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by
T. J. BAKER

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QUARTERLY ECONOMIC COMMENTARY

MAY 1969

by

T. J. BAKER*

Incorporating: The Federation of Irish Industries and The Economic and Social Research Institute Joint Quarterly Industrial Survey and The Economic and Social Research Institute Statistics of Economic Level and Trend.

*T. J. Baker is a Senior Research Officer of the Economic and Social Research Institute. The Commentary has been accepted for publication by the Institute. The Author is responsible for the contents of the paper, including the views expressed therein.

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Note. In preparing the first three Sections of this paper, helpful criticism was received from the economic staff of the Institute, but the author accepts responsibility for the contents and conclusions of the paper and for the views expressed.

Section 5, The Joint Quarterly Industrial Survey, is prepared in conjunction with the Federation of Irish Industries, who also supplied the commentary to this Section.

In using the forecasts in Section 2 it should be remembered that economic forecasting is an inexact science, subject to many uncertainties. In particular, projections for periods more than six months distant should not be regarded as more than a broad indication of what might be expected to happen on the specific assumptions set out.

SECTION I: SUMMARY

Since the January issue of the Quarterly Economic Commentary specific events and changed conditions have led to a considerable revision of the forecast National Accounts for 1969.

Although the economy may be working even closer to capacity in the remainder of 1969 than had been assumed in January, the loss of industrial and associated production due to the maintenance strike has led to a marginal downward revision in the expected growth rate, from 4% to 3.8%. On the other hand the greater increase in money incomes likely as a result of the settlement of that dispute and the change of emphasis of official policy in favour of expansion have led to an upward revision in the forecast of final demand at current prices, from 8.4% to 11.9%. The result of these diverging movements is that both the rise in prices and the external deficit are now forecast to be much larger, at 6½% and £57 million respectively.

The figure for the external deficit includes an allowance for the effect of Aer Lingus' re-equipment programme and is thus less alarming than it might appear at first sight. Moreover, it is closely in line with the official estimate made in the budget speech and tacitly acknowledged as an acceptable price for a continued high growth in investment.

The forecast summarised in Table 2.1 and discussed in detail in Section 3 is a "best guess" at the likely outcome for the year on the basis of apparent present policies. As usual it must be regarded as liable to considerable errors in either direction. On this occasion it must however be pointed out that any errors in an unfavourable direction are liable to be larger than errors in a favourable direction, assuming that the desired movements are high growth rate, low price rise and small external deficit.

In particular the assumption that average earnings will rise by about 10% between the last quarter of 1968 and the last quarter of 1969 is central to the forecast. While it is possible that the actual rise will be slightly lower than this, it is most unlikely that it will be much lower. On the other hand it is quite possible that it will be considerably greater. If the rise in earnings by the end of the year were to be 15% rather than the 10% assumed, and other factors were to remain unchanged, there would be very little extra increase in real output, but the external deficit in 1969 would be nearly £70 million and the average rise in prices at least 7½%. Even if such a rise came so late in the year that it would not much affect the outturn for 1969, it would create very difficult problems for 1970.

Thus in the present circumstances of production pushing on capacity limits, and a firm likelihood of export growth being slower than in the past two years, the case for reasonable restraint in the growth of money incomes is overwhelming. If the domestic economy is not capable of expanding output to meet the greater money demand, the only effects will be a greater deficit and more rapidly rising prices. If the rise in average money incomes during the year cannot be held to about the 10% level assumed (itself an increase in the annual average of 11.2% over 1968) then countervailing measures in the fiscal and monetary fields must be expected. Such action would not in itself amount to a retreat from the present strategy of expansion. It would best be regarded as a tactical adjustment designed to relieve some of the inflationary pressure on prices and the balance of payments, while still allowing the greatest sustainable growth in real output.

SECTION 2: NATIONAL ACCOUNTS FORECAST

TABLE 2.1: FORECAST NATIONAL ACCOUNTS 1969

	1968 Provisional	Change in 1969		1969 Fore- cast	Change in 1969		
					Price	Volume	
	£m	%	£m	£m	%	%	£m
A. Expenditure on Gross National Product							
Personal Consumer Expenditure	849	+10.3	+88	937	6.5	3.6	31
Public Net Current Expenditure	164	+10.4	+17	181	7.5	2.6	5
Gross Domestic Fixed Capital Formation	255	+20.8	+53	308	7.0	13.0	33
Exports of Goods & Services*	522	+8.6	+45	567	2.5	6.0	31
Physical Changes in Stocks:							
Agriculture	+5	—	+5	+10	—	—	5
Other	+7	—	+6	+13	—	—	6
FINAL DEMAND	1,802	+11.9	+214	2,016	5.3	6.2	111
Imports of Goods & Services*	542	+15.1	+82	624	3.0	11.7	63
GROSS NATIONAL PRODUCT AT MARKET PRICES	1,260	+10.5	+132	1,392	6.5	3.8	48
B. Gross National Product by Origin							
Agriculture etc. Total	196	+3.1	+6	202			
Non-Agricultural: Wages etc.	574	+13.4	+77	651			
Profits etc.	195	+10.3	+20	215			
Total	769	+12.6	+97	866			
Other Income (including adjustment for price of stocks)	33	+9.1	+3	36			
NATIONAL INCOME	998	+10.6	+106	1,104			
Depreciation	91	+9.9	+9	100			
GNP AT FACTOR COST	1,089	+10.6	+115	1,204			
Taxes on Expenditure less Subsidies	171	+10.0	+17	188			
GNP AT CURRENT MARKET PRICES	1,260	+10.5	+132	1,392			
C. BALANCE OF PAYMENTS	-20	—	-37	-57			

*Including factor flows. General Assumption: unchanged policies. Detailed Assumptions: see Section 3.

SECTION 3: COMMENTARY

§3.1 *Introduction*

Since the January issue of the Quarterly Economic Commentary the prospects for the economy, and the mood of the country, have been seriously affected by the maintenance strike and the terms of its settlement. Although the initial reaction has now abated, and the budget may have set a new mood, it still seems appropriate that this issue of the Commentary should concentrate on the effects of the strike. Changes in external conditions and other important trends within the economy since January will be dealt with more briefly.

§3.2 *The Strike*

Until far more statistics are available for the first few months of 1969, the impact of the strike on production, purchasing power, and foreign trade can only be examined in terms of first principles and guesswork. On this basis it would appear that the direct effects of the strike itself are unlikely to have been particularly serious for the economy as a whole, although of course they may well have been so for particular firms and individuals.

In the following discussion the effects of the settlement have been deliberately ignored, as they will be considered later. With regard to industrial production a reasonable assumption would be that about one third of normal production was lost for just over one month. This is about the amount indicated by the published lists of major companies affected by the strike. On this assumption the loss in annual production would be between $2\frac{1}{2}\%$ and 3% . The replies to the April questionnaire of the FII—ESRI Joint Industrial Survey, published in Section 5B of this issue, support this estimate. According to the formulae derived from the analysis of past Survey results¹, the fall in total production in the first quarter of 1969 compared with the same period of 1968 reported by a net 4% of respondents implies that actual production (as measured by the CSO index of production) was probably fractionally higher than a year previously. This however is 9% or 10% below the level which could have been expected from an extrapolation of 1968 results. Such a fall indicates an annual loss of about $2\frac{1}{2}\%$.

The crucial question, however, is how much of the loss will subsequently be made good. In some cases it can be expected that deliveries delayed mean orders permanently lost; in others, capacity and overtime limits prevent any shortfall being made good subsequently. On the other hand there must be many cases where the loss of production can be caught up by more intensive working, following settlement. If it is arbitrarily assumed that half the shortfall can be made up, it would appear likely that industrial production for 1969 as a whole will be between 1% and $1\frac{1}{2}\%$ lower than it would have been without the strike. A rather smaller loss of output can be assumed for other sectors of the economy, such as transport and distribution, which are in part dependent on the flow of goods and purchasing power from the industrial sector.

A similar crude calculation can be made with regard to exports. There is no reason to suppose that the strike interfered with shipments of livestock and unprocessed agricultural produce, or of metal ores. Thus the monthly total of exports at risk from the strike was probably of the order of £15 to £20 million. Assuming that one third of the total at risk actually was lost during the strike, this would give a loss of about £6 million. While this guess cannot be checked until detailed trade statistics for the period are available, the figure for total exports in February, at £7 million below the exceptionally high January total, is not incompatible with it. As with production, it can be hoped that part of the loss can be made good by later shipments, so that the total direct loss of exports due to the strike may be no higher than £3 or £4 million in 1969 as a whole.

¹Quarterly Economic Commentary September 1968, Section 4.

In the case of imports, the strike can be expected to have had two conflicting effects. On the one hand, while the strike lasted, an increase in imports of consumer goods to replace Irish goods rendered unavailable by the strike was probable. On the other hand the loss of production caused by the strike can be expected to have reduced imports of materials for further production. Given also that the strike probably reduced consumption expenditure, it seems a fair guess that while the strike lasted the import reducing effects will have outweighed the import increasing. The February trade figures, showing a fall of £8½ million from the January level of imports, may be read as supporting this view, although by no means conclusively. For imports, as for exports, the total trade figures for subsequent months do not appear to have been obviously affected by the strike, but it can be expected that for the year as a whole the strike is more likely to raise imports than to reduce them.

The effects of the strike itself (excluding any influence its terms of settlement might have on the course of incomes later in the year) on incomes and expenditure are difficult to assess. The nature of the strike, in which the majority of the employees affected could draw neither strike pay nor unemployment benefit, suggests that the loss of incomes must have been largely commensurate with the loss of industrial production at the time of the strike itself. Of course, in spite of the fall in many families' consumption at the time and the many cases of real hardship caused, expenditure is unlikely to have fallen by nearly as much as income. This supposition is supported by the Turnover Tax returns covering the first quarter of 1969. While total receipts for the quarter were extremely buoyant, even the figure relating to February was considerably higher than the corresponding figure for 1968. Savings must have been drawn and debt increased in order to keep expenditure above income. How far this dissaving will be reversed in the remainder of the year is a major imponderable in assessing the inflationary aspect of the strike. Some reduction of the debt burden assumed and some re-building of the savings consumed is certain, but whether this will go all the way to restoring the pre-strike position must be regarded as doubtful.

With the payment of compensation for the strike to many workers, and with the effort to make good lost production likely to involve considerable overtime payments, it seems probable that the ultimate incidence of the strike on incomes will be more on profits rather than on wages. Given that there is a much higher propensity to consume wage than profit income, the effect of the strike in reducing consumption in the year is likely to be very small, while the effect on savings may be considerable. If this purely theoretical conclusion is justified, then the strike itself will have added definitely, although not very greatly, to the inflationary pressures on the economy.

§3.3 *The Settlement*

As has frequently been pointed out, the number of maintenance men actually involved in the strike and its settlement was not very large, and the direct effect of the large pay increase obtained is consequently of minor importance. Quite obviously the significance of the award lies in the influence it may have on the size of other pay claims and on the militancy with which they are pursued.

If it were accepted by the majority of other workers that this award represents an exceptional and acceptable re-adjustment of differentials in favour of a particular group of skilled workmen, its influence would not be great. Even if certain other limited groups of comparable skilled manual workers seek similar rises, the impact on the economy would not be overwhelming, provided that other manual and non-manual workers and staff were prepared to accept this shift in relative pay in favour of the skilled manual groups. Indeed, given the present structures of Irish industry and of the Irish work-force, an adjustment in favour of certain skilled groups probably makes sound long-term economic sense.

However, it is quite possible that this shift in differentials will not be accepted easily by the remainder of wage and salary earners, and that there will be a concerted drive to re-establish the pattern of pay that existed before the strike. If this happens, the effects would be most serious in terms either of long strikes if the claims are vigorously resisted, or in terms of inflation if the claims are granted.

The economist is no better placed than anybody else to predict the balance likely to be struck between these two viewpoints, or how far the many exhortations and examples in favour of restraint may persuade those favouring a re-establishment of old differentials to modify their demands or to delay their implementation. Probably the outturn will be some form of compromise, but towards which pole it will lean it is still too early to discern.

The assumption made in arriving at the National Accounts forecast for 1969 in Section 2, is that average weekly earnings in the transportable goods industries will be about 10% higher in the fourth quarter of 1969 than they were in the fourth quarter of 1968. This is about the same percentage rise as there was between the fourth quarter of 1967 and the corresponding quarter of 1968. Part of this assumed rise will take place as the result of the implementation of the later phases of agreements reached in the last year or so, but the assumption also makes allowance for moderate new wage agreements. On the further assumption that the rise to this level takes place fairly smoothly over the year, average earnings in 1969 as a whole would be 11.2% higher than in 1968. This steeper increase in the annual average (1968 was only 8.6% above 1967) is due to the fact that earnings were rising rapidly throughout 1968 whereas in 1967 they were stable for most of the year. Indeed, even if earnings were frozen at their end-1968 level throughout 1969—there would be still an increase of 4.7% in the annual average.

It is worth looking in more detail at the implications of this assumption and of various alternative assumptions which could be made. Discussion of the effects of rapid increases in earnings is normally centred on two possible problems they can lead to; the impact on the balance of payments of increasing unit costs, and the general effect on the rate of inflation and the difficulties of demand management. Both the cost and the income effects need to be considered here.

§3.4 *Cost Effects*

At almost every occasion when there has been or is likely to be a substantial wage award, there is a chorus of warnings as to the effects on Ireland's competitive position. Clearly if the increases are sufficiently large there will be an immediate and substantial effect on exports and competing imports. However, given the size of pay increases Ireland has seen over the past 10 years or so, this effect on competitiveness has obstinately refused to reveal itself in the trade statistics.

The subject of unit labour costs, and particularly of international comparisons, is one with many pitfalls, which calls for a careful and detailed approach. Such a study¹, related to a rather different problem, was the subject of a recent paper read to the Statistical and Social Inquiry Society of Ireland.

A much more simple approach however, can demonstrate that over the present decade at least, there has been no overall erosion of Ireland's competitive position vis-a-vis the United Kingdom, its main trading partner. Taking a quarterly index of output per person as a crude measure of productivity, and average weekly earnings per head as an approximate measure of labour costs, an index of labour costs per unit of output for the industrial sector of each country can be obtained. To offset its undue simplicity, this method can at least claim the virtue of familiarity, as it is the one used in the Central Bank Quarterly Bulletin, and in most public discussions of the problem.

Table 3.1 shows the course of quarterly unit labour costs in Ireland and the United Kingdom since 1961. For Ireland the figures are seasonally corrected average earnings in transportable goods industries, divided by seasonally corrected output per head in the transportable goods industries, both series being expressed as an index with 1961=100. Analogous figures for the United Kingdom, relating to manufacturing industry, have been taken from the Employment and Productivity Gazette and Economic Trends, and have also been converted into a seasonally corrected index, 1961=100.

¹K. Kennedy "Growth of Labour Productivity in Irish Manufacturing 1953-1967.

TABLE 3.1: UNIT LABOUR COSTS, U.K. AND IRELAND 1961-68

Index 1961=100

Year	IRELAND					UNITED KINGDOM				
	Quarter					Quarter				
	I	II	III	IV	Av.	I	II	III	IV	Av.
1961	98.4	98.9	99.3	103.3	100.0	96.6	99.9	101.2	102.8	100.0
1962	105.0	105.0	110.3	107.6	107.0	103.6	102.5	101.6	103.6	102.8
1963	106.9	109.1	107.1	105.5	107.2	104.9	104.1	101.0	101.5	102.9
1964	113.1	118.0	116.0	113.4	115.1	102.9	104.2	104.0	104.5	103.9
1965	115.1	116.0	114.8	112.7	114.7	106.8	109.1	109.2	109.9	108.8
1966	116.4	123.5	121.7	124.0	121.4	112.3	155.5	113.9	114.5	114.1
1967	120.5	117.2	119.7	123.1	120.1	113.6	116.2	116.6	115.8	115.6
1968	119.3	116.5	118.3	122.3	119.1	117.8	118.3	117.6	(117.8)	(117.9)
1969 Forecast	—	—	—	130.0	127.0	—	—	—	121.0	120.0

The table shows how Irish unit labour costs since 1961 have risen in a series of steps (usually corresponding with wage rounds) followed by periods of irregular decline. The last major rise was in the middle of 1966, and by the end of 1968, the index was still below the level reached in the second and fourth quarters of 1966 and again in the fourth quarter of 1967.

By comparison the rise in the UK index, although by no means smooth, has been much steadier. It also reached a high point in the second quarter of 1966, but has continued to grow slowly since. The result of this is that for the first time since 1961, the Irish index was actually below the British in the second quarter of 1968, although it has since climbed a little above it again. Thus, so far as these indices can be taken as measuring the relative competitiveness of Irish and British industry, Ireland was more competitive in 1968 than in any year since 1961.

Looking forward to 1969, this position is unlikely to be maintained. As is explained in §3.15 output per head is likely to grow more slowly in 1969 than in 1968 as a whole, due to capacity constraints. If it continues to grow at the rate achieved between the second and fourth quarters of 1968, then by the fourth quarter of 1969 it will be about 3½% higher than in the fourth quarter of 1968, giving a year on year increase of about 4%. With the assumption that earnings will increase by 10% between the final quarters of 1968 and 1969, the index of labour costs in 1969 would be as indicated in the final row of table 3.1. The assumptions concerning UK labour costs in 1969 are based on the forecasts contained in the NIESR Economic Review for February 1969.

It can be seen that on these assumptions there would be a considerable deterioration in the Irish position in the course of 1969. However, the relationship at the end of the year would still be more favourable to Ireland than that which obtained throughout 1964 or for most of 1966. Thus from the point of view of industrial competitiveness vis-a-vis Britain, there is no evidence from this simple exercise that the assumed increase of 10% in Irish weekly earnings in industry would prove catastrophic. A rise of less than 10% would, of course, keep the Irish position more favourable, and in line with the average, rather than the worse years, of the decade.

Holding the other assumptions constant, the index can be used to test the effect of a yet larger increase in earnings on the competitive situation. An increase of 15% between the last quarter of 1968 and the end of 1969 would raise the Irish labour cost index to a level of 136 by the last quarter of 1969. There would then be a gap of about 15 points between the Irish and British indices, a difference which was only seen for a brief period in 1964. At that level it is quite possible that serious competitive difficulties would be faced.

As was explained earlier, a simple exercise of this nature cannot be regarded as at all conclusive in the complicated context of comparative costs. However, the analysis has shown in a negative way that there is no obvious reason why the competitiveness of Irish industry should become intolerably weaker in the course of 1969, unless there is a very large increase in earnings before the end of the year taking the fourth quarter average to well over 10% above the level at the end of 1968.

The relationship between average labour costs per unit of output and the rate of growth of industrial exports is certainly not a simple one. Throughout the period studied here, industrial exports to the UK continued to grow at a fairly rapid rate. As was shown in a previous study¹, the fluctuations in exports to the UK can be explained by other factors, and no significant inverse relationship could be found between Irish unit labour costs and exports. Thus within the range of variation shown in Table 3.1 there is no firm evidence to suggest that a significant short term loss of exports would follow from an increase in average earnings of up to 15%. Beyond that point the unknown is entered, and it is possible that there may be a threshold beyond which lack of competitiveness could have an immediate impact on exports.

§3.5 *Income Effects*

It is necessary to turn from a consideration of the effects of rising earnings on industrial costs, to the effects on consumption of the spending of these higher earnings. Previous studies have confirmed the commonsense view that earnings are a major determinant in consumer expenditure. It has been assumed that average earnings in industry, and by implication in other non-agricultural occupations, will be about 10% higher in the final quarter of 1969 than in the last quarter of 1968, giving an increase in the annual average of 11.2% compared with 8.6% in 1968. Other things being equal therefore, a greater rise in the value of consumption expenditure could be looked for in 1969 than in 1968.

In this case the other major factors, again on the basis of both commonsense and previous work, are the level of agricultural disposal income (largely dependent on agricultural prices), the availability of credit (particularly consumer credit), the number of people at work and the impact of taxation. It cannot be assumed a priori that these factors will in fact be equal, as between 1968 and 1969, and they must be considered in turn before examining the effects of income increases.

§3.6 *Other Factors Affecting Consumption*

Although the forecasting of agricultural prices is always problematical, it certainly does not seem likely that the 10.3% rise in the annual average of the agricultural price index which 1968 showed compared with 1967 will be repeated in 1969. In the first quarter of 1969 the index at 136.2 was 3.1% above its level in the corresponding quarter of 1968. Seasonally corrected, it was 2.6% above the annual average for 1968 as a whole. While previous expectations that the second half of 1968 or early 1969 might see a substantial fall in cattle prices would appear to have proved unduly pessimistic, it would be unrealistic to expect much further increase in agricultural prices in the course of 1969, while a fall can still not be ruled out. A reasonable assumption would be that the agricultural price index in 1969 will be about 2½% above its 1968 average.

¹T. J. Baker, Quarterly Economic Commentary, January 1969, Section 4.

With regard to credit, 1968 saw a most dramatic increase both in total and in consumer credit. Even in the absence of any specific restrictive advice to date from the Central Bank to commercial banks, it must be anticipated that the rise in private sector credit will be much slower over the remainder of 1969 than in 1968. Consumer credit (defined as personal bank advances plus hire purchase debt outstanding) rose by about £5 million per quarter between the first and last quarters of 1968. On present policies (as they are assumed to be) an expansion of about £2 million per quarter in 1969 would seem a reasonable expectation.

Unlike these two previous factors, which have been formally incorporated into consumption models, the third factor, non-agricultural employment, has not been econometrically related to consumption expenditure in Ireland. Nevertheless it must be taken into account in assessing the likely level of consumption. Much of the growth in industrial production in 1967 and the early part of 1968 was achieved with very little increase in employment. In line with observation of previous cycles in Ireland and elsewhere, industrial employment began to rise more rapidly as production continued to expand in the second half of 1966 and early 1969. Previous experience suggests that any further increase in output in 1969 is likely to be accompanied by a rise in the number employed. This expectation is reinforced by the replies to questions on future employment in the FII-ESRI Joint Industrial Survey, and by recent unemployment statistics, which in April and May have been well below the 1968 level.

Employment in the transportable goods industries rose by 3% between the final quarter of 1967 and of 1968, although the increase in the annual average between 1967 and 1968 was only 2%. A further rise of between 2½% and 3% by the fourth quarter of 1969, which seems a reasonable expectation, would lead to an annual average for 1969 about 3% above 1968 when allowance is made for the fact that the strike appears to have interrupted the growth of employment in the first quarter. In other non-agricultural employment, for which less short-term information is available, it also seems fair to assume that the rise in employment, on an annual average basis, will be greater in 1969 than in 1968, although perhaps not as markedly as in the case of industrial employment.

With regard to taxation, which is another factor that has not been formally included in any short term consumption models in Ireland, it would appear likely that the combined effects of the autumn and spring budgets is moderately restrictive of consumption. That is to say, if all other factors remained constant, the effect of taxation changes would be that consumption would grow more slowly in 1969 than in 1968.

