

INDUSTRIAL DEVELOPMENT

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1. INTRODUCTION

“Our pre-War industrial development was based on home-market requirements and protection and it served the purposes of that time. I think that it was the only practical policy then... There is need now to raise our targets and, I believe, also to change our methods”.

Sean Lemass (1959)¹

“While our economic circumstances and general economic environment have changed over the past 20 years, the basic elements of our industrial strategy have remained almost unchanged ... Present policies have served us well, but we clearly need a comprehensive review of them in the light of the circumstances today”.

Charles Haughey (1982)²

The recent review of industrial policy is the first major industrial policy review since the gradual shift in economic policies some twenty years ago from promoting import-substituting native industries by tariffs and controls on foreign investment,³ to promoting exports and direct foreign investment by capital grants and tax holiday.⁴ The decision to change dramatically the focus of industrial policy was made by Lemass in response to the failure of existing policies to solve both sectoral and economy-wide problems: the lack of any sustained growth in Irish industry and its poor prospects, given increasing, if low, import penetration; rising balance of payments deficits; high rates of unemployment and emigration, etc. Ironically, it was in response to broadly similar problems that the current review of policies by the National Economic and Social Council (NESC) was requested. The NESC has produced five reports on industrial policy, and I propose to confine my remarks to the main, and most controversial report, namely, *A Review of Industrial Policy*, hitherto referred to as the Telesis Report.⁵

¹Speech by Sean Lemass to Dail Eireann, 1959, on becoming Taoiseach as quoted in Meenan (1970), p. 144.

²Speech by Charles J. Haughey when Taoiseach to Fianna Fail Ard Fheis as quoted in *The Irish Times*, May 19, 1982.

³These controls were effected through the Control of Manufactures Acts (1932, 1934), which were repealed in 1958.

⁴For a detailed discussion of the transaction, see for example, Ruane (1976), McAleese (1978), and O'Malley (1981).

⁵My concentration on NESC Report No. 64, by the Telesis Consulting Group, does not imply that the other NESC reports on industrial policy are not important to the future formulation of policy, but merely that they are less controversial. The Council's response to the four commissioned Reports (NESC Report No. 66), will be referred to in passing in this paper.

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The analysis in the Telesis Report may be usefully divided into two distinct but related components. First, there is a general review of the performance of the industrial sector, particularly of the manufacturing component, over the past ten years, in terms of the growth of output, exports and employment. Second, on the basis of this review and an analysis of both the current problems of the industrial sector and the effects of existing policies, the Telesis Group recommends a reallocation of the fiscal resources available to the industrial sector between different programmes and a separation of industrial promotion activities from industrial policy formulation. By and large it is the Telesis recommendations rather than its review of performance which has given rise to most of the controversy surrounding the Report.⁶

In this paper, I propose to concentrate on two issues; first, I will examine employment performance of grant-aided projects in the industrial sector and the related contentious issue of the cost per job. Since industrial policy targets have focussed on employment creation over the past decade and since the Telesis Report publishes some new employment data derived from the Industrial Development Authority (IDA) employment survey, this measure of performance deserves special attention. Second, I will examine what I consider to be the major Telesis policy recommendations, and in particular, the recommended reallocation of resources towards native industry.

2. EMPLOYMENT PERFORMANCE

The main criterion used by Telesis to evaluate the success of industrial policies is the number of new jobs which result from these policies, i.e. the number of jobs on projects which receive IDA grants. However, the measurement of grant-aided employment in Ireland poses several problems, and has been the source of some controversy in the past.⁷ The problems stem from the fact that until 1973, when the IDA undertook its first annual employment survey, there were no records available, on a firm-by-firm basis, of the actual numbers employed on grant-aided projects.⁸ Until that date, the only estimates available of actual jobs on the ground were based on internal IDA information, which estimated that within five years of the date of grant approval, 60 per cent of all approved jobs were translated into actual jobs. The gap of 40 per cent between actual and approved jobs was attributed to projects which never went ahead (circa 15 per cent), projects which were less ambitious in practice than they were in planning and projects which failed.⁹

The IDA employment survey provided the Telesis group with accurate employment data, from which various measures of the employment associated with grant-aided projects could be measured. Telesis distinguishes three measures of employment: jobs approved (the number of jobs associated with grant approvals), jobs created (the number of jobs actually generated by grant-aided projects) and jobs sustained (the

⁶See, for example, the NESG's preface to the Telesis Report, or the interviews with the managing director of the Industrial Development Authority, P. A. White, reported in *Business and Finance*, November 4 1982 and *IDA News*, No. 2, November 1982.

