A SYMPOSIUM ON INCREASING EMPLOYMENT IN IRELAND

DUBLIN MEETING

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The current recession has focussed widespread attention on the employment problem. The present difficulties are evidenced by the very high rate of unemployment, the falling level of employment in manufacturing, and the curtailment of many of the normal job opportunities for school-leavers. In this paper, however, I wish to draw attention to the longer-term employment position, which is compounding the short-term difficulties arising from world depression, and which, if allowed to persist, could entail a far more serious crisis than even the present difficulties.

THE SIZE OF THE PROBLEM

In a paper published by the National Economic and Social Council (NESC) earlier this year[1], Professor Brendan Walsh of the ESRI estimated the growth in the labour force up to 1986 on the assumption that net emigration would be maintained at a low level. His figures indicate that, between 1971 and 1986, a total of about 300,000 net new jobs, or 20,000 per annum, would be required outside agriculture to provide full employment,

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Walsh's figures covered the period 1971-86. What has happened since 1971? All the indications are that net emigration has been negligible. The latest comprehensive employment figures, which relate to April 1974, show an advance of only 7,000 net jobs per annum outside agriculture from 1971 to 1974 as against the required 20,000 per annum. There is every indication that the April 1975 figure will be less than in April 1974, and by April 1976 we shall be fortunate if the level of non-agricultural employment is as high as in 1971. If this is so, we will have made no progress at all towards the goal of 300,000 jobs. Since there are now only 10 years to the target date of 1986, the annual requirement has therefore risen to 30,000 net new jobs.

In the past, the highest rate of increase in non-agricultural employment recorded over any lengthy period was 10,000 per annum, or only one-third of what is now required. If performance is no better in the future, this would leave 200,000 persons without jobs over and above the level of unemployment contemplated by Walsh as normal (i.e., 4 per cent). What would happen to those persons? Only two options would be open to them, to remain unemployed or to emigrate. There is no certainty as to which they would choose. In similar circumstances in the past, the vast majority opted for emigration. This would be a solution of sorts, but it would be a solution by default. It would rightly be regarded as a failure on the part of this nation to cater for its people. It is one thing for people to go voluntarily; but emigration is not voluntary when those willing to work at home do not have the opportunity to do so. Resumption of substantial emigration would also have profoundly adverse effects on the morale of those remaining behind.

There are, however, reasons for thinking that many would be less willing to emigrate than in the past or, even if willing, would find it more difficult to do so. If large numbers remained unemployed at home for extended periods, the potential for social unrest would be considerable.

I am drawing attention to this problem, not to add further to the present gloom, but to emphasise that there is still time to do something about it as a nation if we so will. Indeed, to classify it as a "problem" is indicative of our negative thinking on the subject. Surely we need the work of all our people to build the kind of society we desire? The first step towards progress is to confront the issue squarely and to evaluate its size. It is necessary to inquire next whether present measures are adequate to cope with the challenge.

Is Present Progress Adequate?

There are two difficulties in trying to assess whether existing measures are sufficient to ensure an adequate rate of progress. The first is the worldwide depression which has been more severe than any since the 1930s, and which obscures the longer-term picture. The second is the incomplete data relating to employment. Not only are there no published manpower forecasts for the future in terms of location, industry, skill and so on, but we do not have anything like full knowledge of what has been happening in the recent past. Even for total employment, the latest published figures relate to April 1974. These data deficiencies are an indication of the fact that employment creation has historically enjoyed a relatively low priority in Ireland.

The major policy approach to the creation of new jobs is the industrial development strategy, which seeks to attract new industry in the manufacturing sector. Professor

Walsh's labour force projections did not divide the jobs target as between manufacturing and other industrial and services activities. However, a rough order of magnitude may be estimated as follows. Manufacturing employment in Ireland is about 27 percent of total non-agricultural employment. If this proportion held at full employment, the target for manufacturing would be about 6,000 net new jobs per annum over the period 1971-86. If, however, manufacturing is to be the main instrument of job creation in Ireland, then it would be more reasonable to assume that its share would have to rise to at least one-third of total non-agricultural employment. If we set the share at 33 percent by 1986, then the net jobs target in manufacturing would be about 10,000 per annum for 1971-86.

Comparing this target with the progress made in recent years, it emerges that the total number of net new manufacturing jobs created in the five-year period 1969-74 was only 5,500, or only about 1,000 per annum and equivalent to only one-tenth of the required number. Admittedly, this five-year period ends with 1974, the first year of the present depression. Even if we drop 1974, however, and take the four-year period 1969-73, the average net number of new manufacturing jobs was only 2,500 per annum, or one quarter of the required target. Thus, the inadequate rate of progress pre-dates the current depression.

Yet, this was a period of record performance for the industrial development programme, when 78,000 new jobs were "approved", a figure which exceeds total approvals in the 18 previous years since its inception. Undoubtedly, this represents a fine performance from the IDA viewpoint. The national viewpoint, however, must be concerned primarily with *net* new jobs, regardless of how many *gross* jobs are approved. That the two things are not the same can readily be illustrated by comparing the five-year period 1969-74 with the preceding decade. Despite the vast increase in job approvals, the average number of net new jobs from 1969-74 was only 1,000 per annum compared with 4,000 per annum from 1959-69[2].

It is highly relevant to the future to inquire why, even before the current depression, employment performance in manufacturing was so poor in recent years, and much less than in the 1960s, despite the enhanced level of activity under the industrial development programme. The common explanation is the rise in the number of job losses in established firms; and this, in turn, is mainly explained by two factors: rising labour costs and the impact of free trade. The former is usually considered by reference to the effect on prices of tradeable goods of changes in labour costs in Ireland relative to our chief competitors. But this may be to miss a large part of the case for incomes restraint in an open economy like Ireland with a fixed exchange rate. If, as is generally believed, many firms face highly elastic demand curves in the export market and highly elastic foreign supply curves in the home market, a reduction in real wages would make it possible to increase domestic supply and dispose of a higher output without any reduction, or only a slight reduction, in price. In addition, it would encourage relatively greater use of labour in the production of both tradeable and non-tradeable goods and, precisely because of this, it may be difficult to discern the importance of real wage restraint in increasing employment from a simplistic comparison of the trend of unit labour costs here and abroad.

The movement to free trade - whether through AIFTAA or the EEC - can validly be advanced as an explanation of a rise in the *gross* number of job losses. But can it equally validly be used as an excuse for a lower level of *net* job creation? The studies of McAleese which he interpreted as involving an unemployment rate of only 4 per cent. The bulk of the new jobs are required to cater for the increase in the labour force. The target is so high because Ireland faces a far greater increase in the labour force than other EEC countries due to a much higher rate of natural increase in population.

and Martin[3] imply that both AIFTAA and the EEC had a net favourable effect on total real income and the balance of payments but that both would be, in the absence of compensatory domestic policies, unfavourable to employment. Responsibility for translating the gains in real income and the balance of payments, arising from free trade, into increased employment lies chiefly with domestic policy.

In trying to distinguish these and other influences affecting manufacturing employment, we are gravely hampered by the unsatisfactory information on job losses and new jobs. The only agency attempting to provide comprehensive data on the matter is the IDA, and their figures for recent years are given in Table 1, reproduced from their latest Annual Report. These figures indicate that, in the four years 1971-74, 53,000 jobs were lost in manufacturing. If no job losses occurred in the grant-aided firms established in this period, the figures imply that more than a quarter of the manufacturing jobs that existed at the end of 1970 were lost in the next four years - and this before the worst effects of the recent depression on employment. On the other hand, if jobs were lost in grant-aided firms, it is insufficient to publish the gross new jobs without any indication of the job losses in such firms.

The provision of satisfactory information on these matters is primarily the responsibility of the CSO and the Department of Labour, and is of the highest priority if we are to be able to evaluate conclusively the implications of present policies and trends for the future[4]. Even without these data, however, it is clear that employment creation in manufacturing was quite inadequate, even before the depression, when measured against the proper criterion from the national viewpoint - net new jobs. Since the industrial development policy is the major instrument of employment creation, it can, therefore, be asserted with reasonable confidence that existing policies are not securing sufficient progress towards full employment.

NEW APPROACHES

I would now like to discuss briefly some ideas that might offer a greater prospect of success. The achievement of full employment is likely to require a re-orientation of attitudes and policies going far beyond the confines of industrial development policy. A plan for full employment could help greatly in establishing the framework within which these changes in attitudes and policies might be pursued[5]. The actual solution of the problem, however, depends on the response of the general public and the implementation of sound policies.

The Progression of Incomes

Public response is of the highest importance in the attitudes towards incomes increases of those fortunate enough to have steady jobs, whether they be manual or skilled workers, white collar employees or the professional self-employed. There is a clear choice between

TABLE 1: *Manufacturing employment, gross new jobs and job losses*

	Dec. 1969	Dec. 1970	Dec. 1971	Dec. 1972	Dec. 1973	Dec. 1974
1. CSO Quarterly Industrial Inquiry	198,200	199,200	195,800	199,700	207,500	203,700
2. Gross new jobs created Dec.-Dec. in manufacturing industry		Not available	+7,600	+16,900	+17,800	+16,200
3. Estimated job losses (redundancies, non-replacement, job shifts)		Not available	-10,000	--13,000	-10,000	-20,000
4. Dec. to Dec.: Net change		+1,000	-3,400	+3,900	+7,800	-3,800

Source IDA Annual Report, April-December 1974 higher real incomes and the growth of employment. There are some hopeful signs that, in the present depression, the trade-off between incomes and employment has achieved a wider measure of practical recognition than heretofore. Yet, the belief prevails that restraint need only be temporary, until recovery sets in, following which we can move towards EEC living standards. In fact, there is *no* possibility of closing the EEC income gap over the next decade and at the same time achieving full employment. This is made clear in a recent NESC paper[6], from which none of the parties on the NESC dissented. The report indicates that an average real growth rate of 9 percent per annum would be required from 1971-86 to achieve both aims simultaneously. Such a growth rate is so far outside the range of Irish experience over any extended period in the past that it may be ruled out as impossible. On the other hand, the report indicates that if we were to reach EEC standards with the same overall growth performance as from 1958-71 - a high rate by long-term historical standards - then employment would fall substantially: by 1986 there would be an employment short-fall of well over *half a million jobs.*

A change of attitudes is also required on the part of those in secure jobs to the use of government resources. Ireland has not only a major employment challenge but also a high dependency rate and large areas of poverty. Hence, the first calls on government resources should be the relief - and ultimately the elimination - of hardship. To the extent that scarce resources are used for other, less needy, purposes, there is less available for the really poor or for job creation.

The prevailing negative attitude towards profits is adverse to employment creation because of its inhibiting effect on new enterprise. Whatever the economic system - capitalist, socialist or labour managed - something akin to profits must be earned, both as a measure of allocative efficiency and as a means of providing resources for re-investment and expansion[7]. Actual profits have been badly affected in recent years. In the period 1968-73, at a time when real wages and salaries per worker rose by 6 per cent per annum, real net profits (including professional earnings, rent, etc) rose by only 3½ percent per annum. The position of profits deteriorated further in the current depression. In 1974, when real wages were roughly constant, real profits fell by 8 percent, while in 1975 when real wages were again roughly constant, real profits are expected to fall by 6 percent. Hence, the share of profits in non-agricultural national income has fallen from 24 percent in 1968 to 19 percent in 1975, while the share of wages has risen from 72 to 79 percent. It is small wonder that, in such an environment, private sector investment has been totally insufficient to provide enough jobs.