§3.7 *The Impact of Income on Consumption*

Having thus derived specific assumptions concerning the other main factors influencing consumption, it is possible to return to a consideration of the effects of the probable rise in money incomes. As explained in §3.3, the central assumption regarding incomes is that weekly earnings will increase by 10% between the last quarter of 1968 and the last quarter of 1969, giving an annual average rise of 11.2%. On this assumption, and on the other assumptions discussed in §3.6, the value of personal consumption expenditure in 1969 can be calculated according to alternative econometric models. According to Leser's consumption function¹, the rise in consumption in 1969 on these assumptions would be 8.8%. Baker's quarterly retail sales model² suggests that the rise in the annual average level of the index of retail sales in 1969 would be 9.2%, implying an increase in total personal expenditure of a little over 10%. Given the likelihood of a more than average increase in non-agricultural employment, which is not allowed for in the calculations, it appears prudent to accept the higher of these estimates. Thus, on the assumptions made, a percentage rise in the value consumption of 10.3% can be anticipated for 1969. This is about the same as in 1968, in spite of the fact that the annual increase in earnings is expected to be greater in 1969, as the greater increase in earnings should be largely offset by the smaller rises in agricultural prices and consumer credit, and the rather more stringent fiscal situation.

¹The Irish Economy in 1966. ERI Paper No. 33.

²The Irish Economy in 1967, Appendix 2. ERI Paper No. 39.

As in the case of the examination of costs in §3.4, it is worth examining the implications of alternative assumptions concerning earnings, holding the other assumptions constant. If earnings were to rise by only 7% between the end of 1968 and the end of 1969, the likely rise in consumption would be of the order of 9% rather than 10%. On the other hand if earnings were to rise by 15% by the end of the year, it would be reasonable to look for an increase of at least 13% in the value of personal consumption. This last estimate is perhaps unrealistic, as, if earnings appeared likely to rise by as much as 15% it is probable that fiscal and or monetary action would be taken to offset part of the impact of this rise, on consumption expenditure.

To summarise this section, the best guess is that the value of consumption will rise by about, or just over, 10%. Even if earnings rise less rapidly than has been assumed, consumption is still likely to rise at a rapid rate (perhaps 9%), unless there is a major change in some of the other variables due either to a change in policy or to unforeseen circumstances. If earnings rise more than has been assumed, an increase in the value of consumption even greater than in the peak year of 1964 can be looked for, unless the extra increase is offset rapidly by deliberate policy measures.

§3.8 *Public Current Expenditure*

According to the Budget estimates, the current price value of public authorities current expenditure, in National Accounts terms, is due to grow rather less rapidly than in 1968. However, in view of the fact that civil service pay contracts expire in June, and that by tradition full allowance is not made in the estimates for hypothetical increases in pay scales, and also of the possibility that departmental estimates of expenditure have been pruned more drastically than usual before publication this year, it would be prudent to allow for a rather greater increase in this item than the budget estimates would suggest. An absolute increase of the same order of magnitude as in 1968 would appear to be a fair forecast.

§3.9 *Gross Domestic Fixed Capital Formation*

In the January edition of the Quarterly Economic Commentary it was assumed that an increase in the rate of expansion of private investment in 1969 would be offset by a reduction in the rate of growth of public investment. While this is still a fair assumption with regard to many fields of public investment, the fact that a major re-equipment of Aer Lingus is to be undertaken in 1969 changes the outlook dramatically. When allowance is made for transport investment and also for the fact that the stimulus to private investment now seems likely to be even greater than was foreseen in January, a very large increase in total investment appears inevitable. In absolute terms the increase is almost certain to be a record, and even in percentage terms, at over 20% it is in line with the highest increases recorded in the past.

§3.10 *Exports of Goods and Services*

Because of the difficulty in allowing for the effects of the maintenance dispute, interpretation of the trade statistics for the first four months of 1969 is rather complicated. Seasonally corrected, total merchandise exports in the first quarter of 1969 appear to have been running at almost the average rate for the whole of 1968 and well below the level reached in the final quarter. If however the assumption made in §3.2 is correct, and the strike temporarily lost about £6 million of exports, then the performance in the first quarter was much more satisfactory than it appears at first sight. On this assumption a continuation of exports at the level they would have achieved in the first quarter but for the strike would lead to an annual improvement of about £20 million in merchandise exports. Allowing for a moderate growth over the rest of the year an increase of about £30 million would appear to be a reasonable extrapolation.

Detailed figures for the first quarter are not yet available, so a disaggregated rather than a global approach must rest on the position reached by the end of 1968. Compared with the disaggregated projection made in January, recent developments suggest certain amendments. In the first place it has

become apparent that UK imports of manufactured goods rose much more in the second half of 1968 than had been anticipated. UK trade statistics for the early months of 1969 indicate that imports, including imports of manufactures, remain at a level considerably higher than had been expected in the light of the import deposit scheme. As a result of this higher starting base and apparent lack of impact of restrictions, the forecast for UK manufactured imports, and consequently of Irish manufactured exports to the UK in 1969, can be revised upwards considerably.

Also contrary to previous expectations, cattle and beef prices, so far from declining relatively to 1968 have continued to increase slowly. Although a fall (apart from the normal seasonal fluctuations) cannot yet be entirely ruled out, it now appears less likely that it seemed a few months ago. The impending change in the pattern of beef imports to the UK in favour of boneless rather than carcass meat from South America should be a factor in keeping prices high, while the increased support price for British cattle should limit the extent to which Irish store prices can fall.

Against this improvement in the prospect for the value of cattle exports must be set some deterioration in the outlook for other agricultural exports, particularly dairy products. Nevertheless, it would now seem reasonable to predict a small rise in total agricultural exports in 1969.

Taking these suggested adjustments into account, and also allowing for the small permanent loss of exports as a result of the strike discussed in §3.2, the following pattern of exports of goods and services in 1969 emerges.

TABLE 3.2: EXPORTS OF GOODS AND SERVICES 1968-1969

Category	1968	1969	Change	
	£m	£m	£m	%
Industrial: to UK	92.8	105	12	13
Other	56.7	70	13	23
Total	149.5	175	25	17
Agricultural	157.3	161	4	3
Misc. and Re-exports	25.7	27	1	5
Total Merchandise	332.5	363	30	9
Invisible*	(est) 189.5	204	15	8
Total*	(est) 522.0	567	45	8.6

*Including factor flows.

As in all export forecasts it must be stressed that this prediction and its component parts, are liable to a large margin of error in either direction.

§3.11 Final Demand

The sum total of the assumptions made so far is that Final Demand for goods and services at current prices will increase by about £214 million or 11.9% in 1969. This compares with an increase of £216 million or 13.6% in 1968, according to provisional estimates. The slight reduction in the rate of growth of final demand is entirely due to the slower expansion forecast for exports. Domestic demand is expected to rise at almost the same rate in 1969 as in 1968.

The crucial questions remaining are how far will this similar increase in demand be met by imports compared with GNP, and how far it will result in price increases rather than real growth. The next few pages explore these questions.

§3.12 Imports

As in the case of exports, interpretation of the import statistics is made difficult by uncertainty as to how far they were influenced by the strike. Seasonally corrected, total imports in the first quarter of 1969 were slightly lower than in the final quarter of 1968. Almost certainly however, February imports were reduced by the temporary effects of the strike, and the true rate of imports in the months not affected by the strike has been considerably higher than the quarterly total would suggest. Even discounting the abnormally high April figure, which included £10 million for ships and planes, it seems likely that, but for the strike, imports in the first four months of the year would have been running at a level at least 10% above the average for 1968 as a whole.

As economic expansion, and particularly industrial investment, continues in the remainder of 1969, it must be assumed that imports will climb above this first quarter level. When allowance is also made for the unusually high level of aircraft imports due in 1969, it is difficult to see an increase in total imports of goods and services in 1969 of less than about 15% or £80 million.

This figure is considerably higher than the estimates derived from available econometric models, which range from 10% to 13½%. However, it is felt that the two models which give the lowest results place undue emphasis on the fact that imports rose so much faster than either final demand or GNP in 1968. In fact it seems probable that much of this very fast rise was itself a compensation for the relatively slow growth of imports in 1967, and thus to expect an opposite compensation this year would be unrealistic.

In any case the evidence provided by four month's actual import statistics, even though they are affected by the strike and the bunching of deliveries of transport equipment in April, must take priority over calculations based on annual mathematical models. If there has been an increase in merchandise imports compared with 1968 of over £34 million in the first one third of the year, a projected rise of £82 million in total imports over the whole year certainly does not seem too high an estimate if present policies are continued.

§3.13 Gross National Product

On the basis of the estimates made so far, Gross National Product at current market prices would rise by about 10½% or £132 million in 1969. This is very similar to the 10.3% increase achieved in 1968 according to provisional estimates. What is more important than the current price increase however is the way it is divided between prices and volume. The evidence concerning each separately is rather sketchy, but by considering each in turn and putting the results together, a fairly consistent picture emerges.

§3.14 Prices

The consumer price index rose by 3.3% between November 1968 and February 1969. Linking the new series which commenced in February with the previous one through the November figure, it would appear that the level of the index in February 1969 was 5% above the average level for 1968. Even a modest further rise of about 2½% between February and November 1969 would lead to an annual average for 1969 about 6.5% above the 1968 level. In view of the fact that some indirect taxes have been increased by the budget, and allowing for the probable continuing rise in earnings, an increase in the index of this order must be considered as a minimum.

While the price deflator used for the item personal expenditure on consumers' goods and services in the National Accounts is not identical with the consumer price index, it seldom diverges far from it, and so the assumption of a 6.5% rise in this implied index is a reasonable, if somewhat conservative, one.

The greatest part of the price element in public authorities current expenditure is, of course, the level of public service wages and salaries. An increase of about 7½% in the average level for the financial year 1969/70 implies that any settlement which replaces the currently expiring agreement will be rather more modest than last year's.

The price component of fixed capital formation also includes a large wage element, and a substantial increase in this seems likely. Prices of capital goods are also likely to rise, although probably less sharply.

For exports and imports price movements are usually less than for transactions on the domestic market. There seems no reason why 1969 should prove an exception to this normal pattern. In particular, little further rise can be expected this year in agricultural export prices, which accounts for the fact that import prices are projected to rise by slightly more than export prices.

Putting together these rather speculative assumptions concerning prices, price increases of 5½% for final demand and 6½% for GNP are arrived at. This latter figure compares with a provisional increase of 4.7% in 1968.

§3.15 *Volume of Production*

A study of constant price annual increases in GNP by sector of origin since 1958¹ shows that, although there are considerable variations from year to year in the sectoral pattern, industry has consistently the fastest rate of growth. The average increase from 1958 to 1967 was 6.6% for industry compared with 3.8% for GNP. The sectoral increase for industry in each year was very close to the percentage increase in the volume index of production for manufacturing industry, so that this index can be used as an acceptable proxy for the National Accounts identity.

The capacity growth rate for the index of production would seem to be about 7% or 8% per annum. The years when this rate of growth was exceeded were all in periods when the economy was recovering from situations of surplus capacity. As industrial capacity, on the evidence of the FII-ESRI Joint Industrial Survey, appeared to be very nearly fully utilised by the end of 1968, growth in 1969 seems likely to be limited to the capacity growth rate. It has been assumed that in the final quarter of 1969 industrial production will be about 7½% higher than in the final quarter of 1968. Had it been reasonable to assume a smooth growth in the course of 1969 to this level, the increase in the annual average of the index would have been 8.3%. However, as was discussed in §3.2 the maintenance dispute disrupted production in the first quarter, perhaps to the extent that there was no gain over the corresponding quarter of 1968. If this is so, and the remaining quarters follow the capacity growth path suggested above, the increase in the annual average would be 5.6%. Allowing for some recovery of the lost production through abnormal overtime working, the increase in the annual average of the index might perhaps be raised to between 6½% and 7%.

While consideration of increases in the volume of output of other sectors must necessarily remain speculative, there is no good reason to suppose that the normal relationship, whereby industry is the fastest growing sector, will be altered this year. Distribution, transport and communication must also have suffered from the strike, although probably to a lesser extent than industry, while public administration and other domestic output are likely to continue their steady, but unspectacular rise in constant

¹C.S.O. National Income and Expenditure 1967, P. 11. Table 8.

price terms. The volume of output of agriculture is always an imponderable, depending to a considerable extent on weather conditions, and at this time of the year there is no good reason to expect more than a modest growth in net output at constant prices, especially as a reversion to normal weather after last year's exceptionally favourable crop conditions is the only reasonable assumption to make.

Thus the assumption of a rise of about $6\frac{1}{2}\%$ in the index of industrial production would be compatible with a growth rate of GNP at constant prices of a little below 4% . As this is in the same range as that suggested independently by deflating the value forecast of GNP with the projected price deflator of $6\frac{1}{2}\%$, it would seem that the reasoning in both halves of the exercise, while tenuous, is at least consistent.

§. 3.16 *General Synthesis*

It is instructive to compare the forecast National Accounts for 1969 contained in Table 2.1 with the projections made in September 1968 and in January, and also with the pattern suggested by Leser's consistency model.¹

TABLE 3.3 COMPARISON OF FORECASTS, 1969.

% increases at current prices

	September 1968 Projection	January 1969 Projection	May 1969 Forecast	Model
Personal Expenditure	11.5	7.5	10.3	8.1
Public Current Expenditure	8.5	8.5	10.4	11.9
Gross Fixed Capital Formation	17.0	15.4	20.8	19.5
Exports of Goods and Services	5.0	6.0	8.6	12.5
Final Demand (excluding stocks)	10.2	8.3	11.3	11.3
Imports of Goods and Services	12.0	8.0	15.1	10.0
Gross National Product	9.8	8.5	10.5	10.8
Balance of Payments Deficit £m	53	34	57	9

It can be seen that the current forecast is much closer to the projection made in September than to that made in January. There are various reasons which help to account for this, but the most important is the nature of the assumptions made concerning official policy.

At the time of the September projection both monetary and fiscal policy were still expansionary, and it was assumed, even if not really believed, that that policy would continue. The January projection on the other hand was made in the light of the autumn budget. It seemed from this that the fiscal authorities were not prepared to tolerate the sort of balance of payments deficit implied by the September projection. Although bank credit appeared still to be rising it was felt that the hire purchase restrictions which were announced with the budget heralded a considerably more restrictive phase in monetary

¹CEV Leser. The Irish Economy in 1964 and 1965 ER1 Paper No. 27.

policy. Thus in January the phase "unchanged policies" was interpreted as meaning fairly restrictive policies in both fiscal and monetary fields, with some reduction in the rate of growth of public investment, a moderate budget surplus, and, in particular, countervailing action if the rise in money incomes threatened to push the external deficit above about £40 million.

It has become clear that this interpretation of official policy was ill-founded. Fiscal policy as exemplified in the budget was less restrictive than had been anticipated, and an external deficit of over £50 million in 1969 has been explicitly accepted as a tolerable outcome. Monetary policy, while probably less expansionary than in 1968, has, so far at least, not become positively restrictive, although the level of the Central Bank ratio in recent months suggests that even in the absence of official requests the growth of bank credit may well slow down.

The present assumption therefore is that within the general strategy of expansion, official policy is now aiming at some kind of neutrality, neither adding to the level of demand as in the middle of 1968, nor attempting much to reduce it. It is still assumed however that if money earnings show clear signs of growing by much more than 10% in the course of the year measures will be taken to offset the extra increase.

Apart from these changed assumptions concerning policy attitudes, the major differences between the earlier projections and the current forecast are as follows. Average earnings in industry are now expected to be considerably higher than had been assumed in either of the earlier projections (an increase of 11.2% as against 8%). This is largely the result of the maintenance settlement and its expected impact on other negotiations. The re-equipment of Aer Lingus, not known at the time of the previous projections, is expected to add about £12 million to the total of both investment and imports. The prospects for exports appear to have improved slightly, due largely to the continued inability of the UK authorities to contain the level of imports to the UK. The strike itself, while perhaps reducing demand marginally, is likely to have reduced annual output more substantially, thus reducing real growth and adding to the pressure on prices and imports.

Comparing the current forecast with the results of the consistency model, it is apparent that the main differences concern the increases in consumption, exports and imports. It is quite clear from these discrepancies that the expected growth in 1969 is more than usually dependent on home demand. After two years in which growth could fairly be said to be export led, 1969 looks like being a year of domestic boom. Both consumption and investment are likely to be abnormally high. Capacity constraints, made more critical by the loss due to the strike, will prevent domestic production increasing more than a little of the way to meet this high demand, with the corollary that both imports and prices are likely to rise rapidly.

§3.17 Policy Implications

If the foregoing analysis is correct, and the accompanying forecast a reasonable expectation (bearing in mind the inevitable degree of uncertainty) short term economic management is likely to pose some difficult problems over the next few months. As the forecast indicates, a fairly satisfactory outcome for the year is quite possible. The relatively low growth rate predicted is a direct result of the production lost by the strike, and will (in the absence of a corresponding strike) be automatically compensated by the growth in 1970. The apparently alarming increase in the price level is largely a reflection of price movements which have already taken place, and the implied rise over the rest of the year is not very great. If it is firmly accepted by the authorities that a large external deficit accompanied by a moderate fall in external reserves is a tolerable concomitant of a high rate of investment, and that this strategy will not be suddenly abandoned in favour of safeguarding the reserves, then the external deficit predicted need not cause undue alarm.

However, it must be recognised that there is a bias in the forecast for 1969. It is, as usual, a "best guess" estimate of the likely outcome, and is liable to error in either direction. However the probable extent of the errors is not symmetrical. "Favourable" errors (e.g. a lower than assumed rise in earnings, imports or prices or a higher than assumed rise in exports or production) seem likely to be fairly small. On the other hand the opposite "unfavourable" errors are liable to be much larger. For instance the impact of another major strike in the course of the year, or the granting of a large general increase in wages and salaries could lead to drastic changes in the forecast, particularly with regard to the three key aspects of external deficit, rate of price increases and the "real" rate of growth.

The precise degree of price inflation which is regarded as tolerable and the rate at which external reserves should be run down are matters of political choice, and not merely of technical economics. However there is probably general agreement that, on the one hand, there is little point in allowing demand in money terms to run so far ahead of domestic production capacity that any increase in it can be met only by price increases and higher imports rather than by greater production, and, on the other, that sudden massive restrictions of demand and cut-backs in social investment and expenditure are wasteful of resources and should be avoided if possible.

From this viewpoint the current forecast suggests that the economy is running quite close to the former danger, with little safety margin if present assumptions prove wrong or if unexpected set-backs occur. Given that action, to be effective, has normally to be taken before the full facts of the economic situation are available, a decision will need to be made quite soon as to whether that thin safety margin is adequate.

SECTION 4: A STUDY OF IMPORTS, PART I.

by T. J. Baker and J. Durkan.

4. 1 *Introduction*

Although considerable work has been devoted to a study of Irish imports in recent years, and various import functions derived, mainly by C. E. V. Leser,* the subject is of such obvious importance that a further study is well justified. In particular, the previous studies have concentrated on structural relationships which are more relevant to medium term than to short term forecasting, or on annual macro-relationships which obscure the vital timing of turning points.

It is hoped that by the use of seasonally corrected quarterly data, disaggregated according to function, more precise forecasting and consistency models can be devised. This approach is similar to that adopted for industrial exports in Section 4 of the January Quarterly Economic Commentary.

The study will be presented in two parts. This first part will be restricted to a presentation of the seasonally corrected data, and a description of the time patterns of imports which these data show. Part two of the study, which will be published in a future edition of the *Quarterly Economic Commentary*, will attempt to establish formal relationships between different types of imports and movements in other key economic variables. It is hoped that these relationships can be used as the basis of a fairly precise short-term forecasting or consistency model.

4. 2 *The functional pattern of imports.*

The basic classification to be followed in this study is the standard Central Statistics Office distribution of merchant imports according to main uses. The period covered is from 1958 to 1968, although for some of the analytical comparisons, data availability may dictate a shorter period.

Table 4.1 sets out the annual composition of imports since 1958. The most striking feature of the table is the relatively small change in the composition by use of imports over the period. In the light of the undoubted changes in the structure of the economy, and the growth of total merchandise imports, very rapid in absolute terms, and perceptible even as a proportion of GNP this absence of major changes in pattern is rather surprising.

There are of course some exceptions. Producers' capital goods ready for use formed a noticeably smaller proportion of the total in the first three years than in the remainder of the period. The two least important categories, materials for further use in agriculture and unclassified imports (which are mainly transactions of a temporary nature) both declined in relative importance during the period. There is evidence of a slight upward movement in the share of consumption goods ready for use in the final three years, bringing it back to the level it had in the years before 1958.

Nevertheless the abiding impression of the table is of the absence of major sustained trends in the use composition of imports since 1958. However there are some important temporary variations in the year to year pattern, and these could be of considerable importance from the viewpoint of short term

*ESRI Papers Nos. 14, 21, 27, 33, 38 and 39.

TABLE 4. 1: COMPOSITION OF MERCHANDISE IMPORTS, BY USE, 1958-68.

Year	1	2	3	4	5	6	7	8
	Producers' Capital Goods	Food, Drink and Tobacco	Other Consumer Goods	Materials for Further production		Unclassified	Total	Total as % of G.N.P.
				in Agriculture	in Industry etc.			
a	£ million							%
1958	23.0	12.8	31.1	12.2	109.6	10.2	198.9	33.1
1959	24.3	13.6	31.4	13.3	120.9	9.3	212.8	33.4
1960	24.3	13.9	32.5	11.8	133.3	10.5	226.3	33.6
1961	34.9	16.0	38.2	13.6	146.6	12.4	261.7	36.1
1962	39.4	17.2	40.1	15.8	149.9	11.4	273.8	35.1
1963	47.3	19.9	45.3	16.9	164.4	13.9	307.7	36.9
1964	52.2	19.8	51.4	16.5	195.5	14.0	349.4	36.9
1965	60.3	23.2	56.9	17.8	210.8	11.8	371.8	36.7
1966	57.9	23.7	60.5	15.2	203.9	11.4	372.6	35.1
1967	58.8	25.0	62.8	17.0	217.5	11.1	392.3	34.4
1968	72.0	29.4	82.2	22.6	271.9	11.4	489.5	38.8
b	Percentage of Total							
1958	11.6	6.4	15.6	6.1	55.1	5.2	100	
1959	11.4	6.4	14.8	6.3	56.8	4.3	100	
1960	10.7	6.1	14.4	5.2	58.9	4.7	100	
1961	13.3	6.1	14.8	5.2	56.0	4.6	100	
1962	14.4	6.3	14.6	5.8	54.7	4.2	100	
1963	15.4	6.5	14.8	5.3	53.5	4.5	100	
1964	14.9	5.7	14.7	4.7	56.0	4.0	100	
1965	16.2	6.2	15.3	4.8	54.3	3.2	100	
1966	15.5	6.4	16.2	4.1	54.7	3.1	100	
1967	15.0	6.4	16.0	4.4	55.4	2.8	100	
1968	14.7	6.0	16.8	4.6	55.6	2.3	100	

Source. Central Statistics Office, Review of External Trade.

analysis and forecasting. This is because the temporary fluctuations in the pattern suggest that the various categories of imports respond at differing rates and with differences in timing to the impact of changes in the level of economic activity.

4. 3 *Seasonal Corrections*

The hypothesis of differential response, particularly with regard to timing can be better studied using quarterly rather than annual data. In order to use quarterly data in this way, it is necessary to remove purely seasonal variations from the raw series, and this seasonal correction forms the central function of this first part of our import study.

The method of seasonal correction adopted is that of ratio to moving annual average. This is probably the simplest method available, and proved successful in our recent study of industrial exports. The mean ratios to moving annual average for each quarter were calculated for successive five year periods, and applied as correction factors to the mid year of each period where possible. Where this was not possible, at either end of the total period studied, the mean ratio for the nearest five year period was applied. Thus the average ratio for each quarter in the period 1958-62 was applied as a correction factor to the appropriate quarters of 1958, 1959 and 1960, and the period 1964-68 was used for 1966, 1967 and 1968. This procedure is thus less satisfactory for the earliest and latest years of the total period than for the years in the middle, but it is felt that any distortions caused in this way are likely to be small.