⁷See, for example, the papers by Kennedy (1975) and Kileen (1975) read to a symposium on 'Increasing Employment in Ireland' held by this society on November 20 1975.

⁸Since grants were paid out on the basis of the purchase of fixed assets rather than the creation of employment, normal accounting practice in the IDA did not require the collection of the associated employment data.

⁹See *IDA Industrial Plan, 1978-82*, p. 14.

number of jobs created less the number of jobs subsequently lost by those same projects). To analyze the relationship between these concepts, Telesis examines all job approvals in the period 1973–1979 (indigenous industry) and 1973–1980 (foreign-owned industry).¹⁰ The results of this analysis are set out in Table 1; the jobs-sustained figures in the foreign-owned and total columns differ from those recorded in the Telesis Report and in NESC Report No. 66 (Table 4) by 1,235, due to what appears to be an arithmetic error in the Telesis calculations.¹¹

Table 1 shows that jobs created amount to only 45 per cent on average of jobs approved. This figure is considerably less than the 60 per cent published in the IDA Industrial Plan, but is not directly comparable with it for two reasons. First, the IDA figure relates to actual jobs five years after the date of approval, while the Telesis aggregate figure includes projects ranging from one to seven years after the date of approval. Second, since the IDA estimate is supposed to take account of closures, it should be compared with the jobs-sustained figure which turns out to be only 22 per cent on average of approved jobs. Despite these qualifications, however, the results suggest that the IDA's 60 per cent estimate was somewhat optimistic. A comparison of the Telesis jobs-sustained and jobs-created estimates, which are based on the same data sample, indicates that in the case of indigenous and foreign-owned industry, 67 per cent and 40 per cent respectively of jobs actually created were subsequently lost. While job redundancies in older Irish industries were much talked about during the 1970s, the rate of redundancy in new grant-aided industry was hardly discussed at all,¹² though IDA personnel must surely have been aware of this problem when they committed themselves to net job creation targets of 10,000 per year. In fact, over one third of all job losses in indigenous industry over the period 1973–79 were in grant-aided industries.¹³ This is probably the most depressing figure in the Telesis Report.

Table 1. Employment Change in New Grant-Aided Projects, 1973–1979/80 (000s)

| | Indigenous | Foreign | Total |
|----------------|------------|---------|-------|
| Jobs Approved | 61.5 | 101.0 | 162.6 |
| Jobs Created | 31.2 | 42.1 | 73.3 |
| Jobs Sustained | 10.3 | 25.1 | 35.4 |

Source: Data from Telesis Report, Exhibits 6.4 and 6.5, and NESC Report No. 66, Table 4 (adjusted for error in Telesis Exhibit 6.4).

¹⁰In addition to the lack of comparability in the time-period coverage for foreign-owned and indigenous industry, there are slight differences in the programmes to which these job approval figures relate. See Telesis Report, Chapter 6.

¹¹The figure presented here was computed from the data in Exhibit 6.4, page 391 of the Telesis Report. I am grateful to IDA and NESC staff for attempting, albeit unsuccessfully, to track down the source of the discrepancy between the components and the total in Column 2 of Exhibit 6.4. In the absence of any other explanation, I was forced to conclude that the error is arithmetic.

¹²One exception is Kennedy (1975) who suggested that, on the basis of published aggregate employment figures in manufacturing, job losses in grant-aided manufacturing must be significant.

¹³See Telesis Report, pp. 145 and 416.

The Telesis measures of jobs sustained and jobs created presented in Table 1 are deficient as indicators of the direct employment effects of grant policies because they are based on a point-in-time (1979/80) analysis of jobs which were created at different dates between 1973 and 1979/80.¹⁴ Clearly, what is needed is a measure which takes account of job durability. This could be done by showing the duration profile for the cohort of jobs created each year, in other words, the number of those jobs which existed in each subsequent year. This approach has the disadvantage of producing a matrix rather than a single number (as the Telesis Report does), but I would contend that for serious analysis the matrix is essential. Indeed, if a single number is required, the matrix could be used to calculate the number of job years which result from a project over a given time period; this would naturally give more weight to jobs which were sustained longer and not simply attach a zero-one weight to all failed and existing jobs respectively. Such a matrix could be used to estimate how jobs approved, the measure which the IDA use to estimate the current level of job promotion activity, are likely to translate into actual jobs in manufacturing.