Perhaps equally inimical to new enterprise in Ireland is the degree of social censure attaching to business failure - a factor more likely to inhibit native, rather than foreign, entrepreneurs. The failure rate attached to grant-aided projects is low, indicating a low level of risk-taking, which is an understandable reaction to the extreme criticism directed at project failures. As a nation, we must be prepared to tolerate a higher failure rate if the *overall* net results are satisfactory.

Public Finance

Turning now to policy, the most important government instruments of economic and social development are public expenditure and taxation. A major emphasis of any plan, therefore, should be a clear definition of the priority objectives for each major area of public expenditure and taxation within the overall framework of the employment target. This would then provide the basis for a re-shaping of existing expenditure and taxation programmes to ensure that the priorities were achieved more effectively.

Public policy for economic development in Ireland has placed heavy emphasis on subsidies to capital. This applies not only to the new industry and re-equipment grants of the various development agencies, but is also manifest in many other areas of policy, such as accelerated depreciation allowances for tax purposes, more favourable treatment of borrowing than saving, etc. This approach may have been justified at an earlier phase of our history when there was serious deficiency in aggregate demand, and inability to use domestic savings for investment at home. The approach needs to be re-examined now, however, given the likely shortage of investment resources relative to the potential increase in the labour force. It is necessary to recognise that capital resources, including foreign borrowing, are relatively scarce and should, therefore, be employed economically to create as many jobs as possible. This may not be best achieved by incentives encouraging the demand for capital relative to labour.

The first task then is to make some forward estimates, based on broad policy assumptions, of the investment resources likely to be available to meet the jobs target. From this it would be possible to get some idea of the shadow prices[8] consistent with full utilisation of these labour and capital resources. Having done so, the next step is to devise policy instruments to ensure that these shadow prices are translated into practice in such a way that they will influence decision-makers at all levels, whether in the public or private sector. If the standard of living likely to be associated with the projected level of resource utilisation is considered unacceptable, then the major alternative, assuming we still want full employment, is to devise measures aimed at increasing the *supply* of investment resources. Since there are obvious limitations on foreign borrowing and direct foreign investment, and we cannot expect too much from the EEC Regional Fund, this points to measures to raise domestic savings[9].

In considering policy instruments to implement the approach outlined above, there are many practical, political and administrative factors to be taken into account as well as the purely economic. There would be obvious need, for example, to avoid undue disruption by switching too suddenly and too drastically; the more appropriate course would be to try new measures gradually while phasing out some of the existing ones. What I most wish to emphasise, however, is that there are alternatives to the present approach. Labour subsidies offer one possibility. I should stress that the case for labour subsidies in Ireland arises essentially because the market price of labour (i.e., wage and salary rates) is too high to permit full employment. The incentive effect of labour subsidies on employment could therefore be got equally well through a sufficient degree of real wage restraint. I should add, however, that captial subsidies tend to underpin higher real wages for those lucky enough to be employed but make it that much harder to reach full employment. Hence, while I am not *necessarily* advocating labour subsidies - there are many pros and cons - I am suggesting that the pros and cons be evaluated objectively in relation to other possibilities.

An alternative suggestion that I would like to propose for consideration would be to relate tax relief on profits directly to employment creation rather than, as at present, to exports and the accelerated depreciation of capital. The idea would be that in calculating profits for tax purposes, a firm could deduct from its revenue not just the wages of extra workers but also an additional employment premium per new worker. As is the case at present with export tax relief, the deduction would continue over a fifteen-year period so long as the initial rise in employment was sustained [10]. There would be many advantages in this approach. While encouraging employment, this form of incentive would not shore up inefficient firms since they would require to be profitable to get any benefit. It could readily be extended to import-competing manufacturing firms, which are now almost completely open to foreign competition, and to other industries such as tourism. It could conceivably be varied by the government to help enforce the norms for incomes policy.

There are still other possible instruments that might be considered in addition, or alternative, to the foregoing. The employer's social insurance contribution is a tax on increasing employment, with the extraordinary paradox that it does not apply to the public service where its disincentive effect would tend to be less that in private business. This might be stabilised or possibly even reduced, and the revenue foregone might be recovered by increased contributions, proportional or even progressive to income, payable by those already in employment, including the public service. Industrial savings could be encouraged by reduced taxation of retained profits. The personal income tax code could be made more favourable by personal saving, with the possibility of differentiated tax rates on income saved as against income spent.

It will be noted that these measures are directed towards two prongs of a new development strategy: (i) to ensure that factor prices reflect their true opportunity costs to the economy, so as to reconcile efficiency in individual decisions with national well being and, in particular, with the achievement of full employment; and (ii) to increase domestic savings so as to secure the maximum *sustainable* progression of real incomes consistent with full employment. The measures should be looked on as possible alternatives to each other, and to some or all of the existing measures. It is *not* suggested that we pile incentive on incentive. Rather, the central notion is that of choosing from among a variety of policy incentives that package which will maximise the use of scarce resources in the creation of adequate employment.

THE USES OF RESOURCES

Once we have got our thinking straight on the broad outlines of the strategy and the appropriate policy incentives, the third prong of any development strategy must be to ensure that resources are in practice fully employed and used to the best advantage. Maintenance of a high growth of aggregate demand is an important aspect, but one which normally should not present insuperable problems: real wage restraint would encourage exports and past experience shows that fiscal policy is capable of maintaining a high growth of domestic demand. The more challenging task is that facing the development agencies and consists primarily in identifying, developing and re-shaping Ireland's areas of comparative advantage - particularly those that have been relatively neglected - whether they lie in land, minerals, or, most important of all, people.

Education

Among the development agencies, I include the education authorities. Perhaps in no area of public policy is change more urgently required to introduce a sense of economic reality. At present, the vast majority of teenagers in Ireland are engaged in full-time academic studies, and many will emerge from the secondary schools qualified only for clerical-type work in which there is likely to be a large labour surplus over the next decade. At university level, at enormous cost to the State, we seem to be educating many more doctors and arts graduates, for example, than we can hope to employ at home. On the other hand, there are generally shortages of skilled tradesmen other than in depressions like the present. Unless we can build a comparative advantage, that is not yet obvious, on current education patterns, there is need for a major re-direction of education towards greater emphasis on the industrial arts[11].

Education and training must therefore be better geared to equipping people with the skills likely to be in demand in business[12]. There are promising signs that the educational authorities are beginning to move in that direction, and AnCO is making strenuous efforts on the training side. There are, however, significant gaps. Take industrial design, for example. This embraces much more than craft and aesthetic activities. Of greater importance from the viewpoint of industrial development is the design of utility goods, whether for consumers or producers, to ensure convenience in use, accessibility, creation of more space, durability, etc. This aspect of design is difficult to distinguish from the simpler forms of technological change. As such, it is an activity particularly suited to a small country, with a high general level of education but without the resources or the background for large-scale research in heavy industry. To build up this area, we might consider sending a few hundred young students for training abroad, particularly to the Scandinavian countries, in the hope that a proportion of them would return to set up small businesses of their own, or pioneer new designs in existing firms. At present, we send half a dozen. The excellent work of Kilkenny Design Workshops might also be extended by making it a springboard, after an initial training period, for launching craftsmen into their own commercial workshops - something which has already begun to happen on a small scale.

Industrial Development

Some of what I have said already has obvious implications for industrial development policy, in particular concerning the role of capital subsidies and recognition of the complementary role of the home market. Furthermore, the record of achievement to date suggests a comparative neglect of the country's natural advantages in, for instance, the processing of food and minerals, the development of which would also secure greater regional diffusion of the benefits of industrialisation. This relative neglect is clear from Table 2 which shows the average annual increase in employment in food manufacturing and in mining over the last three five-year periods, 1959-64, 1964-69 and 1969-74. For both industries, the rate of net job creation is low and has been declining rather than expanding. The picture is particularly disappointing in mining where there has been scarcely any increase at all in the last five years. There would be less cause for concern about the poor employment performance in mining if the output of the industry were being processed at home, thereby giving jobs in other industries, but this has not yet happened. There are indications, however, that the authorities are now more alive to the potential of these two major industries, including the prospect of exploiting offshore oil and gas, and we may hope for a better performance for the future.

TABLE 2: *Annual average increase in employment in food manufacturing and in mining in five-year periods*

Five-Year Period	Food	Mining
1959-64	840	240
1964-69	740	140
1969-74	420	20

Source *Census of Industrial Production,* and *Quarterly Industrial Production Inquiry*. The picture for the latest period would not be changed much by omitting 1974, the first year of the present depression.

Plans are now being formulated by the IDA to make a more determined effort in future to develop a larger pool of native entrepreneurs. These plans, however - as well as the industrial policy generally - should pay due regard to the cost of capital. Where shortage of capital is a constraint for a new firm, it would seem more sensible to supply this by way of loan rather than outright grant, with the proviso that there should be a more liberal attitude towards risk-taking than can be afforded by the commercial lending agencies. The risks might be mitigated to some degree if other state-sponsored bodies saw it is part of their role to "spin-off" enterprising staff members into new small businesses. These bodies would have the great advantage of experience of the man as well as the project, whereas a body like the IDA would necessarily have more limited knowledge of the man. It is not always the man making the best project proposal on paper who will be the most successful in practice. Another possible approach would be to make special efforts to attract back Irish entrepreneurs successful abroad.

The IDA is also seeking to develop native firms to produce the "buy-in" requirements of the larger firms established under the new industry programme. This is an excellent idea that might also be extended to the buy-in requirements of the government purchasing agencies - the Board of Works, the Stores Branch of the Post Office and the Stationery Office - and of some of the large state-sponsored bodies. These agencies could also give the lead in fostering native industrial design by the standards set for their purchases.

Other Sectors

While manufacturing and mining may provide the main thrust towards full employment, it would be unwise to neglect the possibilities for development in other sectors, or to assume that sufficient jobs will be induced automatically through multiplier effects. The most important means of bringing unskilled workers into employment quickly is building and construction activity in the widest sense. There has been a tendency in the past to regard many forms of construction activity as inefficient and wasteful, and perhaps this was true of some forms. But what could be more wasteful than paying people for doing nothing when these people are willing and able to work? It is not suggested that such construction employment should continue indefinitely. But as a short-term expedient it could make a significant contribution to a long-term solution in two ways. First, by bringing the unemployed into work, it would raise their morale and facilitate their training for other activities. And, second, these persons could undertake many useful tasks in providing recreational facilities, for example, which would not only be enjoyed by the community at large but would also increase the tourist attractions of a given locality. This idea is now being tried on a small scale and deserves encouragement. As regards tourism, much scope exists for greater exploitation of the potential of our recreational facilities (such as horse riding, fishing and camping), and for the development of native cuisine based on Irish foodstuffs, whether from land, river, lake or sea. Often the defect lies in the local efforts to market facilities already available.

More employment could be provided in some professional services were it not for the existence of restrictive practices affecting the use of para-professionals. The latter could be trained at less expense and would command lower incomes, so that the volume and employment content of such services could be expanded at little extra cost. The professional associations can scarcely point the finger at trade unions when their own restrictive practives are often extensive and powerful. The task of breaking down such practices might be eased given a prospect of full employment, though there is no doubt that changed attitudes towards incomes would also be important. Negative attitudes towards status of particular types of work are also a deterrent to expanding some forms of employment, and the recent French idea of seeking to alter such attitudes might well be copied. Jobs as mother's helps, for example, enjoy a low status even though, looked at objectively, minding babies is surely as dignified as minding machines. To some degree, the low status image could be overcome by training leading to a para-professional qualification.

The development of export activities in some commercial services, such as advertising, finance and consultancy might also be pursued with greater vigour. New opportunities will arise following the conclusion of bilateral agreements on economic, industrial, scientific and technological co-operation which Ireland is currently preparing to negotiate with a number of countries in Eastern Europe and in the Middle East [13]. There would be as much economic justification for providing incentives to such exports as to manufacturing exports. The location of government services in the underdeveloped regions could help to increase total employment in various ways. First, it would generate a higher level of induced activity in these regions than it would in more developed areas. Second, the social costs of congestion would be less. And, third, regional dispersion of some of these services would be less costly than in the case of some manufacturing industries which depend more on proximity to market or central transport services.