A further complication, as in the case of the export study, is the effect of major random variations. In this case it was decided that the only random event which affected the series sufficiently to be taken into account was the UK seamen's strike of 1966. Accordingly the raw data were corrected to remove most of the effects of this strike before the ratios to moving average were calculated. Comparison with other years suggested the following amendments to the raw figures.

Strike Adjustments 1966: £ million.

	Second Quarter	Third Quarter	Fourth Quarter
Category:			
1. Producers Capital Goods	+0.6	-0.2	-0.4
2. Food, Drink and Tobacco	+0.3	-0.3	—
3. Other Consumer Goods	+1.2	-0.8	-0.4
5. Goods for Further Production in Industry	+4.9	-4.4	-0.5
TOTAL ..	+7.0	-5.7	-1.3

No adjustments were made for categories 4 or 6.

4. 4 *The Quarterly Pattern*

Table 4. 2 shows the seasonally corrected value of each category of import from 1958 to 1968. The figures for 1966 are the seasonally corrected actual values with no adjustments made for strike effects.

CHART 4.1: IMPORTS BY USE CATEGORY 1958-68

Seasonally corrected, 3 quarter moving averages, plotted to centre quarter

Index 1 at Q. 1963 × 100

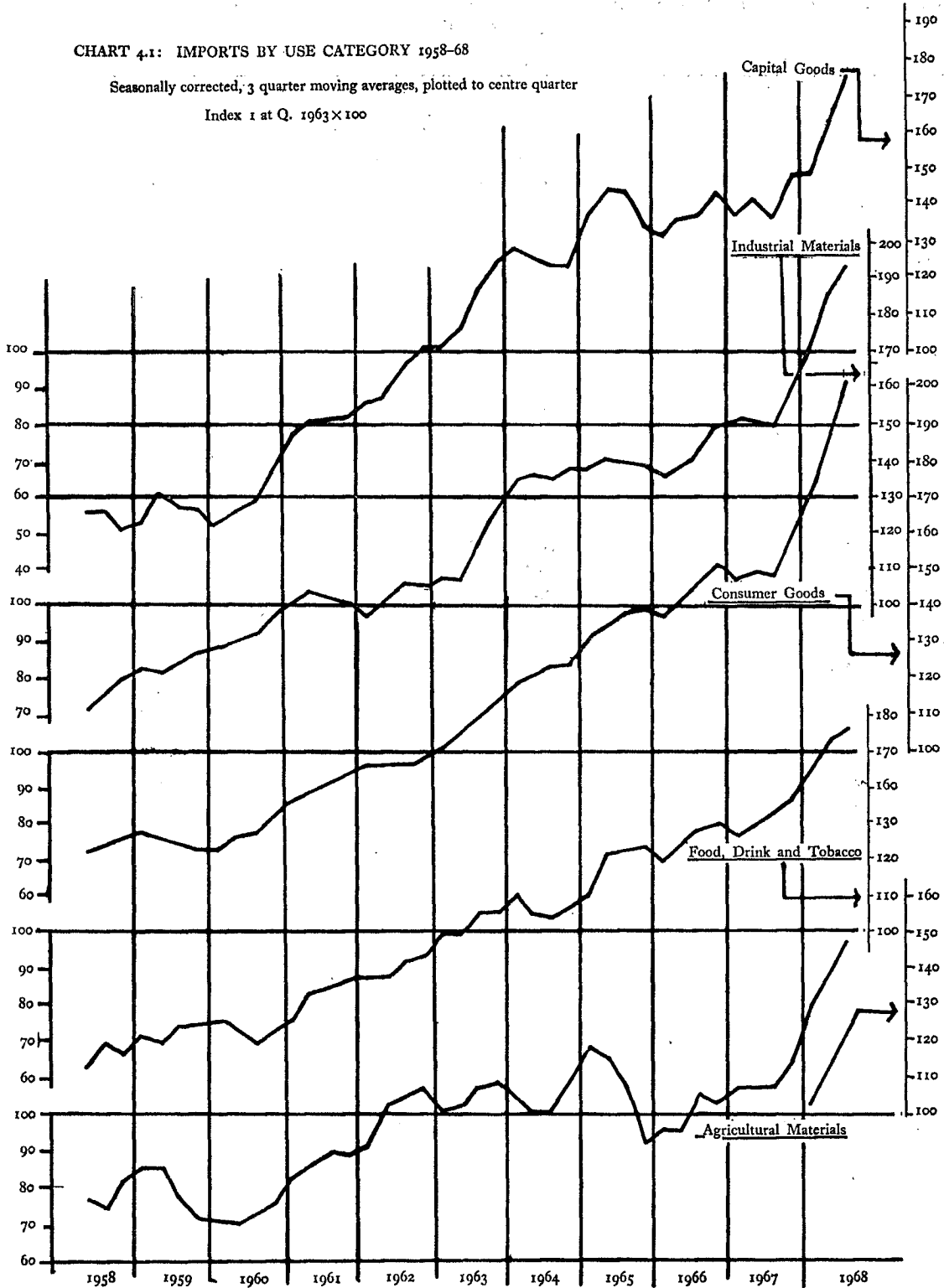


TABLE 4. 2: QUARTERLY VALUE OF IMPORTS BY CATEGORY, 1958-68, SEASONALLY CORRECTED.

£ million.

		1	2	3	4		5	6	7
Quarter		Producers, Capital Goods	Food, Drink and Tobacco	Other Consumption Goods	Materials for Further Production		Un- classified	Total	
					in agriculture	Other			
1958	I	4.9	3.0	7.6	3.2	26.6	2.4	47.7	
	II	7.8	3.2	7.0	3.1	25.8	2.9	49.8	
	III	5.0	3.0	8.2	2.9	26.2	2.4	47.7	
	IV	4.9	3.6	8.2	2.9	31.0	2.3	52.9	
1959	I	6.2	3.0	7.8	3.9	29.5	2.6	53.0	
	II	5.7	3.7	8.5	3.4	29.8	1.5	52.6	
	III	7.3	3.3	7.6	2.9	30.8	2.8	54.7	
	IV	5.2	3.6	7.5	2.8	30.8	2.8	52.7	
1960	I	5.5	3.9	7.9	2.9	33.1	2.6	55.9	
	II	6.1	3.3	7.6	2.7	31.8	2.9	54.4	
	III	5.9	3.4	8.3	2.8	33.0	2.4	55.8	
	IV	6.7	3.3	8.6	3.2	35.4	2.6	59.8	
1961	I	8.8	3.9	9.3	3.1	36.7	2.8	64.6	
	II	9.1	3.7	9.1	3.7	37.1	3.1	67.5	
	III	7.9	4.4	9.8	3.5	38.8	3.1	67.5	
	IV	9.1	4.1	10.0	3.5	34.2	3.4	64.3	
1962	I	9.1	4.0	10.0	3.6	36.0	3.3	66.0	
	II	9.0	4.5	10.0	3.8	35.9	2.2	65.4	
	III	10.0	4.1	10.0	4.8	38.5	3.0	70.4	
	IV	11.3	4.6	10.1	4.0	39.5	3.2	72.7	
1963	I	10.6	4.8	10.5	4.0	36.0	2.5	68.4	
	II	10.4	4.8	11.1	4.1	41.8	4.7	76.9	
	III	12.5	4.7	11.7	4.2	39.6	3.0	75.7	
	IV	14.1	5.6	12.0	4.5	46.6	3.4	86.2	
1964	I	12.8	4.9	12.3	4.3	49.7	3.8	87.8	
	II	13.8	5.3	13.1	3.8	48.4	3.6	88.0	
	III	13.2	4.9	12.5	3.9	48.9	3.5	86.9	
	IV	12.2	4.7	13.4	4.3	48.5	3.1	86.2	
1965	I	13.8	5.7	13.4	4.9	51.0	3.2	92.0	
	II	17.7	5.4	14.3	4.9	49.6	2.6	94.5	
	III	14.5	6.3	14.7	4.0	51.2	3.4	94.1	
	IV	13.5	5.9	14.4	3.9	49.9	2.8	90.4	
1966	I	14.7	5.4	14.5	3.0	49.1	2.9	89.6	
	II	13.1	5.5	13.1	4.4	43.6	3.0	82.7	
	III	14.9	7.1	16.8	4.0	57.9	2.7	103.4	
	IV	15.4	5.9	16.1	4.2	53.8	2.7	98.1	
1967	I	15.6	6.0	15.9	4.3	54.7	2.8	99.3	
	II	12.8	6.2	15.0	4.2	54.1	2.5	94.8	
	III	16.4	6.3	15.9	4.3	53.4	2.7	99.0	
	IV	14.2	6.5	15.7	4.3	54.2	3.1	98.0	
1968	I	16.7	6.9	18.8	5.1	63.7	2.5	113.7	
	II	16.6	7.3	19.5	6.1	66.6	3.6	119.7	
	III	18.4	7.9	21.1	5.3	69.2	2.6	124.5	
	IV	20.6	7.3	22.7	6.2	72.4	2.7	131.9	

Source: Central Statistics Office, Review of External Trade.
Seasonally corrected by methods described in para. 4.3.

While Table 4. 2 provides the detailed figures necessary for an analysis of import composition, and the evidence of important differences in timing between the different categories, it is difficult to obtain from a large table of this nature a quick impression of the pattern. For this purpose Chart 4. 1 has been constructed. The individual series have been smoothed by conversion to moving three quarterly averages and converted into indices with the first quarter of 1963=100. This process eliminates a large part of random temporary fluctuations in each series and thus highlights any medium term cyclical tendency there may be. For the same reason the figures after adjustment for the seamen's strike are used. The unimportant unclassified category has been omitted.

The chart illustrates that while there is to some extent a common cyclical pattern, there are also some important differences in the behaviour of the different types of import. Instances of common movement can be summarised as follows:

Early 1959—Early 1960	Slow growth or decline	All categories
Early 1960—Mid 1961	Rapid growth	” ”
Early 1963—Early 1964	Rapid growth	All categories except S4.
Late 1966—Late 1967	Slow growth or decline	” ”
Late 1967—Late 1968	Very rapid growth	” ”

However, while these periods when all the categories move more or less in parallel are interesting in themselves and are of great importance in the time trend of total imports, they are not our primary interest here. So long as all categories of imports move together there is no point, for either analytical or forecasting purposes, in disaggregation. It is only if the series move in different ways that a disaggregated analysis offers hope of a greater insight than models based on imports as a whole.

Viewed in this light, it is not on the similarity but on the differences in the various lines in Chart 4. 1 that we should focus our attention. In particular the differences between S5, S3 and S1, representing the three large categories of imports, materials for further production in industry, consumption goods (non-food) ready for use, and producers capital goods, need closer study.

The largest category, goods for further production, accounting for about 55 per cent of total merchandise imports, exhibits a clear and definite cyclical pattern. Such imports rose steadily from 1958 until mid 1961, stagnated until mid 1963, rose rapidly until mid 1964, more or less stagnated until the end of 1967, with a minor upturn in the middle of 1966, and then have risen extremely rapidly until the present time. Broadly speaking these phases have corresponded to similar phases in the production volume of manufacturing industry, although the deviations from the long term trend are very much greater in the case of imports than in production. Although the import figures used are in value rather than volume terms, price changes in fact were of minor importance except in the first quarter of 1968. Closer examination of this relationship will be a major task of Part 2 of this study.

Imports of producers' capital goods have followed much the same pattern, but with less regularity. As noted in paragraph 4. 2, they began the period at a relatively low level, and did not begin to grow above the 1958 level until early in 1960. Their growth from 1960 to 1964 was faster than that of any other category with the check in 1961-62 being much less pronounced than in the case of goods for further production. The stagnation from 1964 to 1967 was interrupted by a temporary upsurge in 1965, caused largely by imports of aircraft. Had it been realised at the time that this boost, which went far towards accounting for the rise in total imports in the first half of 1965 was likely to be a temporary phenomenon, the pressure on the authorities to react to the economic situation in mid 1965 might well have been different.

The path of imports of consumer goods other than food, drink and tobacco, is in many ways the most interesting of all. Given that one of the main weapons of demand management in recent years has been indirect taxation, which might be expected to have an immediate impact on personal consumption, and that an avowed aim of any restrictive measures has been to modify both personal consumption and imports, one might reasonably expect this category of imports to reflect such policy measures at least as much as any other category.

In fact it stands out from all other categories in exhibiting by far the steadiest growth path. Periods of stagnation in 1962 and 1967 both come later than downturns in the other major categories, and are much shorter in duration. Most remarkably, in spite of the imposition of a temporary import levy there was only a short lived levelling off of growth in 1965 and 1966 when declines could be seen both in other types of imports and in the index of weekly retail sales. How far this may be due to the longer term reduction in tariffs and easing of other restrictions on imports will be examined in Part 2 of this exercise, as will the effect on timing of the introduction or increases in indirect taxes.

The behaviour of the small category of food, drink and tobacco is difficult to explain, as it shows large fluctuations rather out of phase with other categories. Both in timing and in amplitude its phasing would appear to lie somewhere between those of other consumer goods and those of the other major categories.

Goods for further production in agriculture, another small category, show relatively large cyclical fluctuations, which are probably related to specifically agricultural conditions rather than movements in the economy as a whole.

4.5 *Conclusion*

Table 4. 2 and Chart 4. 1 indicate that there has been sufficient variation in the timing and size of fluctuations between the different use categories of imports to justify a disaggregated quarterly approach to the problem. First indications are that it should be possible to establish some formal relationships between imports of materials for further production and imports of producers' capital goods and the volume of industrial production, and between imports of consumer goods and the index of retail sales. Such relationships are not likely to be simple, and time lags probably vary. Other explanatory variables, such as relative price levels also need to be tested.

Even without this formal mathematical analysis, which will form the basis of Part 2 of this study, a certain amount of guidance can be gained from the exercise as it now stands. Not only are goods for further production the most important category; they have also over the past ten years exhibited the clearest cyclical pattern and the one with the earliest turning points, at least in a downward direction. Thus there is an indication, if no more, that a careful study of this category can enable the observer to draw some conclusions about the future course of imports as a whole, in the expectation that capital goods and ultimately consumer goods will later follow a similar pattern.

4.6 *Implications for 1969*

With regard to the immediate future Table 4. 2 is more informative than the chart. The table shows that the very great rise in imports for 1968 as a whole was made up as follows. In the first quarter there was a sudden large jump in the value of imports of every category, due partly to price increases as a result of devaluation and partly to a belated response to the increase of domestic economic activity which began

in the last few months of 1967. For imports as a whole, price rises accounted for about 40% and volume for 60% of the increase in value.

After this initial strong rise, the growth in most categories, while rapid, was steady rather than spectacular. As the table below shows, the percentage rise in value for each category between the first and fourth quarters of 1968 was of a similar order of magnitude to the rise between the fourth quarter of 1967 and the first quarter of 1968. Nearly all this increase was accounted for by volume, with price increases playing only a minor role.

Percentage Increase in Imports

	4th Quarter 1967 to 1st Quarter 1968	1st Quarter 1968 to 4th Quarter 1968
1. Capital goods	17.6	23.0
2. Food, Drink and Tobacco	6.2	5.7
3. Other Consumer Goods	19.7	20.7
4. Materials for Agriculture	18.6	21.6
5. Materials for Industry	17.5	13.7
TOTAL IMPORTS ..	16.0	16.0
of which Volume ..	9.4	13.9
Price (unit value)	6.6	2.2

Thus the quarterly growth rate of about 5 per cent in total imports experienced in the course of 1968 was somewhat less daunting than comparison of the fourth quarter of 1968 with the fourth quarter of 1967 might suggest.

At the same time it should be remembered that post-devaluation price rises were continuing to have some slight effect throughout 1968, although one can hope that this process has by now been practically completed. In the case of consumer goods, and also perhaps materials for further industrial production, imports in the final quarter of 1968 may have been boosted by orders to anticipate the increase in wholesale tax in January 1969. For both these reasons there are some grounds for hoping that, given a similar increase in Final Demand, the rate of growth of imports (in value terms) will be lower in 1969 than in 1968. With regard to composition, it can be expected that the most rapid growth in 1969 will be in producers capital goods, which, because of financial arrangements, can be expected to pose less of a threat to the level of external reserves than increases in other categories.

This is about as far as visual inspection of the disaggregated data can usefully be taken at this stage. Until Part 2 of this exercise is undertaken the relationship of imports to changes in the level of Final Demand must be studied with the help of Leser's macro models. This exercise is undertaken in Section 3 §.12 of the Commentary.

SECTION 5: THE FEDERATION OF IRISH INDUSTRIES AND THE ECONOMIC AND SOCIAL RESEARCH INSTITUTE.

QUARTERLY INDUSTRIAL SURVEY

DECEMBER 1968

The report contains the results of the September Industrial Survey conducted jointly by the Federation of Irish Industries and the Economic and Social Research Institute. The survey covered the Fourth Quarter of 1968 compared with the Fourth Quarter of 1967 with forecasts for trends in the First Quarter of 1969 compared with the corresponding period of 1968. Over 80% of respondents replied and the results can be taken to represent the views of a good cross-section of industry.

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FII/ESRI QUARTERLY INDUSTRIAL SURVEY

DECEMBER 1968

Summary

The forecasts of continuing expansion predicted in the September Quarterly Industrial Survey of the Federation of Irish Industries and the Economic and Social Research Institute have been borne out by the results of the December Survey. Manufacturers report substantial increases in production and sales, both on the home and export markets, in the Fourth Quarter of 1968 compared with the Fourth Quarter of 1967. The general feeling for the coming months is that growth will continue but at a more moderate rate.

Overall Findings of the Survey

During the Fourth Quarter of 1968 production, home sales and export sales increased significantly compared with the corresponding period of 1967 and it is expected that in the coming months this trend will continue, but at a slightly more moderate rate. Employment continues to increase slowly and in the coming months expectations are that no great upsurge in employment is expected. Most respondents reported that stocks of finished goods and raw materials supply were adequate for their needs in the quarter, but the high number of respondents reporting capacity restraints highlighted in the September Survey is again evident in the December Survey with the proportion of respondents unable to expand output exceeding that which could. Manufacturing investment does not seem to have significantly risen in the year just ended but indications are that a significant increase will take place in the coming year in this type of expenditure.

Overall Results

All industries showed productive increases in the December Quarter of 1968 compared with the December Quarter of 1967.

Higher home sales were reported by all industries in the quarter with some very significant increases taking place. Efforts to anticipate the rise in the rate of wholesale tax may have contributed to some extent to these increases. It is projected that home sales in the coming months will also show an increase compared with the First Quarter of 1968, but the proportion of respondents expecting an increase is lower than in the past few quarters. This could be due to the expected impact of the Autumn Budget.

The results of the Survey indicate that exports continue to increase at a very satisfactory rate and that in the coming months this increase will be maintained.

Employment continues to rise at a rather slower rate than the rise in production, and indications are that only a moderate increase in employment will take place in the coming months. As previous Surveys have pointed out, the rises in production are still being achieved more from higher productivity than from increases in employment. Stocks of finished products were considered adequate by the majority of respondents and it is noticeable that the proportion (21%) finding them insufficient has decreased when compared with the results of the September Survey. Stocks of raw materials were considered adequate by most respondents.

The number of respondents experiencing capacity restraints on their productive ability has again increased, and at 51% this figure is the highest in the history of the Survey. Respondents experiencing productive restraints listed insufficient capacity, insufficient skilled labour and insufficient raw materials supply as the main causes of this. Respondents with financial years ending in the December Quarter of 1968 reported that in 1968 increases in investment had been almost balanced by decreases, so that overall investment was little higher than in 1967. They are more optimistic about investment in the coming months. This is both a welcome and necessary sign. As this is the second survey in which it is seen that investment decisions indicate a higher rate of future investment, the productive capacity restraints now being experienced may be alleviated in the future.

Sector Results

All industry groups reported higher production compared with the corresponding period of 1967. With the exception of Drink and Tobacco the increases in production in all industries were very large.

In line with these production rises all industry groups reported significant increases in home sales, and with the exception of Drink and Tobacco all industry groups expect this trend to continue in the coming months.

Exports are increasing at a rapid pace and all industries had higher exports in the December Quarter of 1968 compared with the December Quarter of 1967. The increase was highest in Clothing and Footwear, and Metals and Engineering, while only in Drink and Tobacco and Paper and Printing was the margin of increase over decrease less than 45%. Drink and Tobacco expects export to decrease in the coming months, but all other industry groups anticipate high increases in exports.

Textiles, Clothing and Footwear, Wood and Furniture, Glass Clay and Cement and Metals and Engineering reported that employment had increased in the Fourth Quarter of 1968 compared with the Fourth Quarter of 1967. Food, Drink and Tobacco and Chemicals reported that employment had not changed significantly while Paper and Printing and "Other Manufacturing" experienced a drop in employment. For the coming months Textiles, Clothing and Footwear and Metals and Engineering expect employment to increase and Food, Drink and Tobacco, Wood and Furniture, Chemicals, Glass Clay and Cement expect no significant change in employment. However, Paper and Printing and "Other Manufacturing" expect that employment will drop.

While the majority of respondents in the Textiles, Clothing and Footwear, Wood and Furniture, Glass Clay and Cement, Metals and Engineering and "Other Manufacturing" Industry Groups reported they were unable to produce more with their existing resources, the other industry groups felt that they had the necessary capacity and labour to fulfil more orders. As reported in the previous survey, the results indicate an increasingly large number of respondents are experiencing capacity pressures and these respondents list insufficient capacity, insufficient skilled labour and insufficient raw material supply as the main causes of this.

The number of firms involved is not sufficient to permit precise conclusions to be drawn about investment trends in any individual industry. While in the year ending in the Fourth Quarter of 1968 the majority of respondents did not increase their investment they do expect a significant increase in the coming year. In view of the capacity restraints which this and the immediately preceding survey have highlighted the trend of increasing investment as now reported and as reported in the previous survey is both welcome and necessary to meet increasing demand with increases in productive capacity.

ALL MANUFACTURING

TREND OF REPLIES

The table set out below is designed to show the trend of replies in this and the four previous surveys. In questions 1, 2, 3, 4, 8, 9, 10, 11 and 12 the difference between the positive and negative replies is taken. Where a positive sign appears before the figure in relation to these questions it indicates that the number of respondents who experienced a rise or expected one in the future quarter was that percentage higher than those who did not nor expected to experience a rise; the opposite applying where a negative sign appears.

For questions 5 and 6 the difference between the percentage of respondents reporting finished goods and raw materials was excessive and insufficient is taken. Here a positive sign before the answer arrived at indicated the number of respondents who considered that raw materials and finished goods were insufficient was that percentage higher than those who did not and a negative sign indicates that they were excessive.

To arrive at the figures given for question 7 the difference between the percentage of respondents stating that more orders could have been met in the various quarters and those replying in the negative is taken to show the trend of excessive capacity during the surveys.