In estimating the cost per job of employment generated by grant-aided projects, the Telesis Group uses the jobs-sustained figure, augmented by an employment multiplier of 1.18, which implies that for every 100 grant-aided jobs created, a further 118 jobs are induced through production linkages in the economy. This estimate, which was derived from an early version of Henry (1981),¹⁵ when applied to the corrected jobs-sustained figure of 34,455 yields an additional 41,837 jobs.

This figure of almost 42,000 jobs indirectly resulting from grant-aided employment is dubious for several reasons. First, since the link between industries is through commodity markets rather than factor markets, the use of input-output coefficients to analyze marginal employment effects induced elsewhere in the economy, at a time of changing technology, rising real wage costs, etc., as Henry (1981), page 11 warns could be very misleading. Second, a proportion of the additional employment which is induced elsewhere within the industrial sector (e.g. through subsupplies) is likely to be already included in direct grant-aided employment, giving rise to double-counting. Third, the corresponding employment multiplier which I derived from the actual data published in Henry (1981) was considerably lower than the multiplier estimated by Telesis — 9.7 compared with 1.18 — which implies an indirect employment effect of 24,000 approximately, compared with the Telesis figure of 42,000. Such sectoral multipliers should only be used with great caution in evaluating a job-creation programme, and should probably not be applied at all in the analysis of a particular project.¹⁶ Policy-makers should resist the temptation of using multipliers which seem to yield magically 'something for nothing'!

Finally, turning to the Telesis Report's estimates of the cost per job, these range from £7,000 to £29,000 depending on what is included as 'jobs' and 'costs'. Some estimates seriously understate the cost per job (by using inflated employment multipliers, as dis-

¹⁴For example, in the case of the jobs-sustained figures, jobs which were created in 1973 but lost by 1978 are excluded, whereas jobs which may survive for a much shorter period, say 1978 to 1982, are included.

¹⁵The multiplier was derived by calculating the ratio of indirect to direct employment effects of an increase in aggregate demand by sector. This estimate is higher than that typically assumed by the IDA, e.g. for every two grant-aided jobs, one additional job is generated in services according to Killeen (1975).

¹⁶The openness of the economy and the danger that any individual project may indirectly reduce the employment on some other project, makes the application of an average multiplier in this case, particularly dangerous.

cussed above, and by excluding the non-grant elements in the cost of job creation all possible expenditures on agencies directly and indirectly involved in industrial promotion). No estimate in the Report provides a satisfactory benchmark against which the benefit to cost ratio in industrial policy can be valued. The minimum cost per job is the grant cost per job, which, if one accepts the Telesis figure of sustained jobs, is £7,000 and £12,500 in the case of foreign-owned projects and domestic projects respectively. But these figures underestimate the true cost per job by excluding both the costs to other agencies of funding the same projects and the fiscal costs arising from tax-based financing.¹⁷ For example, if all of the benefits of tax-based financing to foreign-owned projects are assumed to go to new projects, the cost per job according to the Telesis data (Exhibit 9.8) increases by 30 per cent to £9,275. The Telesis Report does not provide a basis for calculating reliable estimates, and such estimates should be sought as a matter of priority. In my view, this is one of the weakest sections of the Report, and should not be used for serious policy decisions.

3. TELESIS POLICY CONCLUSIONS AND RECOMMENDATIONS

In presenting its policy conclusions and recommendations, the Telesis Report distinguishes between foreign-owned and indigenous industry, and I will follow the same procedure here, concluding with some remarks on the control of industrial policy.

Foreign-owned Industry

The central conclusion of the Report is that Ireland has probably been too generous to foreign industry and has not realized the full potential from foreign projects. In particular, Telesis claims that the level of total (grant plus non-grant) subsidy per job sustained is much higher than that paid by our major competitors for internationally-mobile projects and that the subsidy could be lowered without severely reducing the supply of projects. Furthermore, it claims that the benefits to the economy of some projects assisted is low because of their poor quality, as measured in terms of skill levels and expenditure on research and development. The sector most criticized in this context is the electronics sector, which has been strongly promoted by the IDA over the past five years.