In the rural sector, the possibility of combining part-time farming and paid employment could be further explored. In this regard, there is much to be learned from experience in some European countries, such as Denmark. Present policy seems to be to concentrate on farm efficiency and improving farm size to the degree where the household can have a viable income from farming alone. This implies forcing out uneconomic holdings, and if the households involved relocate in urban areas there are many social costs involved, such as housing. Instead, it is now beginning to be recognised in Europe that a better approach might be to retain the holding while supplementing farm income with paid employment. This could be of a part-time nature as in forestry, which meshes in well with farm activity in the sense that it can be done when the latter is at a low point. In other cases, the employment might be in local industries or services, which would usually imply that the farm work would have to be done in the evenings and at the weekend, or by the spouse or other member of the family. The farmhouse holiday scheme is a notable example.

SUMMARY AND CONCLUSIONS

In this paper, I have drawn attention to the scale of the employment challenge over the next decade and concluded that existing measures are not meeting that challenge satisfactorily. Some may find this conclusion depressing. It is not intended to be so. There is no reason why full employment should be regarded as an impossible dream for Ireland. It is bad enough that we are not progressing towards this goal, but it would be much worse to deny the fact. Only by admitting it, can we hope to secure the changes in attitudes and re-thinking of policy which I believe necessary.

I have indicated what I consider to be the required changes in attitudes and policies, and have suggested that these might be pursued best within the framework of a plan for full employment. I stressed the role of real incomes restraint and the need to modify public expenditure and taxation in the light of national priorities and relative factor endowments. I then discussed some concrete development possibilities that have been relatively neglected. Some of these might have only a small impact, but many small things can add up to something big. The great mistake would be to imagine that there is any single all-embracing formula that will automatically ensure the desired result. I hope that many others will turn their minds to thinking out new development possibilities. We need all the help we can get.

REFERENCES

1 *Population and Employment Projections: 1971-86*, NESC Report No. 5, (Dublin. Stationery Office, February 1975).

2 The IDA warn that new job approvals "should be interpreted carefully" since "projects build up employment over a period of years". Nevertheless, their most recent Annual Report claims that 58,500 actual jobs were created in the *four* years 1971-74 - no figure is available for 1970 - and that these mainly derive from IDA activity. If that is so, the short-fall between jobs approved and actual jobs would not explain the weaker performance in recent years, which, it must be emphasised, pre-dates the depression.

3 McAleese, D. F. and Martin, J., *Irish Manufactured Imports from the UK in the Sixties The Effects of AIFTA* (Dublin: ESRI Paper No. 70, 1973); and McAleese, D. F., "Ireland in the Enlarged EEC: Economic Consequences and Prospects" in J. Vaizey (Ed.), *Economic Sovereignty and Regional Policy* (Dublin: Gill and Macmillan, 1975).

4 It would appear that data on gross job losses and gains could readily be derived from data on manufacturing establishments already on file in the C.S.O. In establishments where employment is down compared with the previous year, the difference is roughly equivalent to the job loss figure we require, and aggregation of these losses would give a good estimate of total job losses in manufacturing. The IDA could also help in relation to grant-aided firms by publishing the results of its annual census, dividing the data into job losses and gains, and relating the data to the "approved", or projected, employment figures on which the grants were based.

5 The type of plan envisaged is a specification of the foreseeable problems of the future and the steps that will be taken to solve these problems - those steps to be decided following a detailed analysis of the strengths and weaknesses of existing policies in relation to alternatives. It is not important that the plan be sophisticated in technique, but it is vitally important that it be frank and impartial.

6 *Jobs and Living Standards Projections and Implications*, NESC Report No. 7 (Dublin· Stationery Office, June 1975).

7 This is not to say that all profits are equally desirable. Particular vigilance should be exercised regarding the operating margins of sheltered businesses (such as the banks). If these margins were too wide, they could result in excessive profits, wasteful spending, or concession of disruptive wage and salary claims.

8 The notion underlying a shadow price may be explained simply as follows. If the going wage rate is £50 a week but an extra worker will add only £40 a week of additional output, then an employer cannot afford to hire that person. On the other hand, it could well be in the national economic interest that he be hired since he would then add £40 to total output whereas he produces nothing when unemployed. The worker will be brought into employment if it is possible, by whatever means, to reduce the actual price to the employer of hiring him to the shadow price of £40 a week.

9 It is true that at present there appears to be a surfeit of domestic savings, but this is a temporary phenomenon associated with the depression and the resulting uncertainty on the part of consumers and investors.

10 It may be objected that such an incentive would run counter to EEC policy. The same is true, however, of some of the existing incentives but these were specifically exempted. We must impress upon the EEC that Ireland faces a longer-term employment challenge of vastly different character from other EEC countries, including Italy; and, in the absence of a realistic Regional Fund, we must press for greater freedom to adopt appropriate policy instruments until full employment is reached.

11 To say this is not for a moment to deny that education should seek to develop "the whole man". However, "the whole man (or woman)" spends a good part of his (her) life at work, and what is being asserted is that, for many, the education process fails to equip them with ideas and skills relevant to the type of work likely to be available to them. Moreover, with a more constructive approach, there is no reason why education in the industrial arts could not enrich the "whole man". Further, through night classes - given the same flexibility and variety in academic education as exists in the adult education programmes of vocational schools - those who so wished could advance their intellectual knowledge further once they had a job.

12 The common objection to this approach is that the state should not compel individuals to take a particular form of education. Of course it should not, but that is not the point. The state can, however, devise economic incentives that will, in the aggregate, aim to secure the desired result. In particular, the state can get rid of some of the existing incentives operating in the wrong direction. At present, for example, the state subsidises upwards of two-thirds of the cost of university education

for all students regardless of means. This not only encourages participation in university education to a degree that may be excessive for the nation at its present level of development, but may also discriminate against the poor. Those who benefit come mainly from the middle and upper classes while the burden of taxation falls on the community generally.

13 For fuller details, see Garret FitzGerald, *Irish Foreign Policy within the Context of the EEC* (Discourse to Royal Irish Academy, November 10, 1975).

M. J. Killeen

INTRODUCTION

For a number of reasons I believe that your Society has chosen an appropriate time for initiating a fresh look at our policies for creating the jobs needed over the next decade:

* There is a concensus emerging that there will be an economic recovery in Ireland and OECD next year;
* The Minister for Finance has stated his intention of publishing a new programme to deal with structural trends in the economy;
* The NESC has this year spelled out the arithmetic of full employment and the implications for jobs and living standards. The set-back to employment deriving from the recession and the population rise in the working age groups make it imperative that we get back to the full-employment growth path so thoroughly plotted out by the NESC;
* It is just over five years since the last major piece of industrial development legislation, the Industrial Development Act 1969, came into operation in 1970 and we have considerable experience in operating the policies and incentives provided for that legislation. Indeed, we are currently revising our five-year regional plans in the light of that experience.

The time is ripe, therefore, for a genuine national debate which looks *critically* at our current batch of policies and instruments to create and preserve jobs and what we are achieving with them and which looks *creatively* at modifications of them or new policies which might be introduced to improve employment-creating performance. The IDA welcomes wholehearthedly such a debate which we approach openly and positively. We are continually looking for ways of carrying out our industrial development mandate more efficiently and effectively and we welcome suggestions for new initiatives or changes in our present approaches. We look forward to the chance of articulating some of our experience of dealing with the realities of modern industrial life.

(When I speak of policies in this paper I am referring mainly to the strategic policy areas for which the IDA has been given responsibility in the legislation. The IDA acts under the Minister for Industry and Commerce, who is responsible for the broad national industrial policy).

My mind goes back to 1958, which saw the publication of Dr. Whitaker's analysis of Irish economic development. The national debate at that time on economic strategies and the publication by the Government of the day of the First Economic Programme were the prelude to the faster economic growth of the Sixties.

Whitaker's book provided a vital factual analysis of the entire range of economic policies and his conclusions commanded widespread support at that time. It provided a good basis for nationally deciding on and implementing policy changes.

Today, some 17 years on, we are again at a "watershed" in our economic development with renewed discussion of full employment prospects and with a new economic programme due for publication.

Today, the environment for industry is more complex than it was 17 years ago; membership of EEC and new trading agreements provide new constraints as well as opportunities; world economies are moving more closely in step whether into boom or recession; industrial technology and markets are more volatile; the average scale of investment needed to support viable jobs in industry is rising; job losses due to new technologies or shifts in market demand are now much more significant features of industrial economies worldwide.

If the prescription for tomorrow is to be the right one, the diagnosis of the state of industry today must be well informed, up-to-date and based on a full examination of real life experience.

I make a plea therefore that we do not waste time seeking the simplistic solutions; todays industrial world is too complex to respond to that approach. We must look in depth, first of all, at the complete range of our industrial policies and programme for home and overseas industry and fully understand them and then we must critically assess their effectiveness in operation. We must look at the likely characteristics of international trade and industry in the next decade in terms of technologies and market trends. We must take account too of industrial development in the Third World countries and its effects on prospects for our existing industries and for potential new industries which we might consider establishing here. Against that background we must select the strategy best fitted to reach full employment in the 1980s.

1. The IDA Experience Since 1970

The IDA operating experience of the past five years and the results of our own analysis of that experience as well as research which we have commissioned can provide a useful input into current evaluation of policies and strategies. There are a number of general observations I would make on our recent industrial development experience:

First, the scale of industrial investment commitments since 1970 exceeded that for the entire preceding life-span of the IDA since its inception in 1950. Since April 1970, a period of just over 5 years, we have approved industrial proposals from home and overseas sources with a potential for 95,000 jobs at full production compared with

68,000 in the preceding 20 years. We have therefore the recent experience of handling industrial development proposals on an unprecedented scale. Due to time-lags between initial IDA discussion and actual start-up which can take three to four years in the case of large scale investments, many of these industries are still only at the construction or start-up stages. I recognise that this creates a problem for researchers endeavouring to get a statistical basis for evaluating industrial policies. We have, however, spelled out in our Annual Report the relationships between job "approvals" and actual jobs and we publish detailed information regularly on the industries we support. Much of the analysis of, and comment on, IDA policies has been based on data which is out of date, in particular, the survey of grant-aided industry published in 1967. The rate of change in terms both of the quantity and quality of industrial investment during the past decade and especially towards the end of that decade have been such as to render virtually useless for policy development purposes the pre-1967 data on which that survey was based.

Second, we have come to appreciate that providing the full range of back-up services needed by industry (i.e., in addition to IDA activities, grants and other incentives) is a complex process which depends on a host of development agencies working in a planned and synchronised way: local authorities in providing water and sewerage; planning authorities, the IIRS and An Foras Forbartha in assessing and advising on complex planning application; the banks and Industrial Credit Company in completing financial packages; Coras Trachtala marketing services; AnCO and the National Manpower Services providing the trained labour force, and so on for the ESB, Department of Posts & Telegraphs, CIE, etc. From an operational viewpoint, the institutional co-operation and joint financing needed for industry is an immense administrative problem. Certainly, the IDA alone without the services of these other agencies, could achieve virtually nothing. That so much has been achieved in the past five years is a tribute to the level and quality of the co-operative effort by all these agencies.