TABLE 5A.1

Question	January 1968	April 1968	July 1968	October 1968	January 1969
1. Total Production was	+49	+49	+68	+76	+75
2. Home Sales were	+54	+55	+67	+76	+80
3. Exports were	+33	+30	+22	+26	+53
4. Labour Force was	-6	-7	+8	+14	+15
5. Finished Stocks were	+3	+3	+15	+21	+14
6. Materials Stocks were	+2	+4	+5	-1	+4
7. Constraints	-47	-52	-32	-	+2
8. Home Sales will be	+64	+55	+68	+81	+51
9. Exports will be	+30	+20	+27	+37	+49
10. Labour Force will be	-9	-10	+16	+22	+10
11. Investment was	+7	+18	+5	+25	+10
12. Investment will be	+26	-	+18	+51	+52

TABLE 5A2: INDUSTRY GROUP—ALL MANUFACTURING

	Weighted Replies %			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 compared with 4th Quarter 1967:				
1. Value of Total Production was	81	13	6	Higher
2. Value of Home Sales was	87	6	7	Higher
3. Value of Exports was	66	21	13	Higher
4. Wage Paid Labour Force was	37	41	22	Same
At End December 1968:				
	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	7	72	21	Adequate
6. Stocks of Materials are considered to be	3	90	7	Adequate
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes		49	No
	No		51	
	Insufficient Capacity ..	50		Insufficient Capacity
	" Skilled Labour ..	20		
	" Unskilled Labour ..	6		
7a. Where firms replied No, the causes responsible were	" Raw Materials Supply ..	20		
	" Cash and/or Credit ..	2		
	Any Other Reason ..	2		
In 1st Quarter 1969 compared with 1st Quarter 1968:				
	Higher	Same	Lower	
8. Value of Home Sales will be	67	17	16	Higher
9. Value of Exports will be	64	21	15	Higher
10. Wage Paid Labour Force will be	30	50	20	Same
For Firms whose financial year ended during 4th Quarter 1968:				
	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	50	10	40	Same
12. Capital investment in coming year compared with last year will be	66	20	14	Higher

TABLE 5A3: INDUSTRY GROUP—FOOD

	Weighted Replies (%)			Apparent Trend	
	Higher	Same	Lower		
In 4th Quarter 1968 Compared with 4th Quarter 1967:					
1. Value of Production was	77	12	11	Higher	
2. Value of Home Sales was	78	11	11	Higher	
3. Value of Exports was	71	13	16	Higher	
4. Wage Paid Labour Force was	26	52	22	Same	
At End December 1968:					
5. Stocks of Finished Products are considered to be	Excessive	Adequate	Insufficient	Adequate Adequate	
6. Stocks of Materials are considered to be	4	86	10		
	—	85	15		
During 4th Quarter 1968:					
7. Could more be produced with present resources	Yes	71	Yes
	No	29	
	Insufficient Capacity ..	44		Insufficient Raw Material Supply	
	„ Skilled Labour ..	—			
7a. Where firms replied No, the causes responsible were	„ Unskilled Labour ..	10			
	„ Raw Materials Supply ..	46			
	„ Cash and/or Credit ..	—			
	Any Other Reason ..	—			
In 1st Quarter 1969 Compared with 1st Quarter 1968:					
	Higher	Same	Lower	Higher Higher Same	
8. Value of Home Sales will be	71	23	6		
9. Value of Exports will be	55	34	11		
10. Wage Paid Labour Force will be	21	60	19	Same	
For Firms whose financial year ended during 4th Quarter 1968:					
	Higher	Same	Lower	Same Higher	
11. Capital investment in past year compared with previous year was	43	5	52		
12. Capital investment in coming year compared with last year will be	75	7	18		

TABLE 5A4: INDUSTRY GROUP—DRINK AND TOBACCO

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 Compared with 4th Quarter 1967:				
1. Value of Production was	29	71	—	Higher
2. Value of Home Sales was	89	11	—	Higher
3. Value of Exports was	17	83	—	Same
4. Wage Paid Labour Force was	14	75	11	Same
At End December 1968:				
5. Stocks of Finished Products are considered to be	—	100	—	Adequate
6. Stocks of Materials are considered to be	—	100	—	Adequate
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes	90		Yes
	No	10		
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	100		Insufficient Capacity
	„ Skilled Labour ..	—		
	„ Unskilled Labour ..	—		
	„ Raw Materials Supply ..	—		
	„ Cash and/or Credit ..	—		
	Any Other Reason ..	—		
In 1st Quarter 1969 Compared with 1st Quarter 1968:				
8. Value of Home Sales will be	25	15	60	Lower
9. Value of Exports will be	17	16	67	Lower
10. Wage Paid Labour Force will be	10	79	11	Same
For Firms whose financial year ended during 4th Quarter 1968:				
11. *Capital investment in past year compared with previous year was	—	—	—	
12. *Capital investment in coming year compared with last year will be	—	—	—	

*The number of replies received to this question is not sufficient to permit an estimate to be made.

TABLE 5A5: INDUSTRY GROUP—TEXTILES

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 Compared with 4th Quarter 1967:				
1. Value of Production was	95	5	—	Higher
2. Value of Home Sales was	69	14	17	Higher
3. Value of Exports was	67	11	22	Higher
4. Wage Paid Labour Force was	74	16	10	Higher
At End December 1968:				
	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	2	75	23	Adequate
6. Stocks of Materials are considered to be	4	96	—	Adequate
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	6	No
	No .. .. .	.. .. .	94	
	Insufficient Capacity ..	50	Insufficient Capacity	
	„ Skilled Labour ..	30		
	„ Unskilled Labour ..	7		
	„ Raw Materials Supply ..	7		
	„ Cash and/or Credit ..	—		
	Any Other Reason ..	6		
In 1st Quarter 1969 Compared with 1st Quarter 1968:				
	Higher	Same	Lower	
8. Value of Home Sales will be	73	12	15	Higher
9. Value of Exports will be	73	27	—	Higher
10. Wage Paid Labour Force will be	60	30	10	Higher
For Firms whose financial year ended during 4th Quarter, 1968:				
	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	—	37	63	Lower
12. Capital investment in coming year compared with last year will be	30	70	—	Higher

TABLE 5A6: INDUSTRY GROUP—CLOTHING AND FOOTWEAR

	Weighted Replies (%)			Apparent Trend	
	Higher	Same	Lower		
In 4th Quarter 1968 Compared with 4th Quarter 1967:					
1. Value of Production was	90	7	3	Higher	
2. Value of Home Sales was	83	3	14	Higher	
3. Value of Exports was	87	10	3	Higher	
4. Wage Paid Labour Force was	52	39	9	Higher	
At End December 1968:					
	Excessive	Adequate	Insufficient		
5. Stocks of Finished Products are considered to be	2	79	19	Adequate	
6. Stocks of Materials are considered to be	7	89	4	Adequate	
During 4th Quarter 1968:					
7. Could more be produced with present resources	Yes	12	No	88	No
	Insufficient Capacity ..	36			
	" Skilled Labour ..	52			Insufficient
	" Unskilled Labour ..	2			Skilled
	" Raw Materials Supply ..	8			Labour
	" Cash and/or Credit ..	1			
7a. Where firms replied No, the causes responsible were	Any Other Reason ..	1			
In 1st Quarter 1969 Compared with 1st Quarter 1968:					
	Higher	Same	Lower		
8. Value of Home Sales will be	83	12	5	Higher	
9. Value of Exports will be	76	21	3	Higher	
10. Wage Paid Labour Force will be	65	31	4	Higher	
For Firms whose financial year ended during 4th Quarter 1968:					
	Higher	Same	Lower		
11. Capital investment in past year compared with previous year was	90	9	1	Higher	
12. Capital investment in coming year compared with last year will be	84	9	7	Higher	

TABLE 5A7: INDUSTRY GROUP—WOOD AND FURNITURE

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 Compared with 4th Quarter 1967:				
1. Value of Production was	90	4	6	Higher
2. Value of Home Sales was	86	8	6	Higher
3. Value of Exports was	72	8	20	Higher
4. Wage Paid Labour Force was	60	21	19	Higher
At End December 1968:				
5. Stocks of Finished Products are considered to be	8	84	8	Adequate
6. Stocks of Materials are considered to be ..	8	82	10	Adequate
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	.. 43	No
	No .. .. .	.. .. .	.. 57	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	28	Insufficient Skilled Labour	
	„ Skilled Labour ..	33		
	„ Unskilled Labour ..	10		
	„ Raw Materials Supply ..	8		
	„ Cash and/or Credit ..	13		
	Any Other Reason ..	8		
In 1st Quarter 1969 Compared with 1st Quarter 1968:				
8. Value of Home Sales will be	57	22	21	Higher
9. Value of Exports will be	72	13	15	Higher
10. Wage Paid Labour Force will be	23	62	15	Same
For Firms whose financial year ended during 4th Quarter 1968:				
11. Capital investment in past year compared with previous year was	36	57	7	Higher
12. Capital investment in coming year compared with last year will be	25	56	19	Same

TABLE 5A8: INDUSTRY GROUP—PAPER AND PRINTING

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 Compared with 4th Quarter 1967:				
1. Value of Production was	95	—	5	Higher
2. Value of Home Sales was	100	—	—	Higher
3. Value of Exports was	55	13	32	Higher
4. Wage Paid Labour Force was	10	28	62	Lower
At End December 1968:	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	35	65	—	Excessive
6. Stocks of Materials are considered to be ..	5	79	16	Adequate
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes		68	Yes
	No		32	
	Insufficient Capacity ..	27		Insufficient
	„ Skilled Labour ..	66		
	„ Unskilled Labour ..	—		
7a. Where firms replied No, the causes responsible were	„ Raw Materials Supply ..	—		
	„ Cash and/or Credit ..	—		
	Any Other Reason ..	7		
In 1st Quarter 1969 Compared with 1st Quarter 1968:	Higher	Same	Lower	
8. Value of Home Sales will be	84	14	2	Higher
9. Value of Exports will be	74	8	18	Higher
10. Wage Paid Labour Force will be	8	38	54	Lower
For Firms whose financial year ended during 4th Quarter 1968:	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	76	—	24	Higher
12. Capital investment in coming year compared with last year will be	66	—	34	Higher

TABLE 5A9: INDUSTRY GROUP—CHEMICALS

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 Compared with 4th Quarter 1967:				
1. Value of Production was	90	10	—	Higher
2. Value of Home Sales was	100	—	—	Higher
3. Value of Exports was	53	47	—	Higher
4. Wage Paid Labour Force was	38	24	38	Same
At End December 1968:	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	34	53	13	Excessive
6. Stocks of Materials are considered to be ..	4	96	—	Adequate
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	81	Yes
	No .. .. .	.. .. .	19	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	87		Insufficient Capacity
	„ Skilled Labour ..	13		
	„ Unskilled Labour ..	—		
	„ Raw Materials Supply ..	—		
	„ Cash and/or Credit ..	—		
	Any Other Reason ..	—		
In 1st Quarter 1969 Compared with 1st Quarter 1968:	Higher	Same	Lower	
8. Value of Home Sales will be	71	29	—	Higher
9. Value of Exports will be	65	35	—	Higher
10. Wage Paid Labour Force will be	19	47	34	Same
For Firms whose financial year ended during 4th Quarter 1968:	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	45	—	55	Same
12. Capital investment in coming year compared with last year will be	50	39	11	Higher

TABLE 5A10: INDUSTRY GROUP—GLASS CLAY AND CEMENT

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 Compared with 4th Quarter 1967:				
1. Value of Production was	92	—	8	Higher
2. Value of Home Sales was	100	—	—	Higher
3. Value of Exports was	52	48	—	Higher
4. Wage Paid Labour Force was	41	38	21	Higher
At End December 1968:	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	—	49	51	Insufficient
6. Stocks of Materials are considered to be ..	—	92	8	Adequate
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	35	No
	No .. .. .	.. .. .	65	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	91		Insufficient Capacity
	„ Skilled Labour ..	9		
	„ Unskilled Labour ..	—		
	„ Raw Materials Supply ..	—		
	„ Cash and/or Credit ..	—		
	Any Other Reason ..	—		
In 1st Quarter 1969 Compared with 1st Quarter 1968:	Higher	Same	Lower	
8. Value of Home Sales will be	68	32	—	Higher
9. Value of Exports will be	45	32	23	Higher
10. Wage Paid Labour Force will be	34	29	37	Same
For Firms whose financial year ended during 4th Quarter 1968:	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	100	—	—	Higher
12. Capital investment in coming year compared with last year will be	100	—	—	Higher

TABLE 5A11: INDUSTRY GROUP—METALS AND ENGINEERING

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 Compared with 4th Quarter 1967:				
1. Value of Production was	96	—	4	Higher
2. Value of Home Sales was	100	—	—	Higher
3. Value of Exports was	86	—	14	Higher
4. Wage Paid Labour Force was	48	48	4	Higher
At End December 1968:	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	—	60	40	Adequate
6. Stocks of Materials are considered to be ..	4	91	5	
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	.. 30	No
	No .. .. .	.. .. .	.. 70	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	.. 36		Insufficient Raw Material Supply
	„ Skilled Labour ..	.. 5		
	„ Unskilled Labour ..	.. 13		
	„ Raw Materials Supply ..	.. 39		
	„ Cash and/or Credit ..	.. 7		
	Any Other Reason —		
In 1st Quarter 1969 Compared with 1st Quarter 1968:	Higher	Same	Lower	
8. Value of Home Sales will be	52	19	29	Higher
9. Value of Exports will be	88	4	8	Higher
10. Wage Paid Labour Force will be	39	61	—	Higher
For Firms whose financial year ended during 4th Quarter 1968:	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	35	—	65	Lower
12. Capital investment in coming year compared with last year will be	66	34	—	Higher

TABLE 5A12: INDUSTRY GROUP—OTHER MANUFACTURING

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 4th Quarter 1968 Compared with 4th Quarter 1967:				
1. Value of Production was	82	—	18	Higher
2. Value of Home Sales was	82	—	18	Higher
3. Value of Exports was	78	—	22	Higher
4. Wage Paid Labour Force was	36	—	64	Lower
At End December 1968:	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	—	67	33	Insufficient
6. Stocks of Materials are considered to be	—	100	—	Adequate
During 4th Quarter 1968:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	36	No
	No .. .. .	.. .. .	64	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	100		Insufficient Capacity
	„ Skilled Labour ..	—		
	„ Unskilled Labour ..	—		
	„ Raw Materials Supply ..	—		
	„ Cash and/or Credit ..	—		
	Any Other Reason ..	—		
In 1st Quarter 1969 Compared with 1st Quarter 1968:	Higher	Same	Lower	
8. Value of Home Sales will be	100	—	—	Higher
9. Value of Exports will be	78	22	—	Higher
10. Wage Paid Labour Force will be	18	18	64	Lower
For Firms whose financial year ended during 4th Quarter 1968:	Higher	Same	Lower	
11. *Capital investment in past year compared with previous year was	56	22	22	Higher
12. *Capital investment in coming year compared with last year will be	100	—	—	Higher

SECTION 5B: THE FEDERATION OF IRISH INDUSTRIES AND THE ECONOMIC AND
SOCIAL RESEARCH INSTITUTE

QUARTERLY INDUSTRIAL SURVEY

MARCH 1969

The report contains the results of the March Industrial Survey conducted jointly by the Federation of Irish Industries and the Economic and Social Research Institute. The survey covered the First Quarter of 1969 compared with the First Quarter of 1968 with forecasts for trends in the Second Quarter of 1969 compared with the corresponding period of 1968. Over 80% of respondents replied to the survey and the results can be taken to represent the current views of a good cross-section of Irish Industry.

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FII/ESRI QUARTERLY INDUSTRIAL SURVEY

MARCH 1969

Summary

The results of the March Quarterly Industrial Survey of the Federation of Irish Industries and the Economic and Social Research Institute highlight the serious effects which the maintenance dispute has had on Irish Manufacturing Industry. The continuously buoyant trend in production, home sales and exports as indicated by previous surveys has on this occasion been seriously interrupted. Whereas in previous surveys, production, home sales and exports had been showing substantial increases on the corresponding quarters of the previous year, a near reversal of these trends occurred in the March quarter. This is clearly illustrated in Table 5B1 showing the trend of replies over the past year.

The expectations for the coming months are, however, more optimistic and Irish Manufacturing Industry anticipates increased home sales and exports. The similarity of these expectations to those in recent quarters suggests that the maintenance dispute was entirely to blame for the apparent stagnation in the first quarter, and that there has been no weakening in the underlying situation of buoyant demand and expanding output.

Findings of the Survey

During the first quarter of 1969 production and home sales showed no increase compared with the corresponding period of 1968 while the export performance of Irish Manufacturing Industry was apparently below the level of the first quarter of 1968. It is expected, however, that in the coming months home sales and exports will increase compared to the performance of the second quarter of 1968.

The recent growth in employment was temporarily checked in the first quarter, but expectations are that it will resume in the second quarter.

Most respondents reported that in the quarter just ended stocks of finished goods and raw materials were adequate for their needs, but the continuing high number of respondents reporting capacity restraints as highlighted in the September and December 1968 surveys has not decreased. Firms whose financial years ended in the first quarter of 1969 reported that investment has risen compared with the previous year and they expect that in the coming year investment will rise further. In view of the continuing constraints on productive capacity it is essential that industry continues to invest at a greater scale than in previous years and these future expectations are most welcome.

Overall Results

When the overall results of the surveys are analysed the effect of the maintenance strike on hitherto expanding industries is very evident. Whereas in the December survey of 1968 all industries showed higher production than in the corresponding period of 1967, only four industries registered significantly higher production in the first quarter of 1969 compared with the first quarter of 1968. Four industries reported lower production. Home sales were similarly effected although the pattern of increases and decreases as between industry groups was slightly different from that in production.

The effects of the maintenance dispute also manifested themselves in the export performance of Irish industry during the first quarter of 1969, and 50 per cent of respondents reported that they were lower than in the corresponding quarter of 1968.

As would be expected from the trends already noted, employment did not rise in the quarter compared with the corresponding quarter of 1968, with over 50 per cent of respondents reporting employment at the same level. Stocks of finished products were considered adequate by the majority of respondents and stocks of materials supplies were generally considered adequate.

The number of respondents to the survey still experiencing resource restraints on their productive ability give cause for some concern and it is noticeable that the record 51 per cent of respondents experiencing such restraints as reported in the December 1968 survey was equalled in the March survey. Those respondents experiencing restraints listed insufficient capacity and the maintenance dispute as the major causes of this. It seems probable that, but for the strike, there would have been a slight fall in the proportion of firms reporting constraints.

The results of the survey seem to indicate that industry is attempting to overcome these capacity restraints by increased investment and firms with financial years ending in the first quarter of 1969 reported substantial increases in investment in the year compared with the year ending in the first quarter of 1968 and they also expect that in the coming year this type of expenditure will increase at a significant rate. It will be interesting to see from future surveys if the results of this increased investment will ease the capacity restraints now being reported.

Sector Results

During the first quarter of 1969 only the textiles, clothing and footwear, wood and furniture and other manufacturing industry groups reported increased production compared with the corresponding

period of 1968. The paper and printing, chemicals and glass, clay and cement industry groups reported that production was at roughly the same level as in the first quarter of 1968 while the food, drink and tobacco and metals and engineering groups reported substantial decreases in production compared with the same period of 1968. Higher home sales in the quarter were reported by the clothing and footwear, wood and furniture, paper and printing and other manufacturing industry groups, while drink and tobacco and the textile industry groups reported home sales were at the same level as in the first quarter of 1968. The food, chemicals, glass, clay and cement and the metals and engineering industry groups reported that home sales were lower than those in the first quarter of 1968. Exports by the textiles and the clothing and footwear industry groups were higher in the first quarter of 1969 compared with the first quarter of 1968, while exports by the wood and furniture, paper and printing, glass, clay and cement and the metals and engineering industry groups were at the same level as those in the first quarter of 1968. Exports by the food, drink and tobacco, chemicals and other manufacturing industry groups were at a lower level than in the first quarter of 1968.

Only the textiles and clothing and footwear industry groups reported increased employment in the first quarter of the year and the majority of respondents in the food, drink and tobacco, wood and furniture, chemicals, glass clay and cement and metals and engineering industry groups reported no significant change in their employment compared with the corresponding period of 1968. The paper and printing and other manufacturing industry groups, did however, report lower employment in the quarter. Respondents in the textiles, wood and furniture, paper and printing, glass clay and cement and metals and engineering industry groups reported that stocks of finished products were adequate in the quarter compared with the corresponding period of 1968. The chemicals and other manufacturing industry groups reported they were excessive, while the food, drink and tobacco and clothing and footwear industry groups reported they were insufficient. With the exception of the food industry, which felt that stocks of raw materials were insufficient, all other industry groups reported they were adequate in the quarter compared with the corresponding quarter of 1968.

While the majority of respondents in the textiles, clothing and footwear, glass clay and cement, metals and engineering and other manufacturing industry groups did not feel their existing capacity would have facilitated increased production the majority of respondents in the food, drink and tobacco, wood and furniture, paper and printing and chemicals industry groups felt they could. Respondents reporting capacity restraints listed insufficient capacity and the effects of the maintenance dispute as the major causes of this.

In the coming quarter the food, textiles, clothing and footwear, wood and furniture, paper and printing, chemicals, glass clay and cement, metals and engineering and other manufacturing industry groups expect increased home sales compared with the second quarter of 1968. The drink and tobacco industry, however, expects home sales to drop in the quarter.

The food, textiles, clothing and footwear, wood and furniture, paper and printing, metals and engineering and other manufacturing industry groups expect exports to increase in the quarter, while the chemicals and glass clay and cement industry groups expect no significant increases in exports. Drink and tobacco, however, does expect a significant decrease in exports in the second quarter of this year when compared with the corresponding quarter of 1968. It is encouraging to note that the textiles, clothing and footwear, wood and furniture and the metals and engineering industry groups expect employment to increase in the quarter. The food, drink and tobacco, glass clay and cement industry groups expect employment to remain at the same level. The paper and printing, chemicals and other manufacturing industry groups do, however, expect employment to drop in the quarter when compared with the second quarter of 1968.

The number of firms involved is not sufficient to permit precise conclusions and forecasts to be drawn about investment trends in any individual industry. The majority of respondents with financial years ending in the first quarter of 1969 reported increased investment when compared with 1968. Their

expectations in the coming year are that investment will rise at a rather significantly encouraging rate and may have the desired effects of improving the capacity restraints reported in this and the previous surveys.

FII/ESRI QUARTERLY INDUSTRIAL SURVEY

ALL MANUFACTURING

TREND OF REPLIES

The table set out below is designed to show the trend of replies in this and the four previous surveys. In questions 1, 2, 3, 4, 8, 9, 10, 11 and 12 the difference between the positive and negative replies is taken. Where a positive sign appears before the figure in relation to these questions it indicates that the number of respondents who experienced a rise or expected one in the future quarter was that percentage higher than those who did not nor expected to experience a rise; the opposite applying where a negative sign appears.

For questions 5 and 6 the difference between the percentage of respondents reporting finished goods and raw materials was excessive and insufficient is taken. Here a positive sign before the answer arrived at indicated the number of respondents who considered that raw materials and finished goods were insufficient was that percentage higher than those who did not and a negative sign indicates that they were excessive.

To arrive at the figures given for question 7 the difference between the percentage of respondents stating that more orders could have been met in the various quarters and those replying in the negative is taken to show the trend of excessive capacity during the surveys.

