1981	I	346.2	344.6	103.9	103.6	35496	239.4	120.6
	II	373.3	371.4	107.8	107.5	29155	264.0	119.1
	III	383.8	385.2	104.9	105.5	32094	276.1	120.7
	IV	391.6	388.4	101.1	100.5	7160	279.8	121.2
1982	I	392.3	389.0	99.0	98.4	27934	269.5	108.4
	II					21044		
	III					13899		
	IV							
1983	I							
	II							
	III							
	IV							
Quarterly Averages or Totals Seasonally Corrected								
1980	I	307.5	307.3	112.3	112.3	28801	218.0	122.2
	II	317.3	316.4	108.9	108.7	19890	221.9	118.6
	III	316.6	316.6	103.3	103.5	21283	225.2	116.0
	IV	343.1	343.2	107.4	107.7	19083	242.2	120.5
1981	I					29518	253.9	120.1
	II						261.8	119.3
	III						278.0	120.1
	IV						279.1	114.7
1982	I						286.4	114.8
	II						288.1	114.4
	III						291.9	109.5
	IV						308.0	112.8
1983	I							
	II							
	III							
	IV							

Government			Monetary Developments				
23	24	25	26	27	28	29	
Current Revenue	Current Expenditure	Current Deficit	Money Supply M3	All Banks Domestic Credit Government Non-Gov.		External Reserves	
£m	£m	£m	£m End Period	£m End Period	£m End Period	£m End Period	
1757	1966	209	3257.3	836.0	2639.5	1200.7	1977
2023	2421	398	4117.2	902.6	3475.2	1251.9	1978
2384	2905	521	4986.3	1005.9	4350.5	974.7	1979
3155	3708	553	5828.6	1132.6	5050.7	1346.0	1980
3973	4796	823	6615.9			1473.1	1981
4908	5896	988					1982
Quarterly Totals			Monthly Totals				
751	777	26	5003.1	875.8	4607.8	960.7	1980 I
783	1013	230	5103.7	952.5	4585.8	979.7	II
726	870	144	5447.8	1123.1	4773.0	1164.4	III
895	1047	152	5828.6	1132.6	5050.7	1346.0	IV
871	1076	205	6147.6	1124.1	5381.7	1322.7	1981 I
936	1188	252	6369.8	1201.5	5511.6	1191.7	II
970	1245	275	6679.8	1217.8	5785.0	1071.8	III
1196	1287	91	6972.7	1277.4	6053.6	1473.1	IV
1044	1437	393	7098.2	1334.1	6366.8	1406.0	1982 I
1176	1474	298	7141.8	1369.9	6347.9	1464.6	II
						1521.0	III
							IV
							1983 I
							II
							III
							IV
Quarterly Totals (S.C.)			Monthly Totals (S.C.)				
692	775	83	4985.7	882.5	4538.3	923.0	1980 I
833	1008	175	5109.9	968.5	4533.1	1070.7	II
757	906	149	5459.8	1100.9	4688.1	1178.5	III
880	1013	133	5669.4	1095.0	5034.6	1275.8	IV
803	1073	201	6072.6	1124.1	5274.3	1270.6	1981 I
996	1182	186	6387.4	1201.5	5468.0	1302.4	II
1011	1297	286	6683.2	1217.8	5719.2		III
1176	1246	70	6839.6	1277.4	6039.2		IV
962	1434	472	7011.0	1334.1	6239.9		1982 I
1251	1466	215	7189.1	1369.9	6301.5		II
							III
							IV
							1983 I
							II
							III
							IV

	Visible Trade Indicators					Exchange Rates	
	30	31	32	33	34	35	36
	Imports (Value)	Exports (Value)	Import Excess (Value)	Imports (Volume)	Exports (Volume)	Effective Index	Sterling Index
	£m	£m	£m	1975 = 100	1975 = 100	Dec. 1971 = 100	Per IR£
1977	3090.9	2518.2	572.7	129.9	122.2	77.01	1.0000
1978	3713.1	2963.2	749.9	148.8	134.8	77.57	1.0000
1979	4817.5	3501.1	1316.4	170.3	146.1	77.08	0.9646
1980	5419.6	4130.9	1288.7	162.6	157.9	74.01	0.8862
1981	6578.4	4777.6	1800.8	166.0	159.2	67.75	0.8002
1982	6812.3	5687.9	1124.4			67.35	0.8125
Monthly Averages							
1980 I	476.6	319.6	157.0	182.8	150.5	75.85	0.9276
II	440.0	334.4	105.6	160.9	153.2	74.71	0.9026
III	433.2	356.6	76.6	156.6	161.3	74.65	0.8905
IV	458.1	363.1	95.0	157.2	162.0	70.75	0.8231
1981 I	511.7	339.6	172.1	162.7	145.0	67.24	0.7686
II	557.2	405.5	151.7	169.6	162.9	66.57	0.7730
III	572.6	419.4	153.2	170.4	162.7	67.85	0.8177
IV	549.4	450.7	98.7	163.4	171.3	69.32	0.8407
1982 I	597.7	411.2	126.4	172.8	153.8	67.71	0.8126
II	589.5	503.7	85.8	167.1	181.2	67.72	0.8171
III	532.5	475.0	57.5	147.7	168.1	66.88	0.8022
IV	550.8	506.5	44.3	151.7	178.0	67.10	0.8185
1983 I							
II							
III							
IV							
Monthly Averages. Seasonally Corrected.							
1980 I	466.5	346.0	120.5	178.7	165.2		
II	423.8	334.8	89.0	154.8	155.6		
III	453.3	349.0	104.3	165.2	158.0		
IV	464.4	349.2	115.2	158.8	152.2		
1981 I	504.1	361.0	143.1	158.7	155.0		
II	537.6	406.9	130.7	164.0	165.9		
III	597.7	414.2	183.5	179.1	159.7		
IV	555.4	434.0	121.4	164.0	162.8		
1982 I	586.8	436.4	143.9	169.7	163.8		
II	573.3	500.5	72.8	163.7	181.9		
III	547.4	468.8	78.6	152.0	165.9		
IV	567.1	488.2	79.9	154.4	168.5		
1983 I							
II							
III							
IV							



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