Third, the IDA as part of its corporate philosophy has, in recent years, deliberately embarked on a whole range of initiatives to create more industrial jobs and a sounder industrial economy. I think it is worth listing some of the new components of our industrial policies which were non-existent, or in their infancy, five years ago:

- the move beyond manufacturing industry into export oriented service type industries such as consulting engineering and computer software. Projects already approved in the past year and a half under this programme will require over 1,000 engineers, architects, technologists and technicians.
- the acquisition of a countrywide industrial land bank of some 4,000 acres. This has facilitated the speedy establishment of many industries which might otherwise have located elsewhere abroad.
- the taking of equity shareholdings in seven major industries the most recent being a 45 per cent stake in a joint venture between Irish and Japanese interests aimed at providing a sound basis for growth by a long established Irish firm, Arklow Pottery;
- the stimulation of Irish enterprise in small firms with less than 50 workers under a special Small Industries Programme.
- the introduction of a scheme to foster Research and Development in Irish industries.

Investment commitments under this scheme increased rapidly during the past five years from £42,000 (1970) to an estimated £850,000 in 1975 with the number of individual research projects rising from five in 1970 to an estimated 150 this year;
- the provision of substantial training grants for industry to provide the vitally needed skills. These grant commitments for training alone are of the order of £15m since 1970. In addition to their significance in giving Irish workers skills they also act indirectly as a once and for all contribution to labour costs in the high cost start-up stage of new industries.
- joint ventures, loan guarantees, interest subsidies and other financing mechanisms have been used;
- a regional industrial development programme based on a strategy of bringing jobs to the people, was published in 1972. The implementation of that programme to date has demonstrated the feasibility of substantially accelerating industrial development in the worst-off regions of the country;
- selectivity in restructuring and modernising industry with tripartite guidance by the Irish Congress of Trade Unions, the Confederation of Irish Industry and the State;
- Attraction of fully integrated high technoloy projects with full R & D back-up e.g., Merck Sharp & Dohme, pharmaceutical plant in Tipperary.

This list gives some idea of the dynamic nature of industrial development; it has to be, because the environment for investment can change quickly at home and overseas and we have to respond quickly. For example, during the past five years we have had to cope with the Northern Ireland situation, threats to our incentives, high inflation, and the worst international recession since the 1930s.

There is a great deal of new knowledge available to IDA and to our own Minister and his Department on the potential and limits of different approaches to promoting industrial investment. I do not wish to imply by this that we know all the answers; we are learning all the time, not infrequently from our own mistakes. We are anxious that this store of knowledge in the IDA be fully available to a wider public. Through our Annual Reports, our monthly magazine, "IDA News", and through the detailed announcements of projects, we already publish extensively on our activities - both the good news and the bad news. While it may not all be within the covers of one book it is, nevertheless, relevant data freely available.

We have, ourselves, commissioned outside researchers to carry out a number of systematic studies. For example, the study by Dr. P. N. O'Farrell "Regional industrial development trends in Ireland 1960-73" has recently been published. Another study by Dr. Dermot McAleese which will carry forward the 1967 survey of grant-aided industry is now well advanced and will be published as soon as it is ready.

2. How Big is the Industrial Development Challenge?

The sheer magnitude of the job creation task facing Ireland must be a governing factor when we come to choosing the best combination of industrial development approaches. We have the smallest industrial sector in the EEC, we have normally the highest employment rate, a fast growing population and we are setting out to reach full employment over the next decade.

Consequently, even if an exclusively "small industry" approach and/or an exclusively "natural resource industry" approach were the most attractive to us they will not suffice if they cannot deliver the jobs we need in this time span.

Proposers of specific approaches must be faced with a basic question. How many jobs can this or that approach generate in 1975-86 on different assumptions relating to national inputs or resources? Some policies may be highly desirable for social or strategic reasons but may take too long to mature; they may be incapable of making anything like the contribution to job creation which we need up to 1986.

In addition to simply creating jobs, there are other objectives to be aimed for simultaneously; the resultant industrial structure should have a high probability of growth in the decades ahead; we must avoid becoming too dependent on a particular sector of industry; we must aim to achieve a reasonable regional balance within the country; the jobs must not be in frustrating repetitive operations but must match the aspirations, skills and educational attainments of our people; industry must not be developed at the cost of polluting the environment.

The basic arithmetic of job creation in manufacturing which we have derived from the NESC projections to 1986 can be simply stated:

a) the non-agricultural employment target for 1986 is 1,080,000 and implies a *manufacturing* workforce then of 325,000.
b) due to the current recession, the *manufacturing* workforce at the end of 1975 is likely to fall to 215,000.
c) therefore, a net additonal 110,000 jobs in *manufacturing* is required in the years 1976-1986 inclusive to achieve 325,000 jobs in *manufacturing* by 1986, that is, a net addition of 10,000 a year.
d) *in addition*, we must aim to replace the job losses which will occur over this period, particularly during the next five years. These losses are likely to be in the range of 75,000-100,000, unless there is a quick, substantial and sustained economic recovery internationally.
e) the gross new job creation required from manufacturing is, therefore, in the range 185,000-210,000, an average of 17,000-19,000 a year.

While these figures for gross job creation are huge in comparison with averages over, say, the past decade, it is well to point out that the figures for actual gross new jobs created in industry during the two years to December 1974 were of this magnitude i.e., 17,800 in 1973 and 16,200 in 1974. The crucial variable will be the rate of job loss in the coming years. (The total job creation need is, of course, much greater than the figure which I have been mentioning because the service sector and non-manufacturing industry sector - construction, mining, etc. - must generate their share of jobs i.e., an estimated net increase of almost 200,000 during period 1976/86).

3. *Key Issues in the Industrial Development Debate*

i) The small industry approach

It is a fundamental aim of IDA policy to tap the enterprise capabilities of our own people to the limit. We want to see more Irish entrepreneurs - craft workers, technologists and executives from private and State firms, and Irish men and women returning from abroad - setting up their own businesses to employ, initially, maybe five persons and, ultimately, progressing to employ much larger numbers.

We have gained valuable experience in this field during the past five years or so. After study of the experience in Scotland, Denmark and other countries the Small Industries Programme was introduced nationally in 1969 to encourage Irish entrepreneurs. To date some 1,200 small industries have been backed under this programme to give a projected 12,000 jobs at full production. The IDA Small Industry Division has a total staff of 30, specialising in this entrepreneurial field backed by County Development Officers in every county. About 150 projects are being approved each year with an average of 10-15 jobs in each project.

Under the *Research and Development Scheme,* many of these industries are being assisted to develop new products or improve processes. This investment can and frequently does lead to further investment and jobs.

We have now formulated proposals for a more extensive Enterprise Development Programme and these are under consideration by the Minister for Industry and Commerce.

Small industry development is a slow process; an individual does not often employ 100 men or women in a new industry from the start. He builds up slowly over five years or more by expanding his markets and by reinvesting the profits as they are earned.

ii) Are we getting the maximum from existing industry?

Our first commitment is to get the maximum number of jobs from existing firms in Ireland. In our planning, we treat "new overseas" industry as the "residual" element between the industrial proposals we can generate internally and what is needed to reach agreed objectives of full employment. New overseas investment is therefore a necessary supplement in order to bridge the industrial job gap on the way to full employment. As the number of jobs from existing industry increases and accounts for rising shares of national industrial job creation, so also can the share of new jobs sought from overseas diminish. This will, however, be a slow phasing-out since the number of jobs needed in the next decade will, in absolute terms, be much higher than our achievements of the last decade. Most of you will be familiar with our Re-equipment Grants Schemes and our New Industry Grants Scheme which are used heavily to back existing industry. Given our priority commitments to getting the most jobs from Irish sources, we have now taken initiatives to identify specific industrial opportunities which could be exploited by existing firms.

Our working knowledge of the evolving industrial economy in Ireland is enabling the IDA to identify a wide range of new industrial investment opportunities. Here are some examples of such opportunities:

* The new grant-aided industries in Ireland have very substantial requirements for raw materials, components, packaging and specialised services. Information available to IDA indicates that in addition to their expenditure on salaries and wages, a high proportion - of the order of 50 per cent - of the expenditure by these new industries goes on goods and services of Irish origin, for example, raw materials, packaging and transport. We are now systematically identifying their purchasing patterns and have come up with many possibilities for new spin-off industries or expansions.

  Import substitution for some of the £1,600m merchandise imported annually offers potential for manufacturing here. Again these imports are being screened in conjunction with Irish importers and manufacturers and worthwhile projects are now emerging.

A Product Identification Unit was established within IDA last year to develop these opportunities and is already in discussion with industry on 30 specific projects.

* Where we identify major sectoral gaps in industry we are prepared to put together a proposal for a new or expanded industry to fill such a gap and seek a sponsoring Irish firm. For example, consultants commissioned by IDA produced a feasibility study for a modern foundry in Ireland capable of supplying the expanding Irish engineering industry with castings in the volume and tolerances now needed. We have put this proposition to Irish firms and are ready to back a project with capital and training grants and to participate ourselves with a large equity stake.

* The beef industry is one where we have many comparative advantages. A year long consultancy study by the industry and the possibilities for additional "high added value" manufacturing is being completed for the IDA. In consultation with the Departments of Industry and Commerce and of Agriculture and Fisheries, CBF and An Foras Taluntais, we will use this study to guide the industry's development path in coming years.

These initiatives indicate our continuing commitment to a very positive role in identifying specific investment opportunities and encouraging and assisting Irish business to go after them. We are now completing a major re-structuring of our own internal organisation so that we will be better equipped to fulfil this growing role.

3. Capital Intensive - v - Labour Intensive Industry

There is plenty of room for differences of opinion as to sectors of industry which offer the best market prospects and job creation potential, and on the capital intensity of industries which IDA should seek out and support.

There are a number of important points to be borne in mind in discussing these issues. Let us look, for example, at the question of capital intensity about which there appears to be serious misunderstanding.

The IDA operates over a wide spectrum of capital intensity from an average of about £2,000 per job under our Small Industries Programme to an average of about £15,000 for new overseas industry.

The following table of fixed asset investment per project under the new industry and small industry programmes in the first nine months of 1975 shows the frequency of projects approved at different capital intensities.

Fixed asset investment per job in projects approved by IDA - Jan-Sept '75 under New Industry and Small Industry Programmes

F/A per job	*Number of projects*	Cumulative percentage
Under £2,500	74	39
£2,500-£5,000	56	68
£5,000-£10,000	30	84
£10,000-£15,000	20	95
£15,000-£20,000	2	96
£20,000-£30,000	5	99
£30,000+	3	100
Total	190	100

The spectrum of industries measured in terms of projected employment also ranges from as little as two or three employees to as high as 1,500 to 2,000. The following table of projects approved in the first nine months of 1975 illustrates:

Size of project by job range in projects approved by IDA in Jan-Sept '75 under the New Industry and Small Industry Programmes

	Under 10	10-50	50-100	100-200	200-500	500+	Total
No. of projects	60	79	25	14	5	7	190
Cumulative %	32	73	86	93	86	100	100
Total employment	288	1957	1634	1947	1210	5664	12700

Thus in the case of 73 percent of the projects the grant was approved for an employment increase of less than 50 jobs. Some 86 per cent of the projects related to grant approvals for less than 100 jobs.

We are seeking the maximum number of viable projects right across the range of capital intensity and project size because the national need for jobs is so great. At one end, the Small Industry Programme hunts for the labour intensive industries in terms of relatively low capital investment per job. On the other end of the scale, we have identified and seek growth industries such as pharmaceuticals, chemicals, electrical and general engineering, synthetic fibres and food which are by nature capital intensive. These are also the industries which can produce, in one project perhaps, 1,000 or more jobs which can transform the economic prospects of areas of high unemployment such as North Mayo, Letterkenny, Tralee, Kilkenny and so on. Although capital intensive in one sense, they can also create the largest concentrations of employment in the fastest time. They provide high quality jobs for the graduates of our third level educational establishments for which there are very limited opportunities in the smaller scale industries. But since we adjust our grant levels to reflect employment, quality and numbers in every project, we find ourselves paying up to 60 per cent of the capital cost of many small industries and as little as 5 per cent for some of the very capital intensive ones.