TABLE 5B1

Question	April 1968	July 1968	October 1968	January 1969	April 1969
1. Total Production was	+49	+68	+76	+75	- 4
2. Home Sales were	+55	+67	+76	+80	—
3. Exports were	+30	+22	+26	+53	-19
4. Labour Force was... ..	- 7	+ 8	+16	+15	- 1
5. Finished Stocks were	+ 3	+15	+21	+14	+ 8
6. Materials Stocks were	+ 4	+ 5	- 1	+ 4	- 3
7. Constraints	52	32	—	- 2	- 2
8. Home Sales will be	+55	+68	+81	+51	+53
9. Exports will be	+20	+27	+37	+49	+33
10. Labour Force will be	-10	+16	+22	+10	+14
11. Investment was	+18	+ 5	+25	+10	+26
12. Investment will be	—	+18	+51	+52	+58

TABLE 5B2: INDUSTRY GROUP—ALL MANUFACTURING

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 1st Quarter 1969 compared with 1st Quarter 1968:				
1. Value of Total Production was	45	6	49	Same
2. Value of Home Sales was	41	18	41	Same
3. Value of Exports was	31	19	50	Same
4. Wage Paid Labour Force was	24	51	25	Same
At End March 1969:				
	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	12	68	20	Adequate
6. Stocks of Materials are considered to be ..	8	87	5	Adequate
During 1st Quarter 1969:				
7. Could more be produced with present resources	Yes .. .. .	..	49	No
	No .. .. .	..	51	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	21	Other Reason	
	„ Skilled Labour ..	15		
	„ Unskilled Labour ..	6		
	„ Raw Material Supply ..	10		
	„ Cash and/or Credit ..	2		
	Any Other Reason ..	46		
In 2nd Quarter 1969 compared with 2nd Quarter 1968:				
	Higher	Same	Lower	
8. Value of Home Sales will be	63	27	10	Higher
9. Value of Exports will be	49	35	16	Higher
10. Wage Paid Labour Force will be	27	60	13	Same
For Firms whose Financial year ended during 1st Quarter 1969:				
	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	52	22	26	Higher
12. Capital investment in coming year compared with last year will be	73	12	15	Higher

TABLE 5B3: INDUSTRY GROUP—FOOD

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 1st Quarter 1969 compared with 1st Quarter 1968:				
1. Value of Production was	35	—	65	Same
2. Value of Home Sales was	27	15	58	Lower
3. Value of Exports was	10	23	67	Lower
4. Wage Paid Labour Force was	10	71	19	Same
At End of March 1969:				
	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	9	54	37	Insufficient
6. Stocks of Materials are considered to be	9	54	37	Insufficient
During 1st Quarter 1969:				
7. Could more be produced with present resources	Yes .. .	.. .	52	Yes
	No .. .	.. .	48	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	17	Other Reason	
	„ Skilled Labour ..	—		
	„ Unskilled Labour ..	—		
	„ Raw Material Supply ..	27		
	„ Cash and/or Credit ..	—		
	Any Other Reason ..	56		
In 2nd Quarter 1969 compared with 2nd Quarter 1968:				
	Higher	Same	Lower	
8. Value of Home Sales will be	53	45	2	Higher
9. Value of Exports will be	41	45	14	Higher
10. Wage Paid Labour Force will be	19	73	8	Same
For Firms whose financial year ended during 1st Quarter 1969:				
	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	56	44	—	Higher
12. Capital investment in coming year compared with last year will be	75	—	25	Higher

TABLE 5B4: INDUSTRY GROUP—DRINK AND TOBACCO

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 1st Quarter 1969 compared with 1st Quarter 1968:				
1. Value of Production was	26	—	74	Lower
2. Value of Home Sales was	30	60	10	Same
3. Value of Exports was	27	19	54	Lower
4. Wage Paid Labour Force was	14	75	11	Same
At End March 1969:				
	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	—	49	51	Insufficient
6. Stocks of Materials are considered to be	—	100	—	Adequate
During 1st Quarter 1969:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	90	Yes
	No .. .. .	.. .. .	10	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity .. .. .	.. .. .	—	Other Reason
	„ Skilled Labour .. .. .	.. .. .	—
	„ Unskilled Labour .. .. .	.. .. .	—
	„ Raw Material Supply .. .. .	.. .. .	—
	„ Cash and/or Credit .. .. .	.. .. .	—
	Any Other Reason .. .. .	.. .. .	100	
In 2nd Quarter 1969 compared with 2nd Quarter 1968:				
	Higher	Same	Lower	
8. Value of Home Sales will be	29	11	60	Lower
9. Value of Exports will be	8	6	86	Lower
10. Wage Paid Labour Force will be	14	86	—	Same
For Firms whose financial year ended during 1st Quarter 1969:				
	Higher	Same	Lower	
11. *Capital investment in past year compared with previous year was	—	—	—	
12. *Capital investment in coming year compared with last year will be	—	—	—	

*The number of replies received to this question is not sufficient to permit an estimate to be made.

TABLE 5B5: INDUSTRY GROUP—TEXTILES

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 1st Quarter 1969 compared with 1st Quarter 1968:				
1. Value of Production was	56	9	35	Higher
2. Value of Home Sales was	47	61	47	Same
3. Value of Exports was	61	14	25	Higher
4. Wage Paid Labour Force was	53	44	3	Higher
At End March 1969:				
5. Stocks of Finished Products are considered to be	2	88	10	Adequate
6. Stocks of Materials are considered to be	2	98	—	Adequate
During 1st Quarter 1969:				
7. Could more be produced with present resources	Yes	21	No	No
	No	79		
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	25	Insufficient Skilled Labour	
	„ Skilled Labour ..	38		
	„ Unskilled Labour ..	12		
	„ Raw Material Supply ..	—		
	„ Cash and/or Credit ..	1		
	Any Other Reason ..	24		
In 2nd Quarter 1969 compared with 2nd Quarter 1968:				
8. Value of Home Sales will be	73	22	5	Higher
9. Value of Exports will be	80	20	—	Higher
10. Wage Paid Labour Force will be	49	46	5	Higher
For Firms whose financial year ended during 1st Quarter 1969:				
11. Capital investment in past year compared with previous year was	66	5	29	Higher
12. Capital investment in coming year compared with last year will be	56	44	—	Higher

TABLE 5B6: INDUSTRY GROUP—CLOTHING AND FOOTWEAR

	Weighted Replies (%)			Apparent Trend	
	Higher	Same	Lower		
In 1st Quarter 1969 compared with 1st Quarter 1968:					
1. Value of Production was	70	6	24	Higher	
2. Value of Home Sales was	73	6	21	Higher	
3. Value of Exports was	88	8	4	Higher	
4. Wage Paid Labour Force was	48	37	15	Higher	
At End March 1969:	Excessive	Adequate	Insufficient		
5. Stocks of Finished Products are considered to be	—	74	26	Insufficient	
6. Stocks of Materials are considered to be ..	3	97	—	Adequate	
During 1st Quarter 1969:					
7. Could more be produced with present resources	Yes	11	No
	No .. .. .	.. .. .	.. .. .	89
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	24			Insufficient Skilled Labour
	„ Skilled Labour ..	53			
	„ Unskilled Labour ..	7			
	„ Raw Material Supply ..	1			
	„ Cash and/or Credit ..	1			
	Any Other Reason ..	14			
In 2nd Quarter 1969 compared with 2nd Quarter 1968:	Higher	Same	Lower		
8. Value of Home Sales will be	77	17	6	Higher	
9. Value of Exports will be	79	18	3	Higher	
10. Wage Paid Labour Force will be	48	51	1	Higher	
For Firms whose financial year ended during 1st Quarter 1969:	Higher	Same	Lower		
11. Capital investment in past year compared with previous year was	79	—	21	Higher	
12. Capital investment in coming year compared with last year will be	81	—	19	Higher	

TABLE 5B7: INDUSTRY GROUP—WOOD AND FURNITURE

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 1st Quarter 1969 compared with 1st Quarter 1968:				
1. Value of Production was	62	17	21	Higher
2. Value of Home Sales was	59	13	28	Higher
3. Value of Exports was	8	76	16	Same
4. Wage Paid Labour Force was	14	61	25	Same
At End March 1969:				
5. Stocks of Finished Products are considered to be	28	65	7	Adequate
6. Stocks of Materials are considered to be	35	58	7	Adequate
During 1st Quarter 1969:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	51	No
	No .. .. .	.. .. .	49	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	11	Insufficient Cash Credit	
	" Skilled Labour ..	20		
	" Unskilled Labour ..	8		
	" Raw Material Supply ..	7		
	" Cash and/or Credit ..	41		
	Any Other Reason ..	13		
In 2nd Quarter 1969 compared with 2nd Quarter 1968:				
8. Value of Home Sales will be	67	33	—	Higher
9. Value of Exports will be	42	43	15	Higher
10. Wage Paid Labour Force will be	45	52	3	Higher
For Firms whose financial year ended during 1st Quarter 1969:				
11. Capital investment in past year compared with previous year was	50	—	50	Same
12. Capital investment in coming year compared with last year will be	66	34	—	Higher

TABLE 5B8: INDUSTRY GROUP—PAPER AND PRINTING

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 1st Quarter 1969 compared with 1st Quarter 1968:				
1. Value of Production was	58	—	42	Same
2. Value of Home Sales was	66	—	34	Higher
3. Value of Exports was	46	16	38	Same
4. Wage Paid Labour Force was	—	57	43	Lower
At End March 1969:				
	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	—	100	—	Adequate
6. Stocks of Materials are considered to be ..	8	92	—	Adequate
During 1st Quarter 1969:				
7. Could more be produced with present resources	Yes	81	Yes	
	No	19		
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	—	Other Reason	
	„ Skilled Labour ..	—		
	„ Unskilled Labour ..	—		
	„ Raw Material Supply ..	—		
	„ Cash and/or Credit ..	—		
	Any Other Reason ..	100		
In 2nd Quarter 1969 compared with 2nd Quarter 1968:				
	Higher	Same	Lower	
8. Value of Home Sales will be	77	23	—	Higher
9. Value of Exports will be	70	30	—	Higher
10. Wage Paid Labour Force will be	—	79	21	Lower
For Firms whose financial year ended during 1st Quarter 1969:				
	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	56	—	44	Same
12. Capital investment in coming year compared with last year will be	80	10	10	Higher

TABLE 5B9: INDUSTRY GROUP—CHEMICALS

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 1st Quarter 1969 compared with 1st Quarter 1968:				
1. Value of Production was	56	4	40	Same
2. Value of Home Sales was	13	47	40	Lower
3. Value of Exports was	22	17	61	Lower
4. Wage Paid Labour Force was	23	39	38	Same
At End March 1969:				
	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	42	44	14	Excessive
6. Stocks of Materials are considered to be	—	100	—	Adequate
During 1st Quarter 1969:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	78	Yes
	No .. .. .	.. .. .	22	
7a. Where firms replied No, the causes responsible were	Insufficient	Capacity ..	31	Other Reason
	„	Skilled Labour ..	23	
	„	Unskilled Labour ..	—	
	„	Raw Material Supply ..	—	
	„	Cash and/or Credit ..	—	
	Any Other Reason	.. .. .	46	
In 2nd Quarter 1969 compared with 2nd Quarter 1968:				
	Higher	Same	Lower	
8. Value of Home Sales will be	69	31	—	Higher
9. Value of Exports will be	42	33	25	Same
10. Wage Paid Labour Force will be	16	46	38	Lower
For Firms whose financial year ended during 1st Quarter 1969:				
	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	91	—	9	Higher
12. Capital investment in coming year compared with last year will be	45	10	45	Same

TABLE 5B10: INDUSTRY GROUP—GLASS CLAY AND CEMENT

	Weighted Replies (%)			Apparent Trend	
	Higher	Same	Lower		
In 1st Quarter 1969 compared with 1st Quarter 1968:					
1. Value of Production was	28	30	42	Same	
2. Value of Home Sales was	13	20	67	Lower	
3. Value of Exports was	33	34	33	Same	
4. Wage Paid Labour Force was	21	45	34	Same	
At End March 1969:					
	Excessive	Adequate	Insufficient		
5. Stocks of Finished Products are considered to be	15	72	13	Adequate	
6. Stocks of Materials are considered to be	—	100	—	Adequate	
During 1st Quarter 1969					
7. Could more be produced with present resources	Yes	35	No
	No	65	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	..	14	Other Reason
	„ Skilled Labour ..	..	17	
	„ Unskilled Labour ..	..	—	
	„ Raw Material Supply ..	..	—	
	„ Cash and/or Credit ..	..	—	
	Any Other Reason ..	..	69	
In 2nd Quarter 1969 compared with 2nd Quarter 1968:					
8. Value of Home Sales will be	70	15	15	Higher	
9. Value of Exports will be	33	48	19	Same	
10. Wage Paid Labour Force will be	21	45	34	Same	
For Firms whose financial year ended during 1st Quarter 1969:					
11. Capital investment in past year compared with previous year was	—	100	—	Same	
12. Capital investment in coming year compared with last year will be	100	—	—	Higher	

TABLE 5B11: INDUSTRY GROUP—METALS AND ENGINEERING

	Weighted Replies (%)			Apparent Trend
	Higher	Same	Lower	
In 1st Quarter 1969 compared with 1st Quarter 1968:				
1. Value of Production was	30	—	70	Lower
2. Value of Home Sales was	30	5	65	Lower
3. Value of Exports was	55	—	45	Same
4. Wage Paid Labour Force was	42	34	24	Same
At End March 1969:				
	Excessive	Adequate	Insufficient	
5. Stocks of Finished Products are considered to be	9	84	7	Adequate
6. Stocks of Materials are considered to be ..	24	70	6	Adequate
During 1st Quarter 1969:				
7. Could more be produced with present resources	Yes .. .. .	.. .. .	39	No
	No .. .. .	.. .. .	61	
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	..	7	Other Reason
	„ Skilled Labour ..	..	6	
	„ Unskilled Labour ..	..	15	
	„ Raw Material Supply ..	..	15	
	„ Cash and/or Credit ..	..	—
	Any Other Reason ..	..	57	
In 2nd Quarter 1969 compared with 2nd Quarter 1968:				
	Higher	Same	Lower	
8. Value of Home Sales will be	61	39	—	Higher
9. Value of Exports will be	64	36	—	Higher
10. Wage Paid Labour Force will be	43	57	—	Higher
For Firms whose financial year ended during 1st Quarter 1969:				
	Higher	Same	Lower	
11. Capital investment in past year compared with previous year was	39	11	50	Same
12. Capital investment in coming year compared with last year will be	70	11	19	Higher

TABLE 5B12: INDUSTRY GROUP—OTHER MANUFACTURING

	Weighted Replies (%)			Apparent Trend	
	Higher	Same	Lower		
In 1st Quarter 1969 compared with 1st Quarter 1968:					
1. Value of Production was	78	22	—	Higher	
2. Value of Home Sales was	78	22	—	Higher	
3. Value of Exports was	—	78	22	Same	
4. Wage Paid Labour Force was	—	22	78	Lower	
At End March 1969:					
	Excessive	Adequate	Insufficient		
5. Stocks of Finished Products are considered to be	56	22	22	Excessive	
6. Stocks of Materials are considered to be ..	—	100	—	Adequate	
During 1st Quarter 1969:					
7. Could more be produced with present resources	Yes	22	No
	No .. .. .	.. .. .	.. .. .	78
7a. Where firms replied No, the causes responsible were	Insufficient Capacity ..	71		Insufficient Capacity	
	„ Skilled Labour ..	—			
	„ Unskilled Labour ..	—			
	„ Raw Material Supply ..	—			
	„ Cash and/or Credit ..	—			
	Any Other Reason ..	29			
In 2nd Quarter 1969 compared with 2nd Quarter 1968:					
	Higher	Same	Lower		
8. Value of Home Sales will be	100	—	—	Higher	
9. Value of Exports will be	56	22	22	Higher	
10. Wage Paid Labour Force will be	22	—	78	Lower	
For Firms whose financial year ended during 1st Quarter 1969:					
	Higher	Same	Lower		
11. *Capital investment in past year compared with previous year was	—	—	—	—	
12. *Capital investment in coming year compared with last year will be	—	—	—	—	

*The number of replies received to this question is not sufficient to permit an estimate to be made.

SECTION 6: SEASONALLY CORRECTED QUARTERLY SERIES

Introductory Notes

Since 1965 The Economic and Social Research Institute has undertaken the seasonal correction of certain important economic series, and made the results available to those on a restricted circulation list. Henceforth it is intended to publish these seasonally corrected series as an integral part of the *Quarterly Economic Commentary*, and they will be found in the following three tables.

Table 6.1 sets out the actual data to the latest date available. The selected series have been taken from the Central Statistics Office's "Economic Series" and "Quarterly Industrial Inquiry", published in the *Irish Statistical Bulletin*, and from the Central Bank of Ireland's *Quarterly Bulletin*, with the latest figures in each case being available in the form of stencilled supplements. Two of the series are derived from other series in the table, Series 3 from Series 2 and 7 and Series 20 from Series 19 and 12.

Table 6.2 shows the seasonally corrected figures for the 24 out of the 35 series in Table 6.1 which analysis of variance has shown to be subject to significant seasonal fluctuations. The method used for their derivation is set out in "Seasonality in Irish Economic Statistics" by C. E. V. Leser (E.R.I. Paper No. 26). The correction factors for the current year are derived from the data for the preceding five year period. Thus the factors by which the 1968 original data must be divided (the result being multiplied by either 400 or 100) to arrive at the seasonally corrected series are based on the period 1963-1967, and are as follows:

Series No.	Quarter			
	I	II	III	IV
1	97.2	100.8	97.6	104.4
2	95.8	102.5	98.9	102.8
5	118.9	87.7	80.2	113.2
6	113.2	90.9	98.6	97.3
7	99.0	99.8	100.7	100.5
8	127.1	92.8	76.5	103.6
9	117.9	100.4	85.0	96.7
13	101.7	101.5	97.6	99.2
19	98.6	100.8	100.4	100.2
21	91.3	99.6	102.7	106.4
22	111.8	120.4	100.3	67.5
23	134.1	89.3	91.8	84.8
24	111.6	95.6	92.4	100.4
25	101.5	103.9	93.8	100.8
26	97.0	94.6	106.6	101.8
30	99.1	98.4	99.9	102.6
31	101.6	102.8	94.2	101.4
34	101.8	98.7	98.7	100.8
35	101.4	98.6	98.9	101.1

A further 5 series, Nos. 3, 20, 27, 28 and 29, are indirectly corrected through their relationship to other seasonally corrected or seasonality-free series. No regular seasonal pattern is observed in the remaining series, Nos. 4, 19, 11, 12, 14, 15, 16, 17, 18, 32 and 33, and consequently no correction is necessary.

The figures in Table 6.2 make it possible to interpret and compare changes between consecutive quarters, where otherwise comparisons would have to be confined to the corresponding quarter of the previous year or average of years. Whilst it is possible that in isolated cases, where the seasonal pattern is changing, the correction can in itself impart some instability to the trend, in general the corrected series can be used with a fair degree of confidence in drawing inferences as to short-term trends.

Table 6.3 shows all the corrected series, and three of the more important seasonality-free series, converted to the form of index numbers with 1961=100, and covering a longer period than the other two tables. The purpose is to facilitate comparison between trends in the different series. To the same end, the information given in Table 6.3 is shown in chart form in the following pages (Section 7). As a common scale is kept throughout the section, it can readily be seen how far the trends of different series have diverged from each other over the past few years.

A few points regarding specific series need to be borne in mind to avoid possibly misleading conclusions being drawn. Due to changes in definition in recent years, both of the series (Nos. 8 and 9) dealing with unemployment need to be treated with great caution. The apparent trend reflects these changes, and should not be interpreted as indicating genuine movements in the level of unemployment.

Due to the bank dispute of 1966, only average figures for the period from April to October of that year are available for Series 23, 24 and 31. These averages have been distributed between the quarters of 1966 according to the average monthly pattern observed in the period 1962-1965 and in 1967. The resulting figures are shown in the tables and used in calculating the seasonal correction factors for 1968. Naturally the figures for the period affected by the dispute must therefore be treated with some reserve, but it is felt that the seasonal corrections based in part on these figures are reliable.

Also due to the same dispute, no figures at all are available during the period for Series 30 and 34. Figures for the period were calculated by intrapolation according to the normal seasonal pattern from the known values on either side of the stoppage. Whilst it is felt justifiable to use these figures for subsequent seasonal correction, it is felt that they are not sufficiently reliable to show separately in the tables.

The UK seamen's strike of 1966 distorted the normal pattern of trade. While the actual figures are shown in the tables, their inclusion in calculation of subsequent seasonal correction factors could be misleading. Accordingly an alternative set of figures was calculated for Series 25 and 26 by distributing the aggregate figures for the last three quarters of 1966 according to the normal quarterly pattern, with the results for imports being further modified to take account of divergences from normal in the seasonal pattern of industrial production and retail sales in the course of 1966. These alternative figures have been used in calculating the seasonal correction factors for 1968, and are also shown as points joined by dotted lines on the appropriate charts.

Series 35 is the Central Bank's new series for external monetary reserves. This series has been carried back to 1963 by the ESRI and only the figures relating to 1967 and 1968 are directly based on the official Central Bank estimates. However it is felt that any discrepancies are likely to be small, as it is only in 1968 that the new series has diverged significantly from the older series of External Assets. It is intended to publish both Series 34 and 35 for a short period, and then to drop Series 34.