We generate and approve for grant support, a wide variety of industrial projects all of which we are glad to have, provided they meet commercial viability criteria and are not, for example, "dirty" industries or low wage, "cut, make and trim" type operations with little prospects in the medium to long term.

In general one finds that "growth" industries are those industries which call for more and more capital inputs. Looked at another way one finds that the pool of labour intensive industries with growth potential is fast diminishing. Given the high need in Ireland for the maximum number of job creating industries, we need to take all we can get across the spectrum at the present time. To date, we have not experienced the luxury of turning away viable industrial projects because they could not use native raw materials or because their potential linkages in the economy were not fully to our liking.

Competition for "mobile" overseas industries is keen between European countries. Britain, for example, offers automatic grants of up to 22 per cent of capital costs in many areas. Increasingly, the Middle East, South America and virtually every country in the

Third World are seeking and competing with generous incentives to attract overseas industry. So, too, are the less developed regions of the highly industrialised countries like France, Belgium and the USA.

The textile sector illustrates many of these changing realities and serves as a useful case-study. Two years ago, the cost of machinery in a weaving industry approved by IDA was £12,000 per worker; we are currently considering another weaving industry where the capital cost of machinery per worker is £33,000, that is, almost a threefold rise in two years. Indeed, in this latter project, the individual skilled weaver would be managing looms valued at one-quarter of a million pounds (£250,000).

In the textile industry, yarn and fabric producers in Europe will become increasingly specialised in manufacturing sophisticated yarns and specific end-use fabrics for a high quality expensive market segment.

Opinion among top textile companies in Europe is that conventional spinning and weaving will increasingly pass from European locations to Third World countries. Machinery will be sold secondhand from Europe to African and Asian countries. The medium to low quality end of apparel manufacturing (CMT) is now, and has been for a considerable time, concentrating in Third World locations and is likely to continue to do so.

The rate of industrial job creation required in Ireland in the next decade is so high in relation to our existing industrial base that our approach must be to get "all cylinders firing". The strategy must be one of innovation and experimentation in adding to our current strategies for creating jobs in industry; it must be one of allocating the maximum available resources to the task of job creation. We cannot afford to shut out any source which is currently supplying viable industries.

4. *Concepts of natural resource based integrated industry, linked industries, self-generating industry*

In the course of evolving new and modified industrial strategies it is worthwhile looking at certain concepts which recur:

the concepts of natural resource based industry, integrated or linked industries, self-generating industry.

First, industry based on ones own natural resources has obvious attractions. One should aim to perform the maximum downstream processing within the country and thereby add higher value to the basic material before export.

Agriculture is the prime such resource in Ireland at present and this has been the sector of Irish industry in which we have concentrated most of our investment in recent years. Since April 1972, we have backed planned investment of close on £100m by co-operatives and food companies, largely Irish owned, to make a wide range of meat and dairy products destined mainly for the European market. (It is worth noting that food processing is capital intensive; *average* capital investment per projected job in recent years was about £10,000).

Even with the massive investment of the past three years the job potential at full production in approved food projects has been about 2,500 per year in this period, a valuable but nevertheless small fraction of our needs.

Fish processing industries will continue to be promoted and grant-aided by us in consultation with Bord Iascaigh Mhara.

Exploration and development activities related to *oil and gas* in the North Sea and Irish Continental Shelf will generate many manufacturing opportunities leading to expansions of existing firms and establishment of new ones. The IDA for its part will strive to have the maximum related manufacturing carried on in Ireland. If oil and further gas finds are made, the decisions on the national use of these resources will be a matter for the Minister for Industry and Commerce. Evidence of the industrial possibilities from using gas is already shown by the decision of NET to construct an ammonia plant using gas from the Kinsale field. Some 500 permanent jobs will be created by this industry and IDA is contributing £5m to the capital cost of over £50m.

Downstream industries from oil and gas; will of course, require large construction workforces over a period of years. Looking at the time scales needed to bring oil ashore and build on-shore processing industries it may be close to the mid-1980s before jobs in related chemical manufacturing could be generated in significant numbers.

Second, industries which use imported raw materials can achieve vertical integration in the many subsequent production stages in Ireland, can generate through the application of high technology most of the final sales value in Ireland, can create substantial spin-off business for Irish firms supplying goods and services to them, and can provide us with the production stages offering the best return of jobs for capital invested.

The science based industries such as chemicals, pharmaceuticals and synthetic fibres make low bulk/high technology products, where transportation costs are not a crucial cost factor. Their heavy investment in plant in Ireland and the availability of the top notch chemists, engineers and craftsmen in Ireland serve to "anchor" these industries into the Irish industrial structure.

By getting increasing numbers of overseas firms (such as GAF and Burlington) to use Ireland as their European manufacturing base we are creating future possibilities for diversification and downstream development in Ireland by such companies. These companies are making a long term commitment to Ireland because of the capacity which we have demonstrated to provide a profitable base for growth industries geared to the EEC market.

Thus, even where the initial stage(s) of production is not established in Ireland and they are not based on natural resources, the great bulk of the benefits in terms of downstream industry and jobs can accrue to us. For example, in these industries, there are many stages of production with bigger job numbers and lower capital intensity coming at the later stages. The two Asahi industries in Killala will create 1100 jobs producing and spinning acrylic fibre for an investment of £50m and have potential for further downstream industries in Ireland. The upstream industry to make the imported raw material, acryonitrile, is normally produced in a plant costing about £30m employing 150-200 workers so that the capital cost per job is much higher at this phase.

The average capital investment per job (as distinct from the IDA grant per job) at this level is about £150,000 per job compared with £65,000 per job at the fibre stage and £14,000 capital investment per job at the spinning stage. In our negotiations on projects of this capital intensity we place limits on the grant per job we are prepared to pay. We have had discussions with companies in the past years on "upstream" petrochemical industries. We have not been able to secure any of these projects largely we believe because we were not prepared to pay as much as our competitors in other countries.

In our view the benefits from such industries were too small in relation to the cost to us of getting them.

Third, linkage between industries is desirable but need not manifest itself in the form of a single factory supplying another specific industry. I have indicated already that, apart from salaries and wages, some 50 percent of expenditure by grant-aided industry goes on goods and services of Irish origin. This is manifested in increased industrial purchases from an enormous range of small and large supplying industries in Ireland. This demand is reflected in higher sales and jobs in these firms. This is the pervasive difficult-to-see linkage which is part and parcel of a modern economy.

Fourth, manufacturing plants which are not part of a fully integrated industry can nevertheless display "self-generating" growth by embarking on expansions of their initial factory to meet increasing market demand. In the nine months to December 1974, for example, one-third of the projects from existing firms approved for new industry grants involved expansions by overseas sponsored firms. Much of this expansion is financed by re-investment of profits already made in Ireland.

In moving towards a self-sustaining, closely-linked industrial economy, I believe more fundamental debate and analysis of the concepts involved is desirable. We are currently in the course of commissioning a research project into a series of questions on linkages - what is the extent of the industrial linkages in the economy, who are the beneficiaries and what are the implications?

5. *What Should We Do in the Short-Term?*

It is common to think only of new jobs coming from the building of a new factory on a greenfield site. All too often, the time-lags involved in establishing new industries are not understood. As explained earlier, it frequently takes 3-4 years from initial negotiations with IDA to the worker recruitment stage in a new plant. While new factories are needed, an enormous extra job contribution can come in the short term from the physical plant, i.e., buildings and machinery, already there, but not operating to full capacity.

Ireland should come out of the current recession with the most modern and best equipped industries in Europe because:

i) there has been massive investment in modernisation by Irish industry (£80m investment committed in past two years alone);

ii) there has been a big shake-out of less efficient plants (over 100 factories have closed in the past two years with the loss of 6,000 jobs);

iii) high class new overseas industries have been established on an unprecedented scale (planned investment in fixed assets of over £400m during past two years).

It should be noted also that:

two-thirds of jobs lost in manufacturing in 1974 and 1975 were lay-offs from industries still intact but working at a reduced level. Over 90 per cent of firms have spare capacity now.

over and above the normal productivity increases, increased home or export demand is met by taking on additional workers up to the limits of the plant's physical productive capacity, e.g., every extra export order or success in the Guaranteed Irish campaign can support the expansion of manufacturing employment.

In short, therefore, the key to more jobs in the short to medium term is increased home and export demand for the products of our existing industries. This will come only from a combination of increasing relative competitiveness and rising home market and increased international demand. These factors will also influence long-term new investment.

6. *Priority - Productive Industrial Investment*

Because of the national urgency of dealing with the growing unemployment levels and rising number of school leavers, I believe that the State's capital resources for industry should remain committed as a priority to productive investment, that is, to investment which will yield an adequate return to the community in output of competitive goods and services. (State support for firms which cannot survive in the market place would be wasteful of scarce State resources).

The investment by IDA in new industries fully matches this criteria. O'Farrell in his recent study has calculated that the grant cost per job created under the New Industry Programme in 1960-73 was £2,069 at 1973 prices. A preliminary analysis of costs and benefits associated with this investment shows that summing together the direct and indirect tax flows, unemployment and social welfare payments saved, the discounted present value (DPV) of the benefits less the IDA grant costs is £2,445 over five years. (It is of interest to note that the net discounted benefits after two years come to £2,094 and exceed the original direct IDA grant cost of £2,069 in creating the jobs).

If one applies a very conservative multiplier effect, one manufacturing job should create half a job in the services sector and if one conservatively takes the net DPV of this as £2,040 after five years, the total net DPV of the initial IDA investment of £2,069 in one industrial job is £4,485 after five years (£2,445 + £2,040), i.e., a high ratio of exchequer benefits to IDA grant costs.

The data is summarised below:

a) Direct IDA cost of job created under the New Industries Programme (1960-73) at 1973 prices	£2,069
b) Net Discounted Present Value (DPV) of the benefits less IDA grant cost over five years	£2,445
c) Net DPV over five years of induced job assuming multiplier of one manufacturing job to half services job	£2,040
d) Total net DPV after five years of initial IDA investment of £2,069 in industrial job	£4,485

This net gain to the exchequer, large though it is, is however, only a fraction of the net gain to the country as a whole in terms of the increase in national output, the positive balance of payments effects, the contribution to education by the training of workers and the introduction and diffusion of technological expertise. Productive investment in industry continues to offer the best prospects of creating and inducing long-term employment while giving a very high return quickly on the State investment.

7. Financing the Industrial Programme

Assuming an industrial strategy geared towards full-employment is technically feasible and we succeeded in winning enough investment proposals from home and overseas sources to meet our target, the large capital funds necessary to support the strategy would still have to be found.

The IDA has estimated that £400 m in capital will be required for its direct costs in implementing a new five year industrial plan on the scale discussed here.

In addition, funds must be provided for infrastructure directly related to industrial development if the plan is to succeed, e.g., for water supplies, sewerage systems and telecommunications. Unless a location can provide these services, then an industrialist will not settle or expand there.

Substantial capital funds will, therefore, have to be found to meet IDA's direct cost and those of associated industrial services and these funds will have to be applied in time and in a co-ordinated way to the industrial effort in each region.

CONCLUSION

I would conclude by pulling together the various "strands" I have considered.

The challenge to the manufacturing sector as its contribution to full employment in 1986 is to produce about 200,000 actual jobs over the next 11 years and achieve a net increase of 110,000 after replacing job losses. Based on intensifying and extending our present policies in the ways I have suggested, I believe, this is feasible. The 200,000 jobs could, I envisage, be generated as follows:

a) The small industry approach	
- enterprises with up to 50 employees including "spin-off" industries	40,000
b) Other domestic sources	
- recovery of jobs lost in recession, agri-industry, oil, gas, minerals, expansion and diversification by existing industries	80,000
c) New overseas industries	80,000
	200,000

One of the strengths of the Irish system of industrial development is the continuity of our policies:

- we have avoided sharp zig-zags in industrial incentives and have been able to communicate over the years to industrialists at home and abroad the basic incentives for manufacturing.
- our system which has worked reasonably well has evolved over the past 25 years.

There is plenty of room for building on this historically evolved framework for encouraging industry. However, before throwing out a system which has proved its capacity to deliver in the past five years more job creating industrial proposals than in the preceding 20 years, I would need convincing evidence that an alternative approach would give better results in delivering those elusive combinations of resources we, in the IDA, call "good projects".

Irrespective of the final strategy adopted there are a set of preconditions - frequently taken for granted - which must be met, if the full employment objective is to be attained. I would list the most important as follows:

a) Return to consistent economic growth rates at home and overseas of 4% and over.
b) Continued political stability at home and community support for the national industrial development programme.
c) Our ability to maintain an internationally competitive range of industrial incentives including a responsive reward system for Irish firms taking the risk associated with manufacturing industry.
d) Restraining the rise in unit wage costs well below the experience of recent years.
e) Matching the industrial promotion effort at home and overseas with the sites, water, effluent disposal capacity, skilled workers, telecommunications, transport facilities needed by industries if they are to operate.
f) Continuance of a high flow of "mobile" industrial investment into Europe.

I have concentrated in this paper on the issues facing me as a "practitioner". There are, of course, wider political and social issues which are outside the scope of my mandate. For example, there is the acceptable balance of home/foreign industries in our economy and the power of the Government to control the influence of multinationals on the economy. There are fundamental social issues such as the cultural effect of rapid industrialisation.

Table 1: *Fixed asset investment per job in projects approved by IDA Jan-Sept '75 under New Industry and Small Industry Programmes*

F/A per job	Number of projects	Cumulative percentage
Under £2,500	74	39
£2,500- £5,000	56	68
£5,000-£10,000	30	84
£10,000-£15,000	20	95
£15,000-£20,000	2	96
£20,000-£30,000	5	99
£30,000+	3	100
Total	190	100

TABLE 2: *Size of project by job range in projects approved by IDA in Jan-Sept '75 under the New Industry and Small Industry Programme*

	Number of projects	Cumulative percentage	Total employment
Under 10	60	32	288
10- 50	79	73	1957
50-100	25	86	1634
100-200	14	93	1947
200-500	5	86	1210
500+	7	100	5664
Total	190	100	12700

TABLE 3: *Total net present value of IDA New Industry Grants 1960-73 as calculated by Dr. P. N. O'Farrell in "Regional Industrial Development Trends 1960-73"*

	Costs	Benefits
(a) Direct IDA cost of job created	£2,069	
(b) Net present value of benefits over 5 years from manufacturing employment created		£2,445
(c) Net present value of benefits of 'multiplier effect'		£2,040
Total	£2,069	£4,485

Donal Nevin

Without apology, I would preface my remarks by some quotes from the final chapter of the National Industrial Economic Council's Report on Full Employment:

> "In our view, there is no recipe for reaching full employment easily, quickly and painlessly.
>
> Full employment, with rising standards of living, reasonable stability in prices and equilibrium in the balance of payments can be achieved in Ireland only if there is the will to achieve it, and the willingness to give it precedence over subordinate and sectional objectives.
>
> Full employment may be accepted as a desirable goal but the policies which would work for its attainment may be rejected because they would not at the same time achieve the goals of particular localities, groups or interests.
>
> In the last resort then, the questions raised in this report concern the will and conscience of the whole community. To harden the will and arouse the conscience of the community will require dynamic leadership and sustained backing ...
>
> Without such leadership , particularly in the political field, the policies which will raise living standards and expand employment will not be chosen and implemented".

Self-evident truths no doubt, are tiresome in the repetition. But nearly nine years have elapsed since the publication of that NIEC report. Has the will to achieve full employ- really existed, or the willingness to give it precedence over other objectives? Has there been the readiness to accept the disciplines, actions and policies needed to realise it? Where has been the dynamic leadership and sustained backing not only in the political sphere but in other spheres as well?

The magnitude of the task of achieving full employment at living standards acceptable to our people, is abundantly clear from the demographic and employment projections made by Professor Brendan Walsh for the National Economic and Social Council and in subsequent NESC reports. The depth of the present recession and the horrific level of unemployment already reached (nearly 10 percent of the work force) - with higher levels threatened - are sufficient indications of the considerable efforts that will be necessary to achieve anything like full employment in the foreseeable future.

In this situation, it is tempting to seek some grand new strategy - a whole set of new policies - that will succeed where past approaches have failed. Tempting but futile. Certainly some new departures in policy and a changed emphasis in existing policy are necessary but in *most* policy areas the solution will be found in the energetic and imaginative application of policies such as already have been proposed by the NIEC and NESC, the acceptance of more rigourous sectional discipline and the avoidance of actions that cut right across the achievement of the goal of rising employment.

For the purposes of this contribution to the symposium, I am assuming that about half of the additional jobs that need to be created to achieve full employment, must be found in the industrial sector either through the expansion of existing concerns or the establishment of new enterprises, and that the remaining half or so will be found in the construction industry and in the services sector, largely as a result of the multiplier effects of the new industrial employment. I am assuming too that for the most part the new industrial enterprises will be largely export-oriented. (The small size of the market available in the Republic would seem to rule out, under the conditions of modern technology, the development of purely domestic industries or of import substitution as the *major* source of new jobs). My remarks, therefore, will be largely restricted to the expansion of industrial employment.

First, however, I wish to underline some general propositions that seem to me to be crucial for the attainment of greater employment in industry.

Planning

First, the general industrial strategy devised to create the requisite number of new jobs in industry must be set within an overall framework of national economic and social planning - planning that is

a) active and not merely indicative,
b) that specifies future objectives for the whole community *and* indicates the policies which will be applied to achieve these objectives, these to cover structural policies such as manpower, investment and savings, research and development, enterprise,
c) that quantifies the plan's objectives as far as possible and relates them to a time-table,
d) that covers the changes in the administrative and executive machinery necessary to ensure that policies will be applied towards realising the specific objectives of the plan.

Obviously in an economy which is a mixed economy and an open economy, with a large and growing foreign-owned sector, the framing of such a plan is complex and difficult. But it is the necessary foundation for economic and social progress.

Competitiveness

Competitiveness vis-a-vis other EEC members must be restored and maintained. This can be achieved through (a) policies that raise productivity and improve efficiency, not simply in export industries but throughout the economy and (b) policies that allow for incomes development, within a voluntary framework, that facilitates the achievement of the overall goals of reasonable price stability, the equitable distribution of income and the sharing of the benefits of real growth.

The minimum objective must be the reduction of the rate of inflation to a level that would be consistently somewhat lower than the rate in Britain. Among other things, this should permit the revaluation of the Irish pound vis-à-vis sterling should this be considered desirable.

Demand Management

Thirdly, demand management policies must facilitate the achievement of full employment. Here the role of the public capital programme is crucial both as a means of stimulating demand and creating the infrastructure necessary for economic development.

Industrial Profits

The fourth point concerns industrial profits. The NIEC in its report on full employment stressed that the importance of profits would have to be fully realised if the environment is to be favourable to the development of our resources by private and public enterprise. It interpreted profits as the rewards of genuine risk-taking and economic efficiency in competitive conditions.

> "It is the profit incentive that attracts the required investment funds ... and creates a suitable environment for the exercise of entrepreneurial talents ... Undistributed profits and reserves are an important source of funds for the expansion of firms. As competition increases in conditions of free trade, profits will be even more significant in attracting new capital ..."

These remarks, the NIEC pointed out, simply set out "some of the economic facts of life in a market economy". They are echoed in the recent British Government Paper on Industrial Strategy. An agreed national strategy for industry on a long-term basis must involve, it says

> "ensuring that industry, both public and private, is able to earn sufficient profits on its investments to expand and innovate and to provide them with the internal finance on which to base investment".

I would add that these remarks are relevant only in the context of manufacturing industry operating under competitive conditions and, of course, one must distinguish between the need for industrial profits and the ownership, control and use of them, as NESC Report No. 13 points out.

Industrial Strategy

Against the background set by general economic policies including those areas just referred to, and within the planning mechanism necessary to marry action to policy, the working out of a coherent strategy for industrial expansion with the emphasis on export-oriented industry, may now be considered.

Industrial promotion policies pursued over the last decade or so have been pragmatic and in their application have been subject to the changes necessary to meet new circumstances. To this observer, the Industrial Development Authority would seem to have continuously adjusted its approach to the promotion of new industry and has not been hidebound in adhering to previous practice. Whatever its deficiencies, it cannot justly be said of it that it has not been innovative in carrying-out its mandate whether as regards the types of new industry it has sought to have established, the small industries programme, the encouragement of research and development, the re-equipment of existing concerns, industrial estates and advance factories, participation in the equity of foreign-owned firms or the promotion and marketing approaches it has adopted.

There is unlikely to be any real controversy about the type of new industry that we would wish to see established here. In fact, the selection criteria adopted by the IDA itself seem wholly acceptable; export-oriented, high added value, majority of male labour, strong growth potential, high utilisation of natural resources. To these one might now add backward or forward linkages with existing industry.

There has been some discussion as to whether existing grants and incentives for new industry unduly favours capital-intensive rather than labour-intensive industry. The terms used can, I think, mislead. If we are thinking in terms of the traditional type of labour-intensive industry, then two things seem clear. Firstly, such industry will increasingly gravitate towards developing countries with low labour costs. Secondly, the income levels to which the Irish community aspires - being related to general EEC levels - are such as to rule out such industries on economic grounds. It also happens that many of the assembly-type industrial processes which tend to be relatively labour-intensive are those least likely to be successful in the longer-term.

New Industries

We have been excessively dependant on new industrial enterprises attracted from abroad. Policy should now be directed more towards encouraging native enterprises particularly in the development of the food-processing industry and industries based on our mineral deposits and (hopefully) oil resources. Since it is unlikely, on past experience, that the private sector can provide the initiative or the resources to develop such industries on the scale that is desirable if they are to reach their full potential over the next couple of decades, we must develop means of involving the public enterprise sector both in the exploitation of our natural resources, particularly mining and oil, and in the development of the industries based on these resources.

There should first of all be the fullest utilisation of the resources of skill and expertise in existing State-sponsored bodies in the achievement of this task. I agree with Dr. Kieran Kennedy when he says in his recent book that

> "encouragement might also be given to the State-sponsored bodies to initiate industrial development by diversifying their activities ... many appear to view their role solely in relation to the particular function for which they were established. This may lead to a considerable curtailment of potential enterprise. The State-sponsored bodies are large-scale employers of engineers, accountants and other professional workers, who in private enterprise would be encouraged to seek out new opportunities for expansion and diversification".

Apart from encouragement to existing public enterprises to diversify into new fields, new public enterprises should be set up particularly in the context of our known mineral resources and the prospects of off-shore oil discoveries. Consideration might be given to the setting up of a State Development Corporation whose initial task would be to identify those industrial processes that might be developed from these natural resources and which would be empowered to set up either separately or in conjunction with existing public enterprises, new industrial concerns to exploit the industrial potential of these resources. There are a number of models in Europe and elsewhere of such a type of development corporation.