TABLE 6.1: SELECTED

Number	Series	Unit	1966		
			I	II	III
PRODUCTION					
1	Manuf. Industry: Production Volume	1953=100	166.5	169.7	176.4
2	Tr. Goods Industries: Production Volume	1953=100	168.0	176.5	185.8
3	Tr. Goods Industries: Prod. per Worker	1953=100	138.6	144.6	148.9
4	New Houses Built	No.	2,228	2,560	2,135
5	Electricity Output	Mill. Kw.h.	1,068.8	812.4	753.8
MANPOWER					
6	Sales of Insurance Stamps	'000	7,633	5,884	6,806
7	No. in Tr. Goods Industries	'000	182.6	183.8	187.9
8	Benefit Claims Current	'000	37.8	29.7	23.4
9	Live Register as Prop. of Insured	%	6.9	6.3	5.2
10	Net Passengers Outward—Sea and Air (Moving Annual Total)	'000	29.4	36.7	30.8
PRICES					
11	Wholesale	1953=100	133.0	135.7	134.3
12	Consumer	1953=100	144.9	147.6	150.0
13	Agricultural	1953=100	117.2	119.1	112.6
14	Import (Unit Value)	1953=100	114.1	115.1	113.6
15	Export (Unit Value)	1953=100	111.7	114.8	113.7
16	Terms of Trade	1953=100	97.9	99.8	100.1
17	Stocks and Shares—Ordinary	1953=100	306.2	303.9	294.2
WAGES, EARNINGS					
18	Agricultural Minimum Wages	shs.	160.8	164.2	173.5
19	Tr. Goods Inds.: av. Weekly Money Earnings	1953=100	193.9	206.2	215.9
	av. Weekly Real Earnings	1953=100	133.8	139.7	143.9
CONSUMPTION					
21	Retail Sales	1961=100	120	130	142
22	New Cars Registered	No.	12,410	9,840	11,165
GOVERNMENT					
23	Revenue Receipts (weekly av.)	£'000	6,295	4,379(a)	4,681(a)
24	Exchequer Expenditure (weekly av.)	£'000	6,027	5,130(a)	5,020(a)
EXTERNAL TRADE					
25	Import Value	£ Mill.	90.42	85.65	97.00
26	Export Value	£ Mill.	57.34	50.87	66.09
27	Import Excess Value	£ Mill.	33.08	34.63	31.28
28	Import Volume	1953=100	171.1	160.5	184.2
29	Export Volume	1953=100	179.1	154.8	201.4
BANKING, FINANCE					
30	Money Supply (Unadjusted)	£ Mill.	318.2	(b)	(b)
31	Bank debits—non govt. (daily av.)	£ Mill.	17.98	17.22(a)	16.49(a)
32	Bills, Loans, Advances (within State)	£ Mill.	320.2	(b)	(b)
33	Investments (within State)	£ Mill.	32.3	(b)	(b)
34	External Assets—Bank system and Dep. Funds	£ Mill.	232.8	(b)	(b)
35	External Monetary Reserves	£ Mill.	231.7	(b)	(b)

QUARTERLY ECONOMIC SERIES

IV	1967				1968			
	I	II	III	IV	I	II	III	IV
187.8	179.8	193.3	185.1	202.1	193.8	213.0	208.3	227.6
190.7	183.4	204.7	194.0	205.2	197.9	226.3	221.5	234.0
153.2	150.4	165.6	155.2	163.8	161.1	179.4	173.5	181.2
2,520	3,015	2,817	2,640	3,063	2,897	2,777	2,891	3,182
1,124.9	1,164.4	933.4	846.7	1,216.4	1,265.4	1,017.9	947.2	1,311.6
6,707	7,511	←13,323→		6,567	7,598	6,417	6,653	
187.8	183.7	186.2	188.2	188.7	185.0	190	192.3	194.5
33.2	40.2	29.1	24.8	32.5	40.5	34.6	30.7	35.6
6.0	7.7	6.5	6.0	6.6	7.7	6.8	6.0	6.4
26.3	13.5	10.2	20.5	49.1	38.2	22.96	25.53	4.51
134.0	136.3	138.4	137.0	139.0	143.6	145.9	145.9	148.2
150.4	150.6	153.2	153.3	154.3	157.5	160.0	160.3	162.7
114.2	118.8	118.9	114.9	124.1	132.2	131.1	128.7	132.5
114.3	113.4	113.2	112.6	113.0	120.5	122.5	125.0	123.2
110.8	114.3	114.2	112.6	114.4	121.0	122.6	122.5	123.2
96.9	100.8	100.9	99.9	101.3	100.5	100.1	98.0	100.1
275.9	272.2	284.6	300.4	320.9	357.6	410.6	449.3	462.6
180.5	180.5	180.5	180.5	180.5	180.5	195.75	195.75	195.75
219.8	217.6	222.1	224.0	231.6	230.2	240.9	246.5	255.1
146.1	144.5	145.0	146.1	150.1	146.2	150.6	153.8	156.8
147	127	138	144	153	135	150.6	158	170
5,949	10,369	12,476	9,281	7,346	13,240	14,983	11,938	10,952
4,709(a)	7,149	5,349	5,407	5,025	7,544	5,691	6,273	6,137
6,353(a)	6,394	5,714	6,306	6,670	7,247	6,716	7,463	7,872
99.81	100.31	98.47	92.91	98.92	115.30	124.15	116.5	133.3
68.86	64.37	67.27	76.38	75.43	74.53	80.12	87.6	89.3
30.96	35.94	31.20	16.53	23.49	40.77	44.03	28.9	44.0
188.2	190.8	187.6	177.9	188.8	206.5	218.7	194.4	233.7
217.0	196.7	205.6	236.9	230.5	214.9	228.2	249.6	252.8
351.0	339.4	339.5	357.5	372.9	373.1	370.3	390.5	405.7
19.26(a)	20.21	22.36	20.22	22.19	21.90	22.36	23.69	27.0
339.3	339.5	335.1	346.4	363.6	379.0	394.0	405.2	414.0
51.8	49.6	49.0	48.3	47.5	49.2	49.2	62.5	89.1
244.4	254.4	262.0	275.6	291.2	284.3	250.1	239.9	249.7
244.0	254.1	261.7	275.7	292.0	292.2	280.1	281.0	292.3

TABLE 6.2: SELECTED QUARTERLY

Number	Series	Unit	1966		
			I	II	III
5	Electricity output	Mill. Kw.h.	3,545	3,731	3,741
6	Sales of insurance stamps	'000	26,424	25,751	27,922
22	New cars registered	No.	46,048	31,816	46,715
25	Value of imports	£ Mill.	358.5	328.8	415.9
26	Value of exports	£ Mill.	236.7	218.6	247.1
27	Import excess	£ Mill.	121.8	110.2	168.8
7	Employment tr. goods inds.	'000	184.4	184.1	186.6
8	Benefit claims current	'000	29.3	31.8	30.7
9	Live register prop. of insured	%	5.8	6.3	6.2
23	Weekly revenue receipts	£'000	4,598	5,028(a)	5,150(a)
24	Weekly exchequer expenditure	£'000	5,278	5,278(a)	5,510(a)
30	Money supply	£ Mill.	320.4	(b)	(b)
31	Daily bank debits - non-govt.	£ Mill.	17.7	17.0(a)	17.2(a)
34	External assets	£ Mill.	229.8	(b)	(b)
35	External monetary reserves	£ Mill.	228.5	(b)	(b)
1	Prod. Volume - manuf. inds.	1953=100	170.3	168.4	180.7
2	Prod. Volume - tr. goods inds.	"	175.1	172.4	187.4
3	Production per worker	"	143.1	141.1	151.3
13	Agricultural prices	"	115.2	118.0	114.9
19	Money Earnings - tr. goods inds.	"	195.9	204.8	216.3
20	Real Earnings - tr. goods inds.	"	135.2	138.7	144.2
28	Volume of imports	"	169.6	154.0	200.3
29	Volume of exports	"	184.8	166.3	193.6
21	Retail Sales	1961=100	130.4	130.4	139.8

NOTES. *a*—Average figures April–October 1966 allocated according to normal seasonal pattern.
b—Figures unavailable due to bank dispute.

SERIES CORRECTED FOR SEASONALITY

IV	1967				1968			
	I	II	III	IV	I	II	III	IV
Equivalent Annual Aggregates								
4,000	3,878	4,282	4,223	4,325	4,257	4,643	4,724	4,635
27,917	26,080	28,242	28,242	27,334	26,848	28,236	26,990	
34,587	34,592	41,866	37,087	42,709	47,370	49,777	47,608	64,900
393.0	397.7	378.0	398.3	389.5	454.4	477.3	496.8	529.0
267.4	265.7	289.0	285.5	292.9	307.3	338.7	328.7	350.9
125.5	132.0	89.0	112.8	96.6	147.1	138.6	168.1	178.1
Average Value During Quarter								
186.6	185.2	186.8	186.9	187.9	186.9	190.4	191.0	193.5
32.7	31.1	31.1	32.8	32.0	31.8	37.3	40.1	34.4
6.3	6.5	6.4	7.1	6.9	6.5	6.8	7.1	6.6
5,533(a)	5,229	6,141	5,948	5,905	5,625	6,373	6,833	7,237
6,516(a)	5,599	5,879	6,922	6,841	6,494	7,025	8,076	7,841
342.0	341.8	343.3	360.7	363.1	376.4	376.3	390.8	395.4
19.1(a)	19.9	22.1	21.1	21.9	21.6	21.8	25.1	26.6
240.0	251.1	266.0	280.7	285.5	279.3	253.4	243.0	247.7
241.3	250.6	265.4	278.7	288.8	288.2	284.0	284.1	289.1
Index Numbers 1953=100								
179.9	184.9	191.8	187.2	196.6	199.3	211.3	213.4	218
185.9	191.8	199.5	196.4	199.2	206.6	220.8	224.0	227.6
150.0	156.0	160.8	158.3	159.7	166.5	174.6	176.6	177.1
114.9	117.3	117.4	117.0	125.1	129.9	129.2	131.9	133.6
218.7	221.1	220.3	222.7	231.1	233.5	239.0	245.5	254.6
145.4	146.8	143.8	145.3	149.8	148.3	149.4	153.2	156.5
185.2	189.1	180.0	190.7	185.8	203.4	210.5	207.2	231.8
210.7	203.0	220.8	221.4	223.8	221.5	241.2	234.1	248.3
Index Numbers 1961=100								
138.7	139.3	138.1	140.9	143.6	147.9	151.3	153.8	159.8

TABLE 6.3: SEASONALLY CORRECTED

Number	Series	1963				1964				I
		I	II	III	IV	I	II	III	IV	
1	PRODUCTION: Manuf. Ind. Prod. Vol.	107.4	108.4	112.3	115.4	117.2	120.7	120.3	121.1	123.8
2	Tr. Goods Inds. Prod. Vol.	108.0	108.4	114.9	117.4	118.9	119.8	121.8	123.0	121.9
3	Tr. Goods Inds. Prod. per Head	103.9	104.0	107.8	109.7	109.7	110.1	111.6	113.3	112.3
5	Electricity Output	122.1	120.1	120.0	121.3	125.6	132.2	130.3	136.9	143.8
6	MANPOWER: Sales of Insurance Stamps	107.8	101.9	99.6	103.6	106.0	109.7	104.5	108.0	100.6
7	No. in Tr. Goods Inds.	104.0	104.3	106.8	107.7	108.5	108.9	109.2	108.7	108.7
8	Benefit Claims	113.5	108.2	103.3	105.7	102.2	103.0	106.9	103.2	101.4
9	Live Register/Insured	110.4	106.2	103.5	101.7	98.1	100.0	100.2	105.2	96.3
11	PRICES: Wholesale (not corrected)	103.9	104.4	104.4	104.7	107.6	110.9	111.6	112.1	113.9
12	Consumer (not corrected)	106.2	105.9	105.8	109.1	109.6	113.9	115.4	116.6	117.9
13	Agricultural	100.3	101.1	103.7	103.7	106.2	111.5	116.7	117.8	118.6
19	EARNINGS: Tr. Goods Inds.: Money Earnings	111.1	113.5	115.5	115.7	124.1	129.9	129.5	128.5	129.3
20	Real Earnings	104.5	107.2	109.1	106.0	113.1	113.9	113.8	110.1	109.7
21	CONSUMPTION: Retail Sales	108.8	112.5	114.4	117.6	117.9	122.5	127.2	127.4	129.7
22	New Cars Registered	119.3	126.4	136.9	140.9	127.6	147.5	151.6	156.3	166.6
23	GOVERNMENT: Revenue Receipts	115.5	122.3	117.9	119.7	133.3	145.3	144.9	150.7	153.6
24	Exchequer Expenditure	115.2	122.3	123.8	128.2	132.2	142.5	157.3	152.5	164.7
25	EXTERNAL TRADE: Import Value	101.8	119.5	116.3	132.1	131.2	135.1	134.8	132.1	140.3
26	Export Value	97.9	113.6	110.9	111.0	126.6	127.4	121.2	119.1	112.9
27	Import Excess	110.4	132.6	128.1	178.9	141.3	152.0	164.9	160.9	201.4
28	Import Volume	103.1	120.8	116.6	131.9	130.2	133.6	132.9	129.8	137.4
29	Export Volume	97.1	111.8	108.7	108.2	120.6	116.3	110.3	109.7	102.6
30	BANKING, FINANCE: Money Supply	112.0	115.8	121.4	121.6	130.2	130.5	136.3	137.6	136.8
31	Bank Debits—Non- Govt.	114.8	120.9	123.9	127.0	140.2	135.2	137.2	144.3	143.3
32	Bills, Loans, Advances (not corrected)	114.8	117.1	123.5	125.0	128.3	134.1	139.4	143.9	145.9
34	External Assets	106.9	106.3	109.4	107.7	108.6	108.7	112.5	110.3	106.9
35	External Monetary Reserves	107.5	107.9	108.2	108.4	109.4	110.3	112.0	111.3	107.9

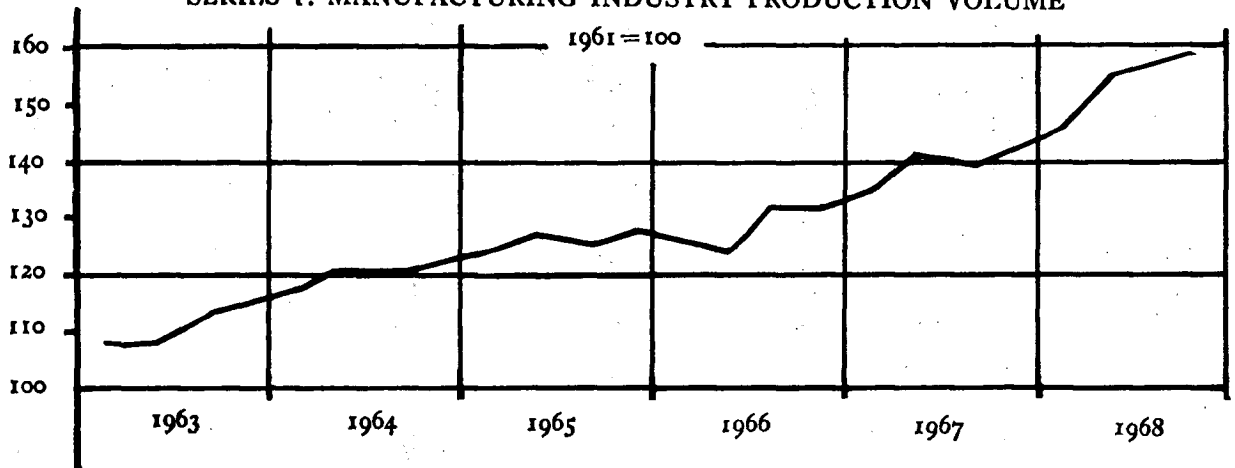
See Notes to Table 6.2.

SERIES INDEX NUMBERS 1961=100

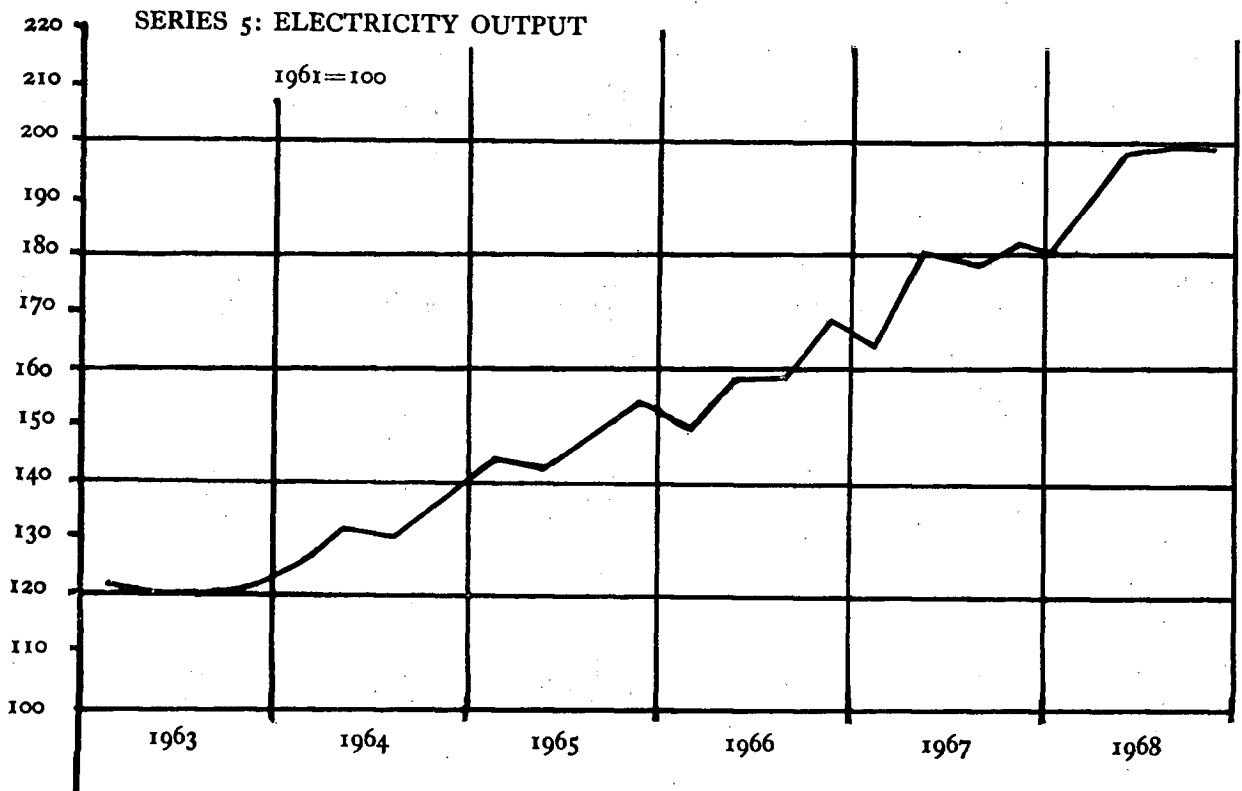
1965			1966				1967				1968			
II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
126.6	125.4	127.0	126.0	123.8	132.9	132.3	136.0	141.0	137.6	144.6	146.5	155.4	156.9	160.3
122.7	126.7	129.8	126.7	124.7	135.6	134.5	138.8	144.4	142.1	144.1	149.5	159	162.1	164.7
112.7	115.8	119.1	115.6	114.0	122.2	121.2	126.0	129.9	127.9	129.0	134.5	141.0	142.6	143.1
142.9	147.5	154.1	149.9	158.2	158.2	169.1	163.9	181.0	178.9	182.9	180.0	196.3	199.8	196.0
110.1	101.2	110.7	104.5	101.8	110.5	110.4	103.2	111.7	111.7	108.1	106.2	111.7	106.7	
109.1	109.6	109.1	109.8	109.6	111.2	111.2	110.3	111.2	111.3	111.9	111.3	113.4	113.7	115.2
100.5	105.9	116.5	111.9	121.7	117.3	125.0	118.8	118.8	125.3	122.3	121.7	142.5	153.3	131.5
95.9	97.9	103.4	101.9	110.4	107.9	110.1	113.5	112.9	122.7	121.0	114.5	119.2	124.5	115.7
115.7	114.7	114.4	115.9	118.3	117.1	116.8	118.8	120.7	119.4	121.2	125.2	127.2	127.2	129.2
119.9	120.4	120.4	120.4	122.7	124.7	125.0	125.2	127.3	127.4	128.3	130.9	133.0	133.3	135.2
118.6	116.6	115.7	115.2	118.0	114.9	114.9	117.3	117.4	117.0	125.1	129.9	129.2	131.8	133.6
130.7	132.9	134.2	134.6	140.8	148.7	150.3	151.9	151.4	153.1	158.8	160.4	164.3	168.7	175.0
108.8	110.3	111.5	111.7	114.6	119.2	120.2	121.3	118.8	120.1	123.8	122.6	123.5	126.7	129.3
131.8	133.8	131.8	130.4	130.4	139.8	138.7	139.3	138.1	140.9	143.6	147.9	151.3	153.8	159.8
158.6	155.9	110.2	161.2	111.4	163.6	121.1	121.1	146.6	129.8	149.5	165.9	174.3	166.7	227.2
170.9	155.6	165.8	164.6	180.0a	184.4a	198.1a	187.2	219.9	212.9	211.4	201.4	228.2	244.6	259.1
165.3	164.3	177.6	169.7	169.7a	177.3a	209.5a	180.1	189.1	222.6	220.0	208.9	225.9	259.7	252.2
147.7	147.2	135.8	137.3	125.9	159.3	150.5	152.4	144.8	152.6	147.2	174.1	183.1	190.4	202.7
115.2	133.5	132.5	131.4	121.4	137.2	148.5	147.6	160.5	158.6	162.7	170.6	188.1	182.5	194.9
220.1	177.8	142.8	150.3	135.9	208.3	154.9	162.9	109.8	139.2	119.2	181.7	171.6	207.5	219.8
143.3	143.0	131.9	133.3	121.1	157.5	145.6	148.7	141.5	149.9	146.1	159.9	165.5	162.9	182.2
104.1	113.9	121.2	120.7	108.6	126.5	137.6	132.6	144.2	144.6	146.2	144.7	157.5	152.9	162.4
141.0	142.9	142.6	145.7	(b)	(b)	155.5	155.4	156.1	163.9	165.1	171.1	171.1	177.7	179.8
181.9	179.9	176.8	179.9	172.7a	174.8a	194.1a	202.3	224.6	214.5	222.6	219.0	221.5	254.9	270.3
155.3	156.5	156.5	156.7	(b)	(b)	166.1	166.2	164.0	169.6	178.0	185.5	192.9	198.3	202.6
100.5	100.2	103.0	107.4	(b)	(b)	112.1	117.3	124.2	131.1	133.4	130.5	118.3	113.4	115.7
102.5	100.6	104.2	104.9	(b)	(b)	110.8	115.1	121.9	127.9	132.6	132.2	130.4	130.4	132.7

SECTION 7: CHARTS OF ECONOMIC SERIES, SEASONALLY CORRECTED

SERIES 1: MANUFACTURING INDUSTRY PRODUCTION VOLUME

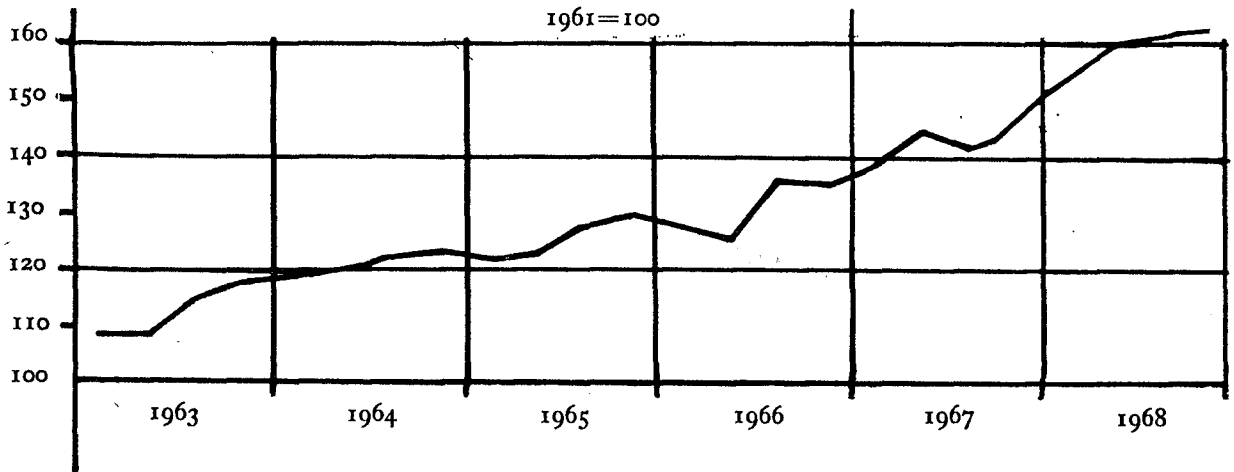


SERIES 5: ELECTRICITY OUTPUT



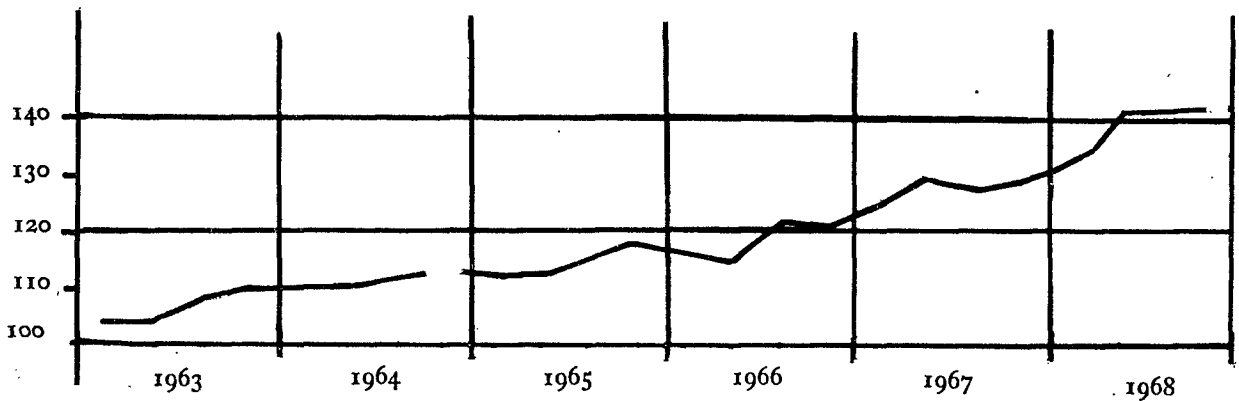
PRODUCTION

SERIES 2: TRANSPORTABLE GOODS INDUSTRIES PRODUCTION VOLUME



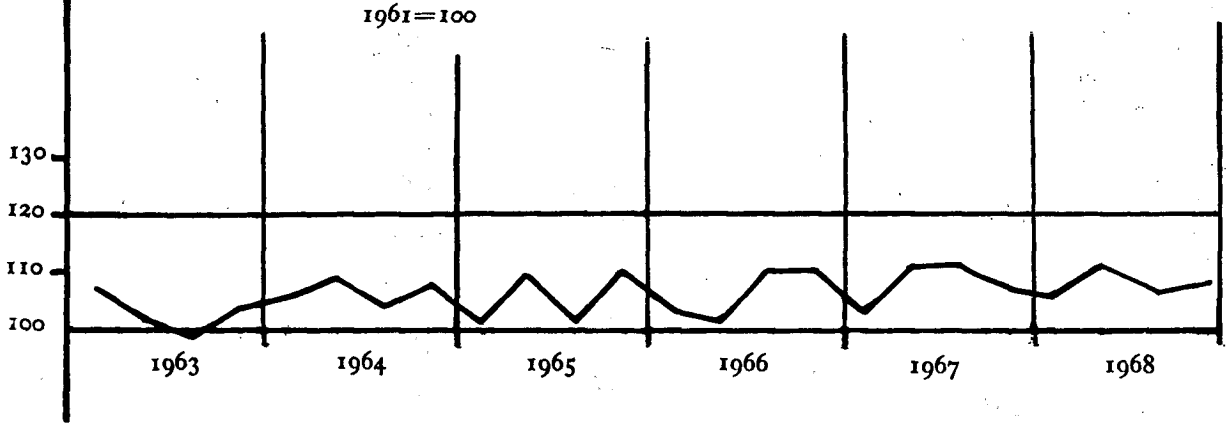
SERIES 3: TRANSPORTABLE GOODS INDUSTRIES PRODUCTION PER WORKER

1961=100



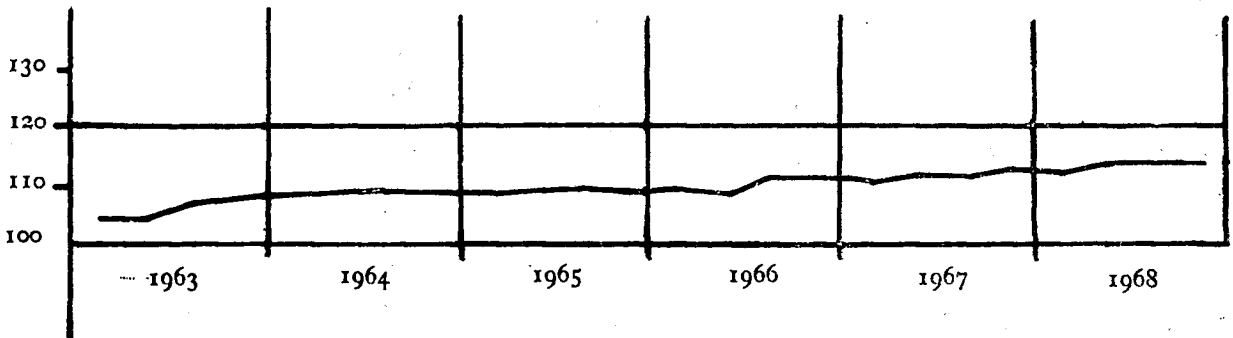
SERIES 6: SALES OF INSURANCE STAMPS

MANPOWER



SERIES 7: NUMBERS EMPLOYED, TRANSPORTABLE GOODS INDUSTRIES

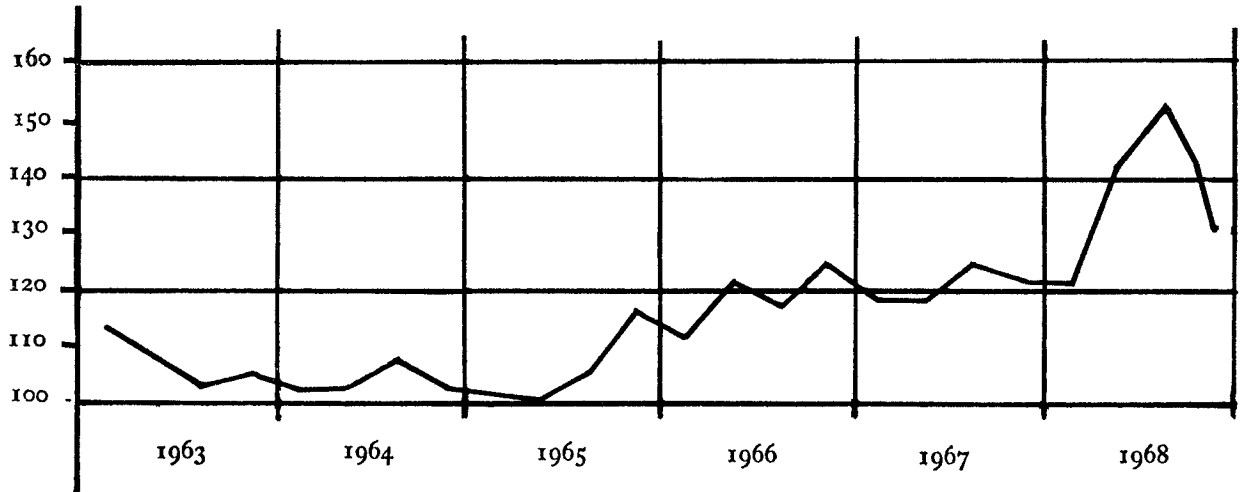
1961=100



SERIES 8: BENEFIT CLAIMS CURRENT

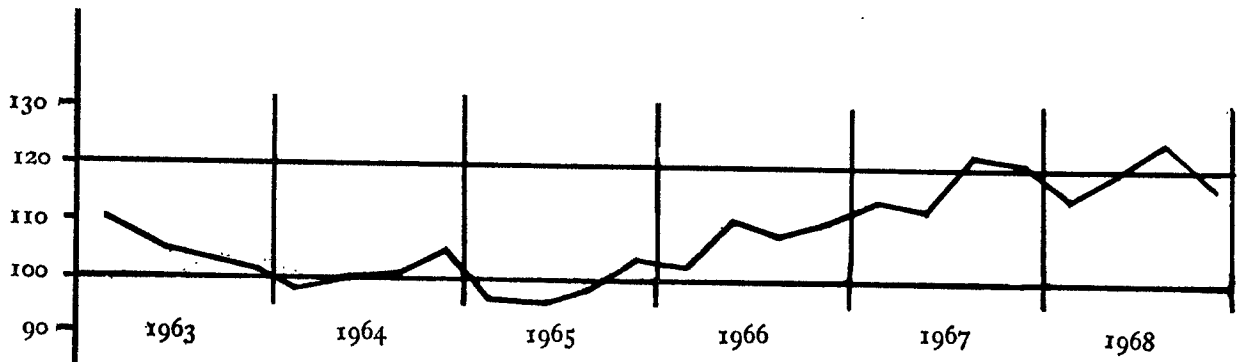
MANPOWER

1961=100



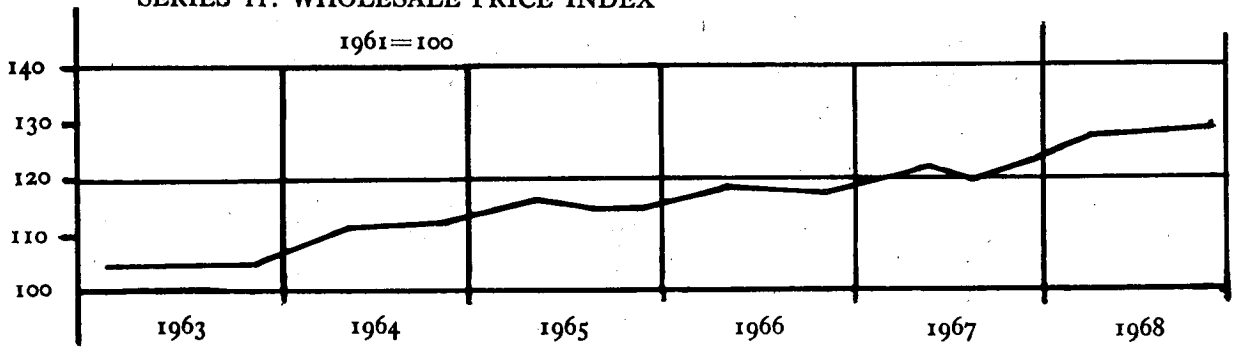
SERIES 9: LIVE REGISTER AS PROPORTION OF INSURED

1961=100

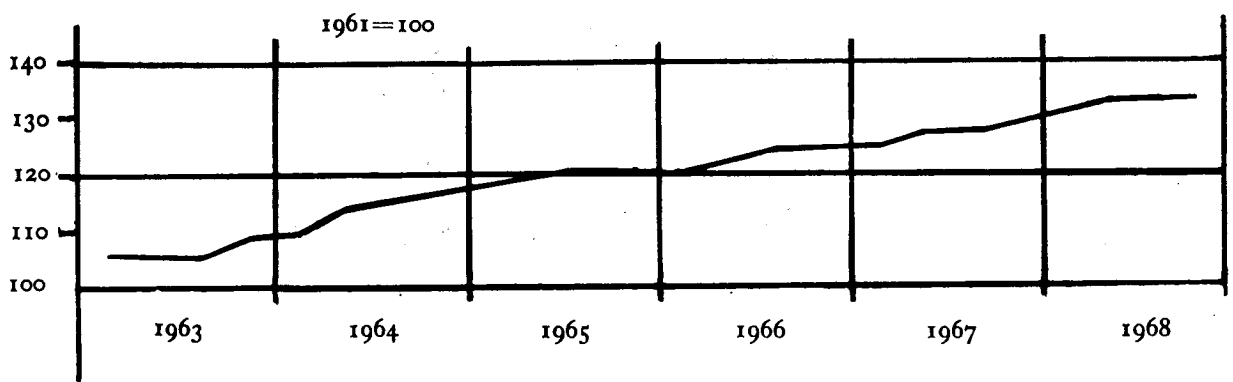


PRICES AND EARNINGS

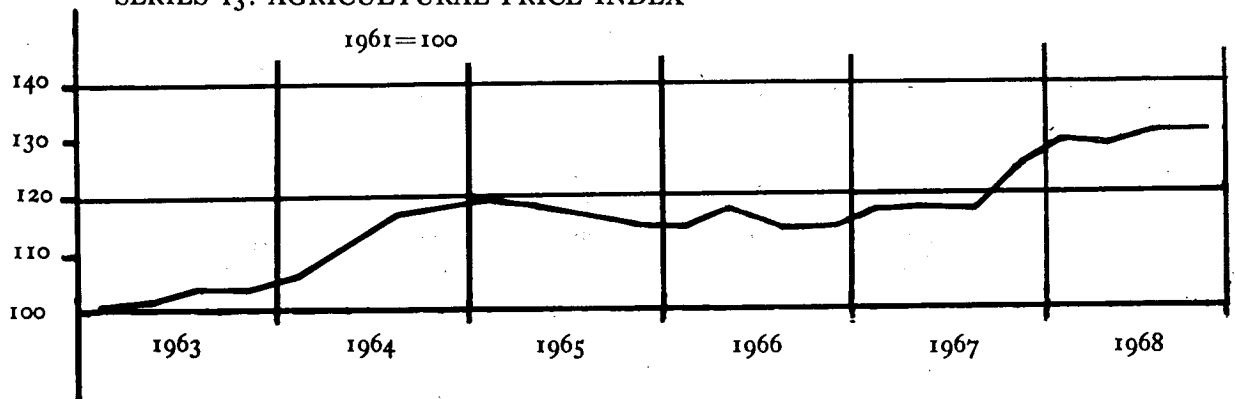
SERIES 11: WHOLESALE PRICE INDEX



SERIES 12: CONSUMER PRICE INDEX



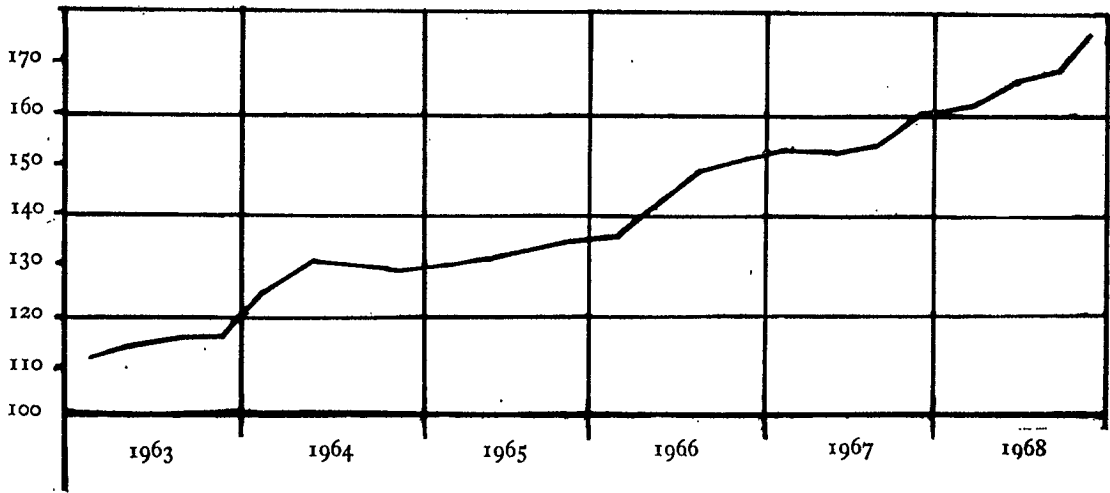
SERIES 13: AGRICULTURAL PRICE INDEX



PRICES AND EARNINGS

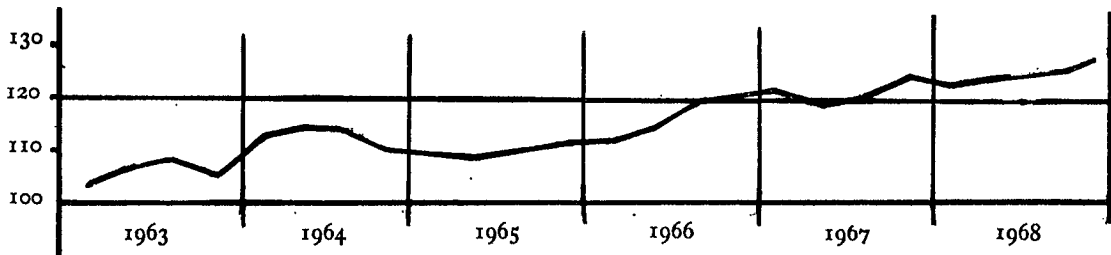
SERIES 19: MONEY EARNINGS, TRANSPORTABLE GOODS INDUSTRIES

1961=100



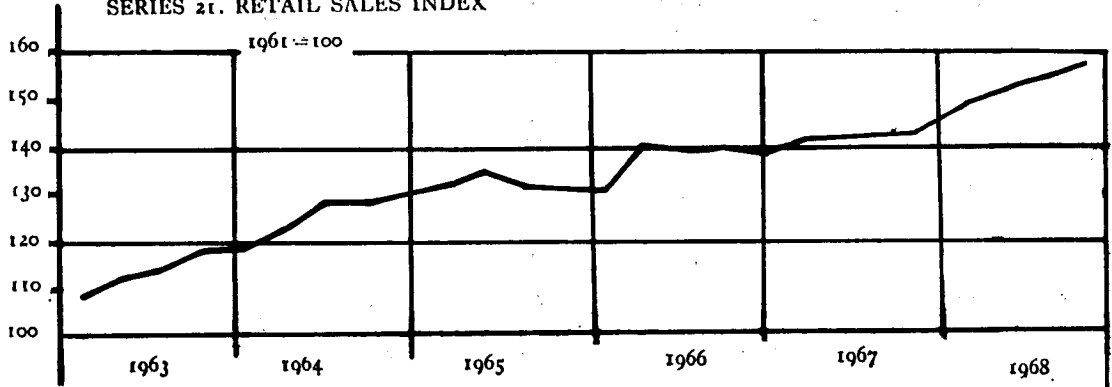
SERIES 20: REAL EARNINGS, TRANSPORTABLE GOODS INDUSTRIES

1961=100



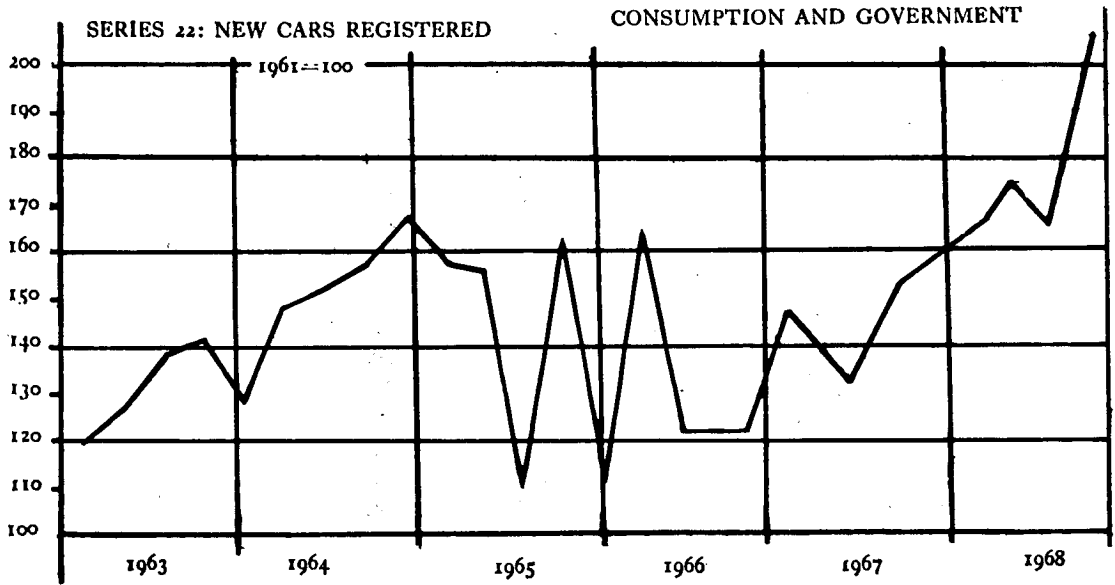
CONSUMPTION AND GOVERNMENT

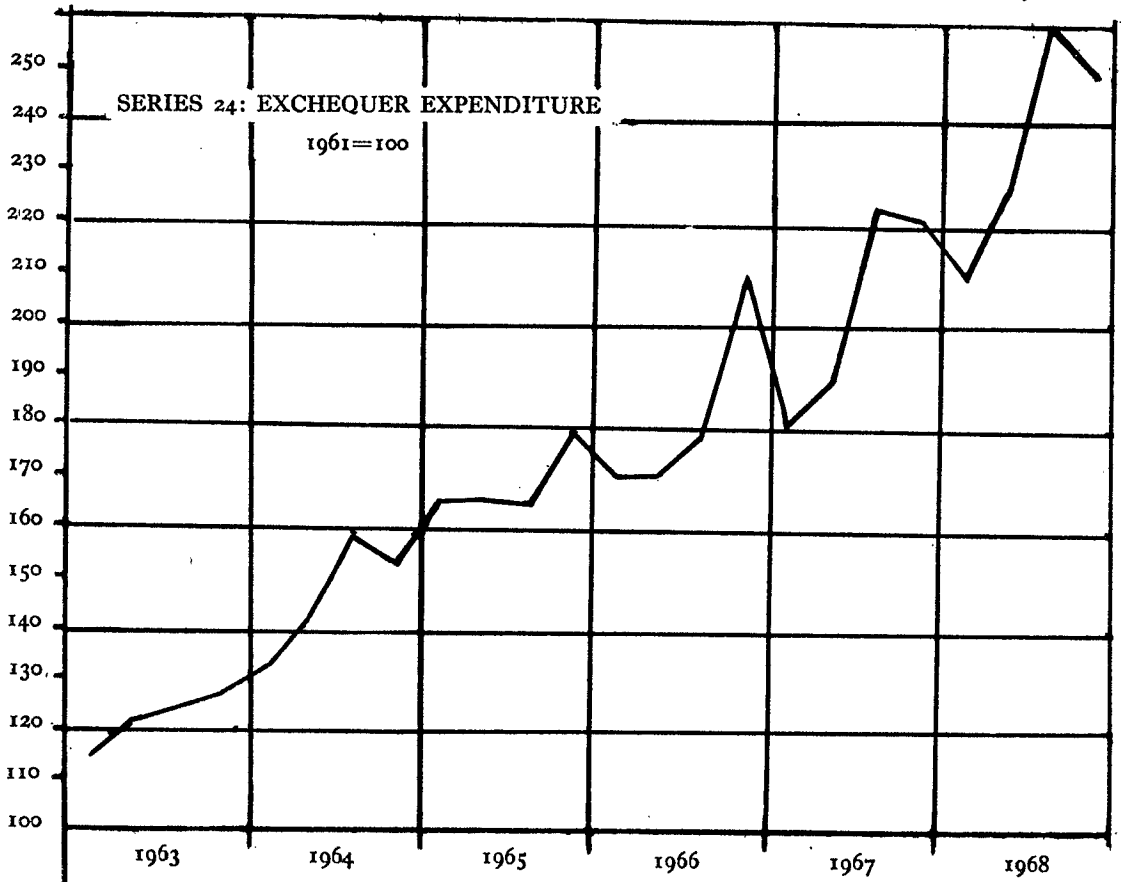
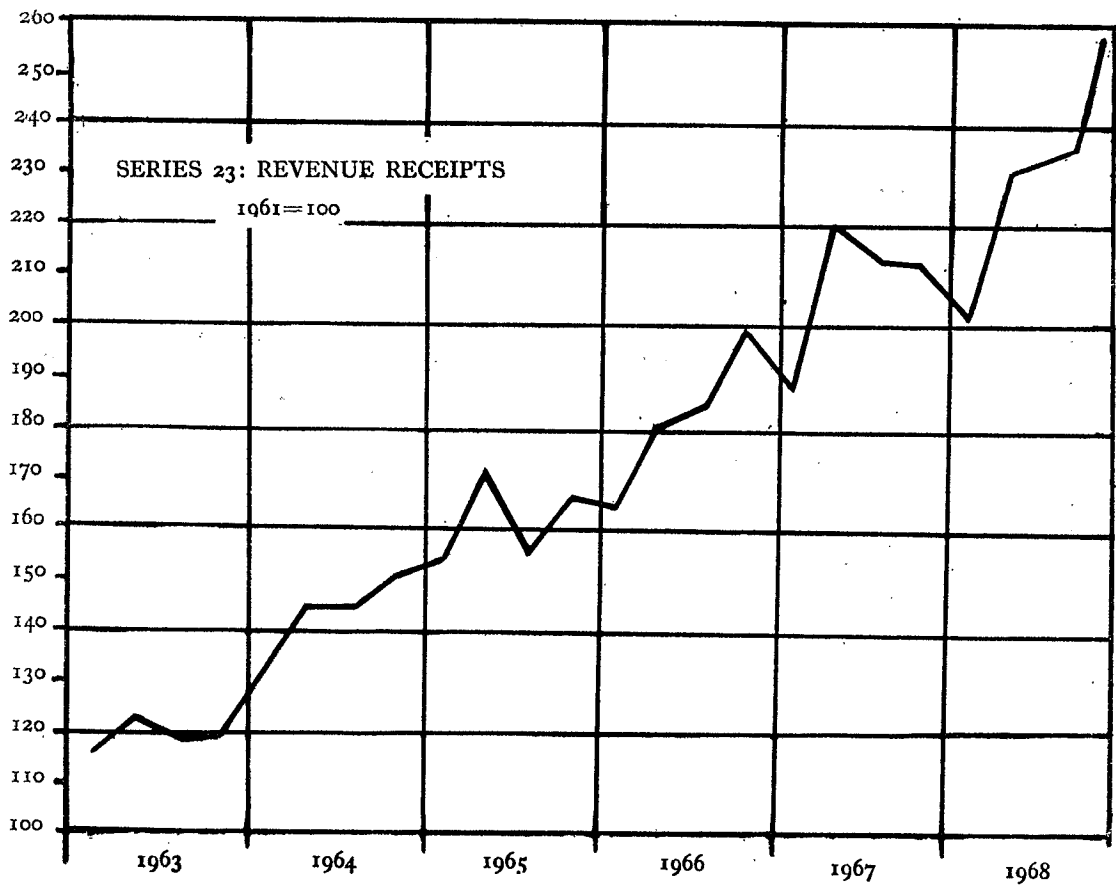
SERIES 21. RETAIL SALES INDEX