There is also a need for a State Industrial Holding Authority which would have overall responsibility for all state participation in manufacturing and extractive industries whether wholly-owned or partly owned by the State. Such an authority would, for example, hold the industrial equity at present held by the IDA and the Industrial Credit Co. The authority would not be a purely financial holding undertaking. It would be expected to play an entrepreneurial role whose involvement in industry could lead, for example, to the development of joint ventures in growth sectors or new products and to filling gaps in the industrial structure. (It would not, I emphasise, be involved in rescue-type operations such as Foir Teo. is concerned with).

Under the new arrangements envisaged, the IDA would be mainly concerned with the promotion of new enterprises and with expansion in the private sector; the State Development Corporation with setting up new public sector industrial enterprises and the State Industrial Holding Authority providing a link between the two through its involvement in both the public and private sectors.

In this contribution I have set down a few disconnected observations and comments, touching on some of the manifold problems that working towards full employment entail. The achievement of full employment by the middle of the next decade, in say ten years time, implies an average *annual* increase in total non-agricultural employment of over 2 percent. This in turn implies a substantially higher rate of economic growth than we have ever succeeded in sustaining in the past, probably a rate of increase of GNP well in excess of 6 percent a year.

In contrast to these projections it is salutary to point out that non-agricultural employment is probably lower now than in 1970 and that over the last five years GNP has increased by less than 2 percent a year.

In concluding, it is difficult to avoid platitudes about challenges and responses. Full employment certainly represents the greatest challenge confronting us. Our response as a community - government, workers, managers, farmers - to that challenge will determine the future of many of the present generation of adults and certainly, our children's future.

Derek Chambers

President, ladies and gentlemen

May I begin by thanking you for your kind invitation to speak this evening.

Having spent most of the last few years outside Ireland, following developments through the written word, I am keenly aware of the contribution this Society has made to increased understanding of Irish economic developments and problems, and the high academic standards which it has set. As a result, I am a little concerned with the way I will deal with my subject this evening. I do not think that industry's role in increasing employment is a subject which can be treated with any great depth in the time available. What I have to say will be more in the way of a series of observations.

I will start with a few general remarks on the 'system'. I believe that the present accent on export-orientated industrial growth is the correct policy approach to increasing employment. I do not believe that alternative approaches could provide acceptable increases in employment at acceptable living standards. Nor do I believe in the 'sharing out' of available jobs through more holidays, shorter working hours and so on. These are perfectably normal and legitimate subjects for collective bargaining and there is doubtless room for more flexibility on both sides of industry. More authoritarian approaches now have some currency in Europe, but whatever the justification there - and I am not convinced by the more extreme views of the anti-growth lobby - they have no relevance in Ireland. Our living standards are far too low for this sort of solution.

So we are left with some form of mixed, export-oriented economy with the bulk of industry owned by the private sector. The strategies may have to change somewhat, but the fundamental approach will be much the same as over the past decade or more.

This being so, and for the moment taking a very narrow view of industry as a collection of firms, industry's aim will be to expand. Industry will expand only if it is profitable for it to do so. Its ability to expand will be based on its profits from past operations and the additional funds these profits enable it to invest. The more profitable is expansion, the faster it will be. The growth of employment will, by and large, be determined by the growth of industrial output.

But, of course, Irish industry is much more than a collection of capitalist firms. Most of us earn our living from it, either directly or indirectly, it produces many of the goods we want to buy and, by exporting, enables us to buy others. Its workings do much to determine our rate of economic growth, employment growth, the balance of payments, the inflation rate (possibly, remembering the discussion at the Society's meeting a year ago, I should say it has some small but probably insignificant effect on prices) and industry plays an important part in the determination of the distribution of income. It is in this sense that industry is important, not as an end in itself but as a means of achieving some of society's goals.

Let us look a little closer at two of these questions: growth and income distribution. As economists, we know that the two are tightly interwoven. The growth of employment is largely determined by the growth of output. The growth of output is heavily influenced and dependent upon the growth of savings and investment. And, since a greater proportion of profits tends to be saved and invested than is the case with wages, the growth of savings is shaped by the distribution of income between wages and profits. This is not a very elegant presentation, but there is sufficient theoretical and empirical backing in post-war Cambridge writing for it not to require further justification.

However, applying this line of thought to an economy such as Ireland does require one further qualification. In a closed economy, an attempt to redistribute income towards profits could reduce demand, reduce investment plans, leave ex-post savings much lower than desired savings and, in the end, be self defeating. This, within reasonable limits, should not be a problem in Ireland. We are only a couple of small steps away from becoming part of a free trade area of 250 million people. Changes in national income shares in Ireland would have an insignificant effect on the size of this market. What does matter is our competitive position within this market. Only if we are sufficiently competitive will we be able to sell in this huge market with profit margins which justify increased investment and generate the funds to finance it.

There are a couple of further, general points to be made on these questions of employment growth and the distribution of income. First, I have suggested that the higher rate of savings from profits means that redistribution towards profits produces faster growth. Additional taxation of the household sector or reduction in public current expenditure could, by reducing the public sector deficit (or even bringing the public sector into current surplus), be as valid a means of increasing savings as a switch to profits. It does, however, imply either that investment in profitable, exporting industry would have to be undertaken by the public sector (directly or through equity participation) or that increased public sector saving would be used to free other savings for investment within the private industrial sector. There is little difference in principle between higher retained earnings in private industry and additional savings being made available to productive investment through higher taxation, though it is probably true to say that owned funds are more readily invested than borrowed capital. In the rest of the paper the argument is put in terms of private sector profits and retained earnings.

The second general point is that I have made no distinction between investment from abroad and domestic investment. Once again there is no difference in principle - the higher the profit rate, the greater the incentive to foreign and domestic industry to invest in Ireland. I will continue to put the argument in terms of domestic industry.

Now where has all this led us? It seems to me to lead to the conclusion that if we want more rapid increases in employment than, say, over the 1960s, one necessary requirement is a shift in the distribution of national income towards profits. Furthermore, we must insure that we remain competitive on international markets. There is no conflict between these two requirements. They imply, for example, that if Irish export prices are largely determined by those of our competitors (which is probably the case), then the lower our rates of pay, the higher will be our profit margins, our investment and our rates of growth of output and employment. Alternatively, if our export prices are determined by domestic costs, then the lower are our rates of pay, the lower our prices, the higher our sales, output and so on.

Let me contrast these requirements for the expansion of employment with recent developments. At the OECD in the early 1970s, we tried to compare profit rates in manufacturing industry in various countries. It was a difficult exercise, with all manner of data and comparability problems, but for what they are worth the results showed Irish manufacturing industry earning a signficiantly lower rate of profit even than the UK, and much lower rates than those in other European countries. Since then the rate has fallen even further, with the result that the recorded rate of return, in Irish manufacturing industry, based on historical costs, is probably in the 5 to 7 percent range. If proper inflation accounting techniques were applied, the rate would be lower. This compares with a higher riskless rate of return currently obtainable on building society deposits.

On the competitiveness side the situation is little better. There have been several recent estimates on the rise in our unit wage and salary costs compared with the United Kingdom in the past few years, all of them showing a significant deterioration in our competitive position. The Confederation of Irish Industry has recently run a survey, showing that exporters think loss of competitiveness has been twice as important as the recession in causing lost export orders. Wage and salary earnings in Irish manufacturing industry are now higher in relation to productivity than those in the United Kingdom, suggesting that our unit profit margins have been squeezed by a deteriorating competitive position. This is confirmed by a rather small survey taken within the CII, which shows that among companies with similar plants in the UK and Ireland, rates of pay are higher in Ireland in the majority of cases, without offsetting differences in productivity.

Overall, I have the impression that for an extended period Ireland was a fairly low wage economy which could afford to have its rates of pay rise faster than those elsewhere. This was somewhat akin to Italian and Japanese experience in the 1960s. It seems that this margin has now been eroded. But whatever the precise judgement on the state of our competitiveness, I doubt if anyone here would disagree that the more competitive we are the faster employment is likely to grow.

This combination of low profits and too weak a competitive position puts industry in a particularly poor position to expand output and employment over the next few years. If the very much lower demand pressures likely in the rest of the world, and their adverse impact on overseas investment activity, are added to the picture I would not rate very highly our chances of seeing employment levels matching those of early 1974 within the next two or three years.

If Lewis's development model worked in Ireland - a perfectly elastic supply of labour at the going wage rate until full employment is reached, and only then do demand pressures bid up rates of pay, then with the help of inflation overseas, an increase in the share of profits would result, and full employment might be reached fairly quickly. But this is clearly not the case in Ireland and the shift in income shares would be very difficult to achieve. To take an example, the change in the terms of trade following the oil crisis required a shift in the proportion of national income going to the foreign sector. Public expenditure plans showed no inclination on the part of the public sector to diminish its share of claims on real resources. So if we had hoped to maintain existing employment levels and a tolerable balance of payments positions, then the real consumption of those in employment would have had to fall to allow the shift in resources to the foreign sector. Allowing for some underlying growth of productive capacity, a consistent set of employment policies would have had to allow for a real earnings fall for those in employment of about 2 percent between 1973 and 1976. But over this period we had two national agreements for a few anomaly claims which between them, before making any allowance for a 1976 national agreement, have provided for increases in the real rate of pay of the average industrial employee of about 10 percent. In other words, the last time there was a need for a shift in the distribution of national income, or, more precisely, to avoid a shift in the wrong direction, we failed to make provision for this in our policies on incomes and employment. We are still in a position where real income levels of those earning the full provisions of the national agreements are inconsistent with 1973 levels of employment and a managable balance of payments position.

The problem, of course, is that there is a conflict between employment and living standards. If more employment requires higher saving, then those currently in employment must be prepared to accept lower consumption levels. The conflict between jobs and living standards was illustrated by the NESC in its publication of the same name. Their calculations showed that if the overall growth rate were to remain unchanged, and those in employment were to choose between possible British living standards and European standards, the choice could make a difference of 400,000 to the numbers employed by 1986. This is greater than the total increase in non-agricultural employment required to reach full employment with no emigration by the same date. So the choice is as stark as full employment on the one hand, or lower employment levels than at present on the other. Now the NESC qualify these calculations as "too rigid and mechanical", which is clearly the case. But, as the NESC also said, "the arithmetic exercise does illustrate the danger to employment if the living standards to which people aspire rise faster than the economy's capacity to meet them".

It would be easy to throw up our hands and say, well if it is living standards people want then that is what they should have, and leave it at that. But I would not view the problem that way. To begin with, nobody thinks of social policy as the strong benefiting at the expense of the weak, as increased living standards for those in employment driving others into unemployment or involuntary emigration. More importantly, when we come to make crucial decisions on such things as National Pay Agreements, I wonder if the options are thoroughly examined. It is usual, at this point, to turn towards the Government and ask why it is not involved in pay determination, it is such an important element of social policy as well as being the principle demand management instrument in an open economy.

But, for once, let me make my aside in another direction and ask questions to the economics profession. When we make forecasts or policy proposals, have we mastered the mechanics of the employment/living standard trade-off and do we set the options out clearly? Let me take the present situation as a case in point. We know that the employment situation is delicately poised, that there is a possibility of a shake-out of labour. Yet to get firmer ideas on how real the danger of this is, and on its timing, we would have to start with ideas on the nature of the world recovery, the Irish competitive position and industry's financial structure. There are severe data limitations on this sort of analysis, but since this is the way the behavioural relationships work this is the way we should look at it. How many of us have any attempt at flow of funds analysis in our forecasts and how many incorporate the financial position of the corporate sector? I can only speak for myself and admit that they are not there. Secondly, whatever our techniques, why do most of our present forecasts stop in 1976? We have a fair idea of where we are now and that stock adjustments will continue to give some temporary boost to activity. With this knowledge, we can guess that GNP will be slightly higher in 1976, yet we can have very different interpretations of the turn of events through 1976 masked by variations within a short range of small positive numbers. But the trend through 1976 is the important question for policy makers. Surely it would be more helpful if we were to come clean and also give a forecast for 1977, or at least show the trend of industrial production and employment quarter by quarter through 1976 and into early 1977. Then at least we would be showing the policy makers forecasts which they have some chance of influencing. Thirdly, when we do present our forecasts, why do we not set out a range of feasible options for a time period which policy can influence showing combinations of employment and living standards and the policies required to achieve each option. I think that if these options were clearly set out it would give the employment policies a greater chance of success relative to the pursuit of higher living standards for restricted numbers.

Before I conclude, I must apologise for a rather short-term slant in my paper. Partly, this is based on a guess that the previous three speakers will have looked at some of the longer term aspects, partly because I believe that the longer term is made up of a series of short-term problems each of which has to be overcome in turn. This has also led me to look at the employment problem in terms of what can be done by industry as an integral part of the process of economic growth rather than what industry can do in isolation.

My conclusions then are as follows. Employment prospects over the next few years are not promising. Only if there is a significant shift in the share of national income from pay to profits, brought about by an improvement in competitiveness, will these prospects be improved. To take a very broad look at the orders of magnitude, if we are to reach full employment by 1986, the average investment level implied is about £1,000 million p.a. at current prices and the degree of capital intensity now being promoted by the IDA. This compares with current domestic savings of about £400 million and a net long-term capital inflow of about £100 million p.a.

There are obvious political or industrial relations overtones to these conclusions. It is clear that for a free enterprise system to grow then it must generate profits and this leads to a struggle over income shares. There is no evidence to suggest that voluntary savings from the household sector would be sufficient to finance faster growth, so the rate of growth of Irish employment will depend upon the result of this struggle between pay and profits. This is no different from any other political system. Under others some sort of 'investible surplus' is required, and by and large the larger it is the faster they grow. In my opinion the real political questions are the distribution of income among employees, the extent to which profits are converted into investments, the extent to which this investment is directed to sectors which aid the growth process and social requirements sufficiently, the fiscal treatment of distributed and retained earnings, the control of sheltered sectors of the economy, participation in the running and ownership of industry. These are legitimate and important subjects for debate, but we must be careful to ensure that the solutions we adopt encourage the required increase in the share of national income going to productive investment.

An early shift to profits will be extremely difficult to achieve. It could be facilitated if the conflict between the expansion of employment and the living standards of those already in employment were made much more explicit in public discussion. It will require detailed discussion between government, employers and trade unions on options and priorities, and in this respect the Working Party on the Economy is a very welcome development. My hope would be that the shift will come about sooner and by agreement rather than later and the operation of market forces. The sooner it comes the less painful will be the adjustment and the sooner we can make satisfactory progress towards full employment. It will be difficult but I hope not impossible. I would prefer to think that we are, to some extent, masters of our own destiny rather than subject to immutable economic forces.

DISCUSSION

P. G. Cox: My compliments to the speakers. I do not propose to comment on the papers but to make some remarks relating to employment in agriculture. My colleague at An Foras Taluntais, Patrick Commins, estimated that for 1966-1971 the total reduction in the male agricultural labour force from deaths, retirements and movements to other jobs was about five times the number of new entrants. He also calculated that deaths and retirements accounted for the majority of exits from the farm labour force in all regions of the country. He concluded that this process of decline in the labour force in farming was likely to speed up during the 1970s.

It is well known that in relation to other EEC countries Ireland has a relatively high proportion of its labour force in farming. As Ireland catches up on other EEC countries, one would expect a fall in the proportion and also the absolute numbers of the work force engaged in farming. This has been the normal experience in countries, which have advanced beyond our present state of development.

EEC structural policies are based on the premise that farm structure should be reorganised, so as to create farms, which provide incomes per labour unit comparable to those obtainable outside farming. The successful implementation of these policies would tend to reduce the numbers engaged in farming. It may be argued that given the relative abundance of labour and relative shortage of land and capital it would be better to have policies designed to raise the rate of return on land and capital rather than on labour. However, it would seem that irrespective of what EEC policies were in operation there would be a substantial drop in the farm labour force in the years ahead.

One further point worth making is that a reduction in the farm labour force is not necessarily a bad thing. If two elderly farmers retire and their land is used to make a viable farm for a young efficient farmer most people would consider this to be a good change. Recent work by my colleague, B. Kearney, has shown that output per acre is now greater on the medium to large farms than on small farms. Thus it would seem that a reduction in the number of farms would increase agricultural output. Any reduction in the number of farms would reduce the agricultural labour force since the farm labour force in Ireland is predominantly family labour.

While the farm labour force seems almost certain to decline, increasing agricultural output creates jobs in the food industry and industries supplying inputs to the farm sector. The food industry provides about 20 percent of jobs in manufacturing industry at the present time. My colleague, Michael Keane, has estimated that the food industry provided about 17 percent of the increase in manufacturing jobs between 1960 and 1974. He has also shown that employment in primary food processing increased faster than employment in manufacturing industry generally. The main reason for this rapid expansion was that there was more agricultural output to process.

For the future Mr. Keane concluded that the main factors likely to effect growth in employment in the food processing industry were: 1) changes in the raw material supply; 2) the development of further processing, and 3) change in the structure and technology of the industry. As regards changes in raw-material supply An Foras Taluntais has been concerned with research at all levels to increase the fund of technical knowledge for farmers to increase farm output and farm incomes. Increasing attention is being given in our research towards structural reform in Irish farming, i.e., mechanisms of ensuring that land is transferred from inefficient to efficient farm operators. It is obviously of little use pioneering new farming methods, better seeds, better cattle breeds etc. unless land is being farmed by persons who are prepared to innovate. Given effective policies for allocating land to efficient farmers there is great scope for expanding farm output which will contribute to increased employment in the food industry.

An Foras Taluntais is also doing a considerable amount of research for the food industry in relation to the development of new products and increased processing of existing products.

There may be some loss of jobs because of rationalisation of part of the food industry. However, given an expansion of agricultural output and the development of new products it should be possible to more than offset this loss of jobs.

To sum up, what I have said so far, farming will provide less jobs directly, but it will generate many jobs outside the farm gates.

One final point worth making is that while expansion of farm output is of great importance for the national economy it cannot solve the employment problems of the rural areas. Many new jobs in manufacturing and services are needed in these areas.

J. Teeling: There is very little doubt that the work done by the IDA to attract foreign industry to Ireland has been successful. Indeed, many of us who have conducted research into export led industrial development are convinced that the IDA is the best organisation of its kind in the world. Yet during its 25 years of existence (1949-1975) the IDA has been unable to solve the problem of high unemployment in Ireland. It is worrying to reflect on the possibility that the success to date of the IDA was based on premises which now no longer exist hence, the concern that the IDA, no matter how successful, cannot bring about full employment in Ireland.

The factors which contributed to the success of IDA policy in the Sixties encompass the following:

a) cheap and available labour,
b) English speaking educated labour,
c) relative political stability.

d) access to the United Kingdom market,

e) one of the first in the field of attracting foreign export oriented investment,

f) a range of incentives unsurpassed anywhere.

By 1975 most of these advantages have disappeared. Not only has labour become expensive but our political stability has decreased, our incentive package is under scrutiny and there is now a large number of countries competing for the pool of investment. Access to the EEC goes someway in offsetting these disadvantages. To compound the problem we have the spectre of an ever increasing flow of redundancies. A careful examination of industrial sectors reveals that many of the early foreign investors who established labour intensive low technology projects in apparel, textiles and similar industries are now under extreme cost pressures. Such firms are likely to close thus increasing the pressure on the IDA to create new jobs. Indeed, one can project a situation where the creation by the IDA of 20,000 new jobs each year goes to offset 20,000 redundancies in firms attracted years previously by the IDA.

A further concern must be voiced here. To date, remittances from overseas firms in Ireland to their parent companies abroad have been small. As firms mature in Ireland their tax exemption period expires, in many cases reinvestment opportunities diminish, thus pressure for remittance grows. It is highly likely that the coming years will see private capital outflows grow in relation to capital inflows.

To further add to the current dilemma, the very success of the IDA in attracting industry has created alternatives to emigration. This in turn has led to an increase in the numbers available for work. These people expect to find jobs in Ireland.

Is there a way in which Ireland can provide for the expected increase in population? If there is, it does not involve wiping out the current activities of the IDA. Policy changes might involve redirection of some IDA activities and extension of others. Some of the suggestions made here tonight deserve examination by all concerned with development policy. The suggestion that we concentrate more on domestic Irish industry arises, I think, from an uneasy feeling by many that the increasing domination of Irish industry by foreign firms (a) *is unstable*, in that usually only the final stages of production are brought here by foreign investors, (b) *is uncertain,* in that we really do not know that foreign firms will stay in Ireland, after their tax exemption expires, particularly if costs continue to rise and finally (c) that ultimately *the Irish balance of payments* will suffer from remittances abroad. By concentrating on native businesses it is hoped that deeper local roots will provide greater hopes of expansion both within the firms themselves and from ancillary industries servicing the Irish firms.

The suggestion that Ireland's natural resources should be developed is fine as long as one realises that the primary processing stages for raw materials such as zinc and lead ores, crude oil and even milk are extremely capital intensive. Certainly, extensive job opportunities do exist at further stages of processing and fabricating but there is absolutely no evidence to suggest that Ireland can attract many of these fabricating industries. The cartelised nature of most raw material industries in Europe does not augur well for a small country attempting to enter the market for the first time. Despite these caveats I, too, am a believer in a development policy based on resources but I would like to see all of our natural resources involved including marine, horticultural, peat and industrial minerals.

These comments are designed to assist in the discussion on our future development policy. Good though the IDA is it does not appear that they can achieve full employment with their existing policies. It is to be hoped that the present symposium can offer them some guidelines for the future.

S. Cromien: I join with other speakers in congratulating the four contributors on their excellent papers. Economists are sometimes criticised for being long on analysis but short on remedies; the same cannot be said of these papers, since they contain not merely cogent analysis but practical suggestions for remedying our present ills.

I share Dr. Kennedy's concern about the seriousness of the problem facing us in the next ten years and , in particular, about the social and political difficulties with which we are likely to be confronted if we do not find an adequate solution. No one, I am sure, has any illusion that an adequate solution will be easily found. At a meeting in Brussels earlier this week of the Tripartite Conference on employment, it was very clear that even when the cyclical upturn reduces unemployment in the Community below its present level, there will still be a historically high degree of structural unemployment, as a result of factors such as the shift in economic power from Western Europe to the oil producers. It is difficult to see Western Europe returning permanently to the very rapid increases in national output and living standards that characterised the 1960s.

We in Ireland are therefore facing a more difficult challenge in the 1970s and 1980s than we experienced in the good years of the 1960s. Against this prospect, Mr. Killeen's figures of increased employment, in the period to 1968, seem optimistic unless one visualises a fundamental change in national attitudes. To achieve a reduction in unemployment on the scale required, those of us in stable employment may need to revise sharply the expectations of steadily rising living standards to which we have become accustomed. Already, we are aware that part of our increase in output in the years ahead will have to be ear-marked to pay the higher cost of our imports of oil and perhaps other commodities whose producers can exert economic power. Another part will require to be made available to bring about a levelling up of the living standards of our less fortunate citizens. A third part will have to be invested to make our industries more competitive and therefore able to support a large rise in employment. The question poses itself whether in these circumstances there will be much left for an increase in living standards. Unless this is appreciated, it could be very difficult to provide the employment opportunities of the magnitude required.