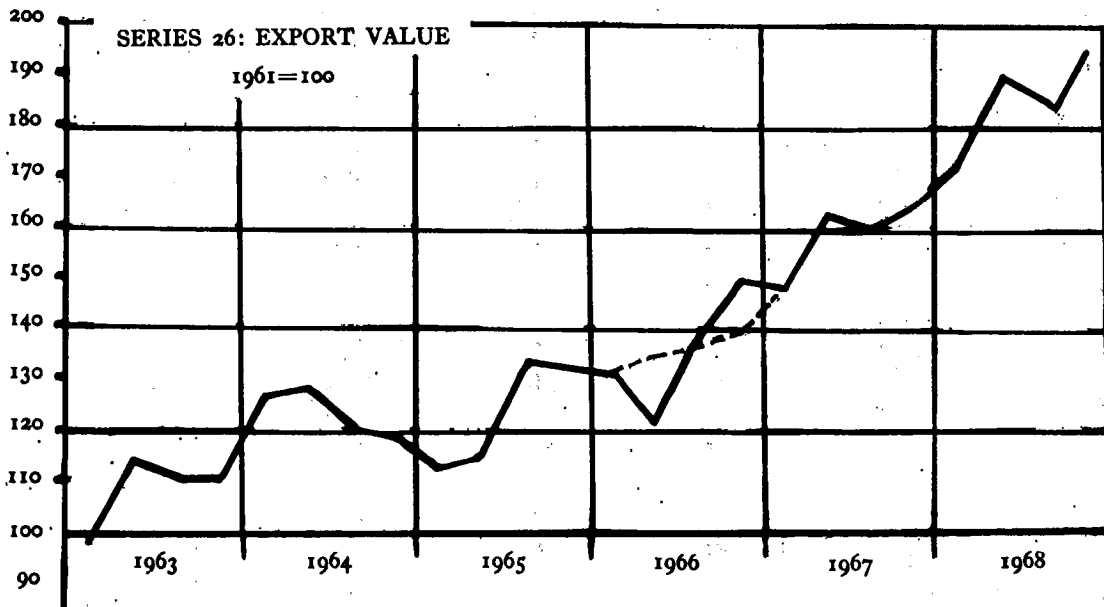
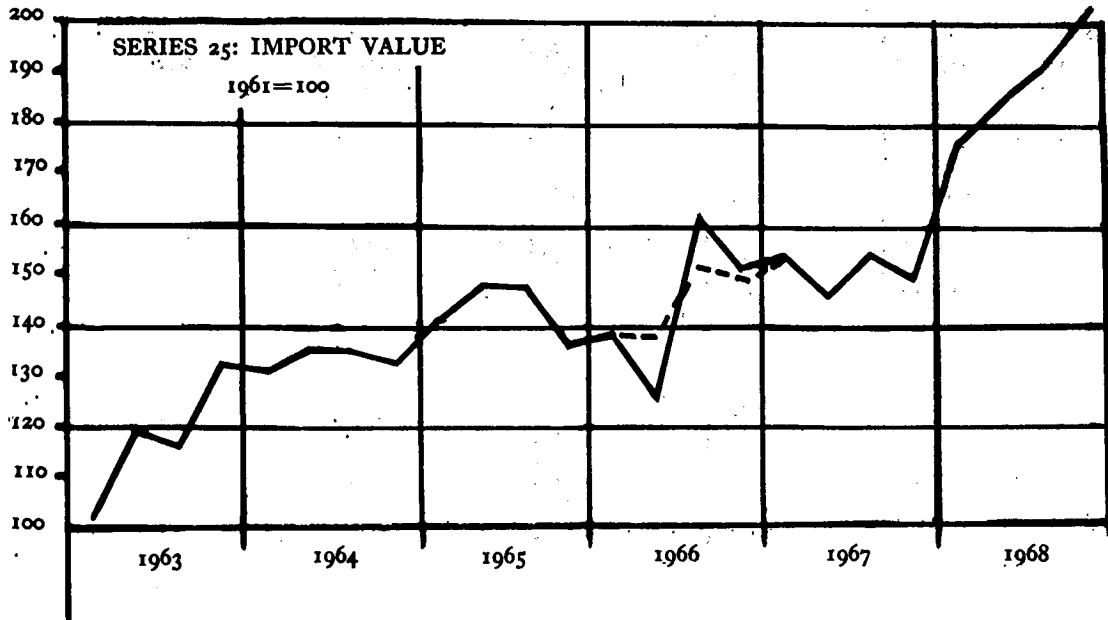
CONSUMPTION AND GOVERNMENT

SERIES 22: NEW CARS REGISTERED



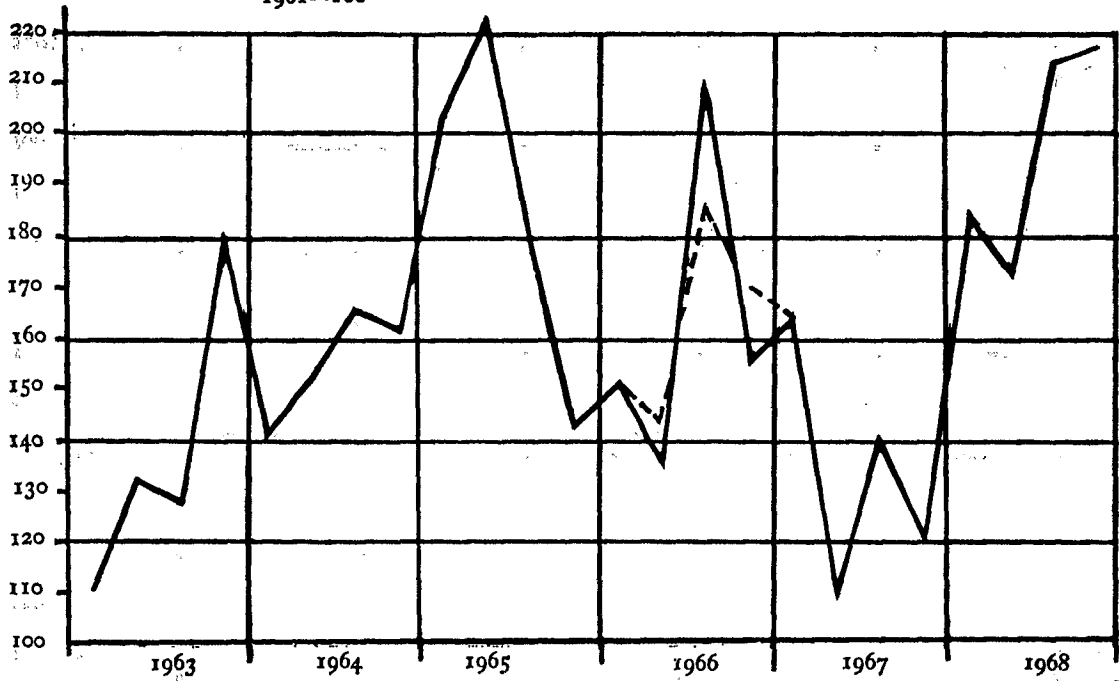


EXTERNAL TRADE



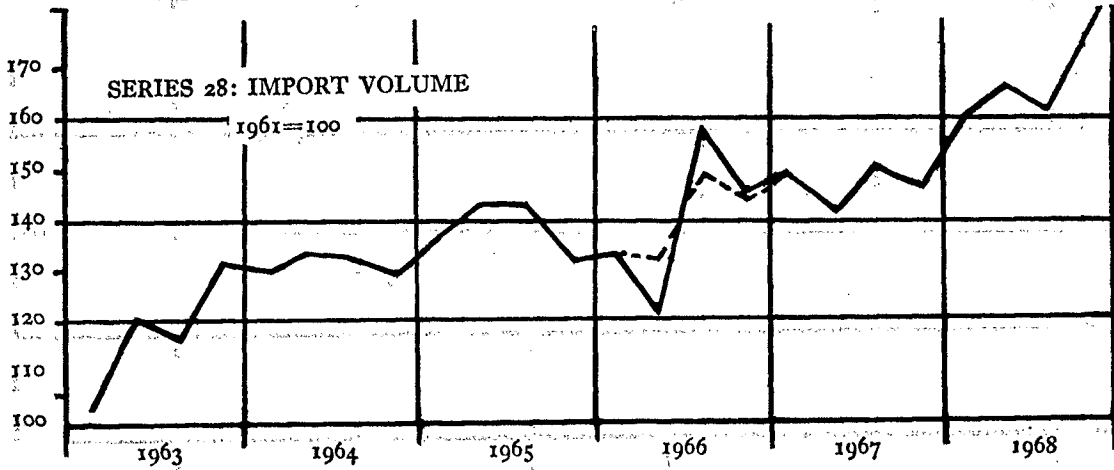
SERIES 27: IMPORT EXCESS VALUE

1961=100



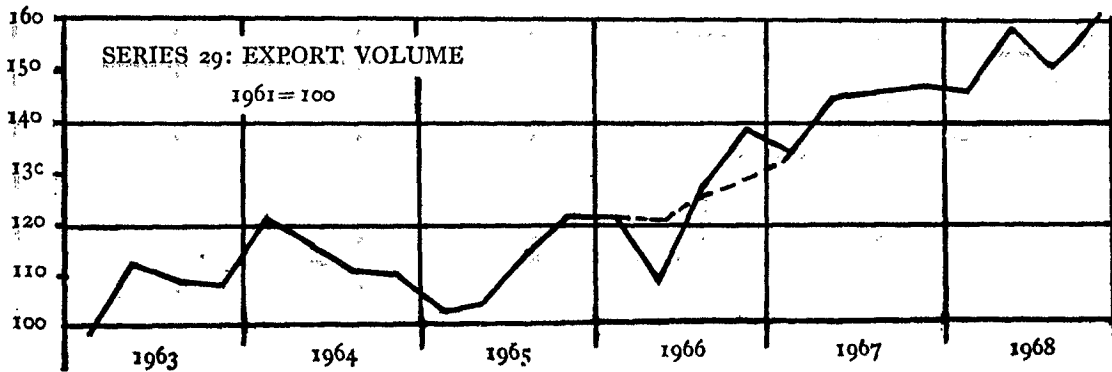
SERIES 28: IMPORT VOLUME

1961=100



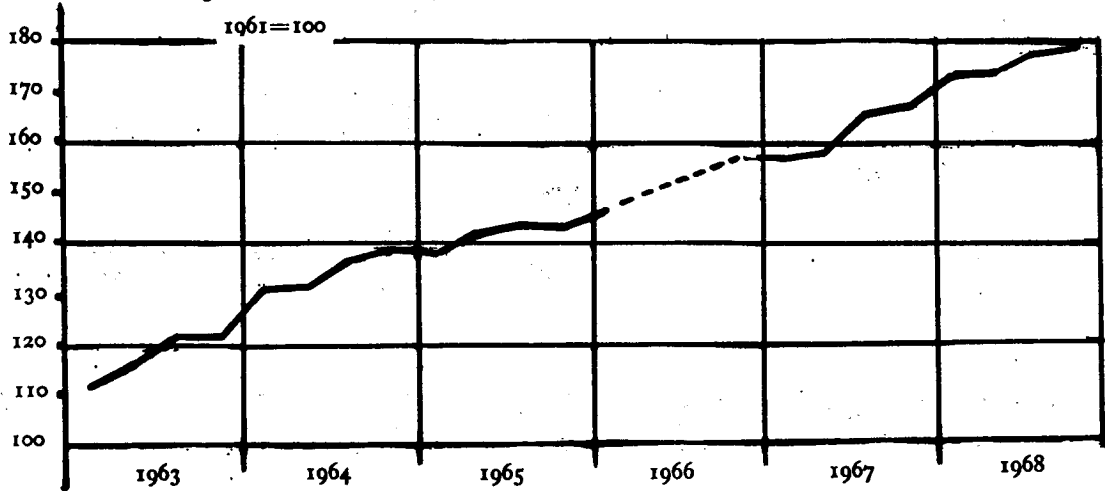
SERIES 29: EXPORT VOLUME

1961=100

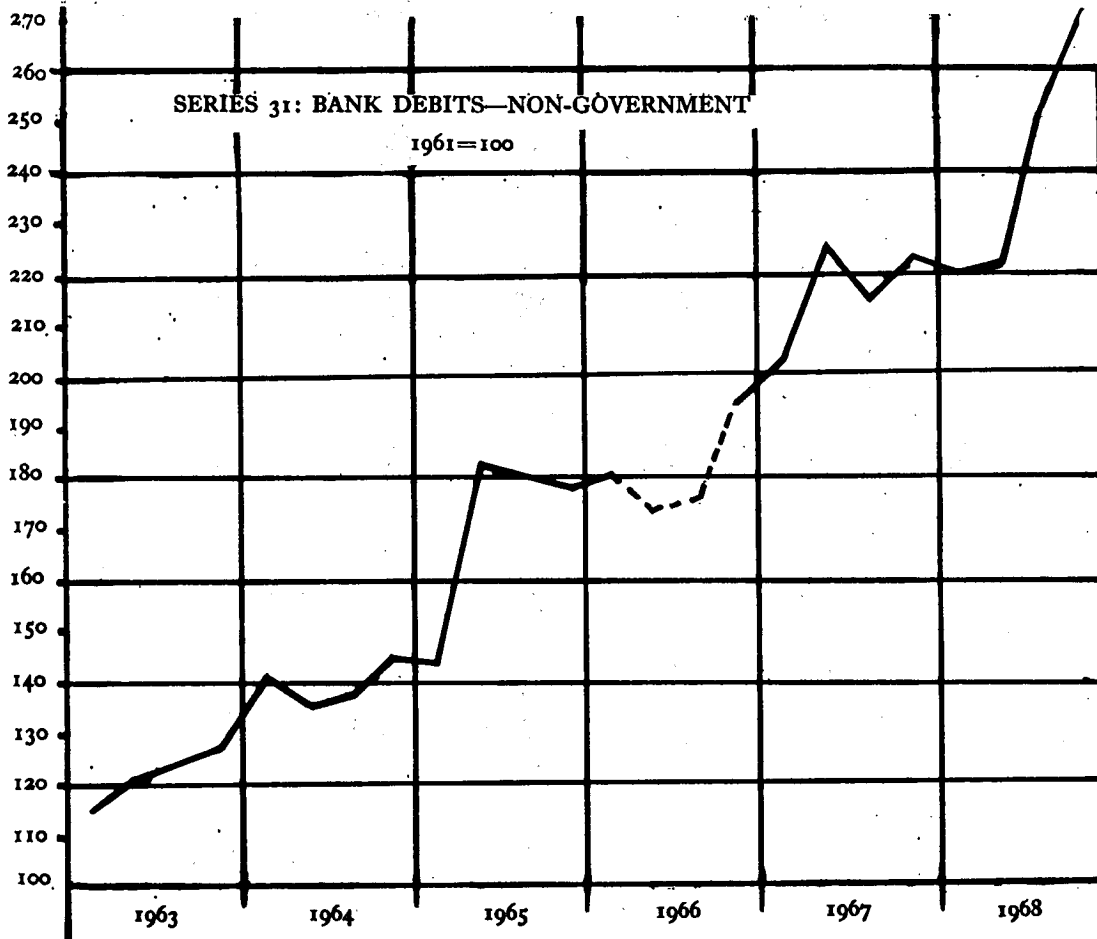


BANKING, FINANCE

SERIES 30: MONEY SUPPLY

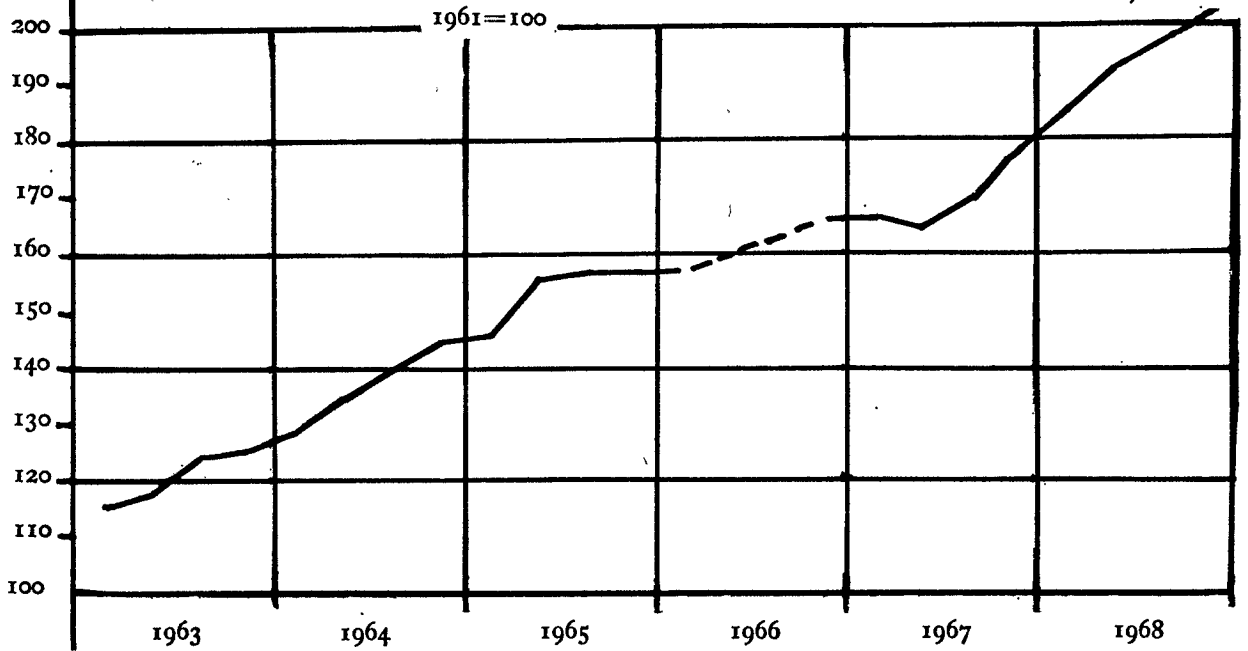


SERIES 31: BANK DEBITS—NON-GOVERNMENT



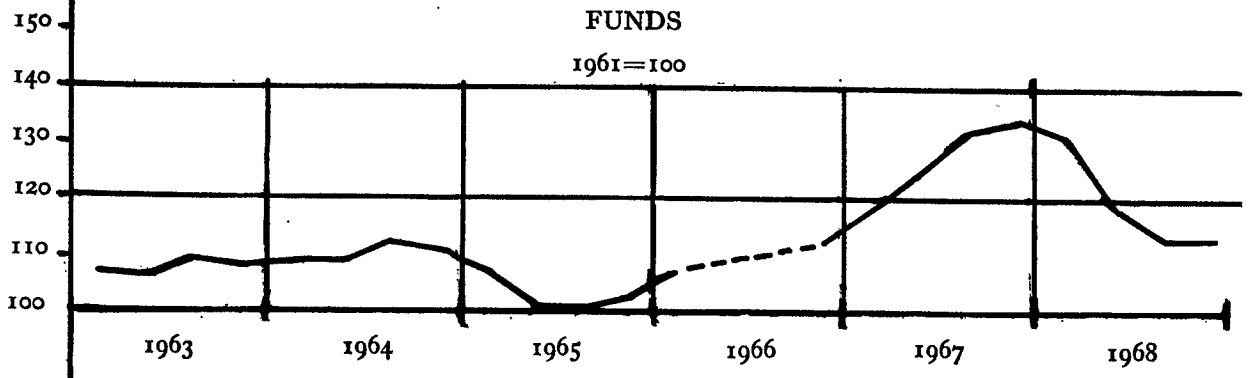
SERIES 32: BILLS, LOANS, ADVANCES, WITHIN STATE

BANKING, FINANCE



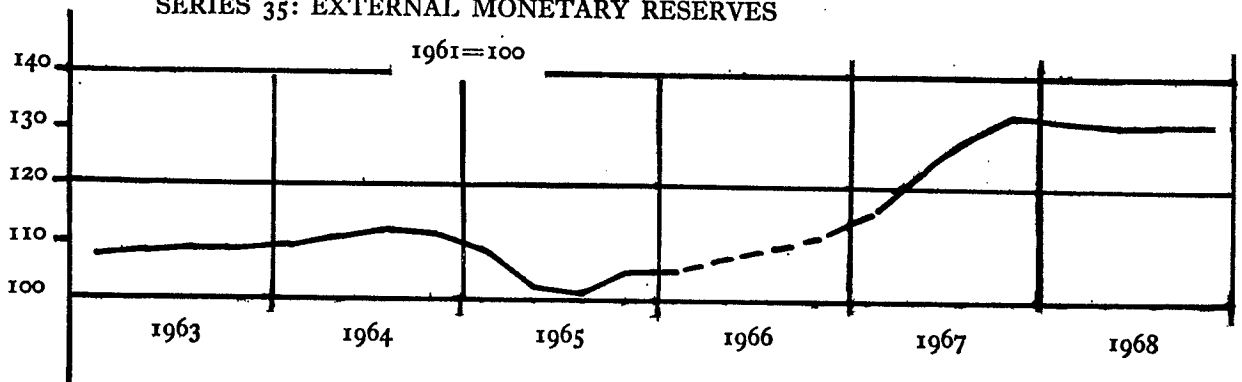
SERIES 34: EXTERNAL ASSETS, BANKING SYSTEM AND DEPARTMENTAL FUNDS

1961=100



SERIES 35: EXTERNAL MONETARY RESERVES

1961=100





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