The Report raises rather than answers the question of whether the level of total subsidy paid to foreign-owned firms is too high. Discussion of this question is long overdue¹⁸ and should centre on two issues: are we paying more than is necessary to secure the current supply of projects, (as Telesis claims), despite our discretionary policy, and, how do the net benefits from this use of funds compare with alternative uses. Telesis suggests that they may be higher for indigenous industry. In the past, attention has tended to focus solely on the ability of job-creation programmes to 'pay-back' the government for the revenue allocated, as if this were the only criterion for judging the net benefits of such expenditure. It is particularly important in the present

¹⁷In a recent interview (*Business and Finance*, November 4 1982) the managing director of the IDA quoted Telesis as saying that the cost of creating a job is £7,400. What Telesis actually said was that the grant cost per job is £7,400 (in fact it is £7,000 when the Telesis arithmetic is corrected) which only represents a component of the total cost per job. The use of grant cost in lieu of total cost is misleading, especially in the context of judging the net benefit of a job-creation programme.

¹⁸This is especially true in the context of the rapid growth of non-grant incentives over the past five years.

financial crisis that the allocation of government funds, between and within sectors be based on a comparison of real net benefits.¹⁹

The IDA's reaction to the Telesis view that the electronics projects which Ireland has secured are pure assembly-type, low-skill operations has been very strong.²⁰ In support of this view, the Telesis report cites examples from a survey of sixty electronics firms located in Ireland, while the IDA counter argument is based on a different set of examples, which show a high level of graduate employment in the industry and an increasing commitment to research and development in Ireland by new and established electronics firms. This kind of argument by example is not a satisfactory method of analysis and leaves many questions unanswered. For example, one obvious question not analyzed by either side is whether or not the skill composition of the electronics sector in Ireland differs markedly from that in the US or other economies promoting electronics projects. In other words, while the electronics industry has a high technology image, most of the jobs in it, world wide and not just in Ireland, are assembly-type jobs.²¹ (It is perhaps not widely known in Ireland that a high proportion of the employees in California's Silicon Valley are immigrant Mexican workers. In fact, American television reported how employees at several electronics firms were among those arrested for illegal entry into the US earlier this year.) The electronics industry is a fast-growing industry and the IDA is right to promote it, but perhaps wrong to imply that it will ever become a major source of high-skilled employment and research and development in Ireland. Take away the technological mysticism and the aura of IDA personnel picking technological winners and what do we find: rapidly expanding firms coming to Ireland for the grants, fiscal incentives, labour and a base in Europe — in return, we get jobs. While the process of negotiation may be complex, the principle is simple, and the IDA's job is to get the best deal it can for the country, given the information available on the market.

*Indigenous Industry*²²

The main conclusions of the Telesis Report on the disappointing performance of the indigenous sector are that exporting firms have not received sufficient assistance in overcoming the difficulties of establishing export markets and that firms producing output exclusively for the domestic market with no competition from foreign producers (non-traded output) have received too much grant-assistance under the Re-equipment Grant programme. The Report recommends that, in addition to increasing assistance to exporting firms, the IDA should select individual firms which have export potential and "the structure necessary to be competitively-successful in the long term" for additional assistance, using funds hitherto allocated to non-trading firms.²³

The suggestion of relating government assistance more closely to the problems faced by indigenous industry, rather than simply giving capital grants, is firmly based on

¹⁹For a discussion of this issue, see Ruane (1979), Ruane (1980), McKeon (1980), Ruane (1980a) and Durkan (1982).

²⁰See for example, the interview with the IDA managing director, P. A. White in *Business and Finance*, November 4, 1982.

²¹In preparing this paper I had hoped to examine this issue in some detail, but was assured by the IDA that there were no independent source data available in Ireland of the skill composition of the sector in other countries.

²²I will not discuss the Report's comments on resource-based industries for reasons of time.

²³This idea is taken up in the Fianna Fail Government's plan *The Way Forward* (p. 47) under the heading of 'Company Development Plans'.

economic theory.²⁴ However, the appended suggestion, which Telesis strongly emphasizes, namely, that after years of picking winners on international project markets, the IDA should now turn to pick domestic winners, has no such basis. It begs the question as to why IDA personnel in the public sector should be better at detecting market potential in the private sector than those who actually work and invest in that sector. If such fantastic potential were there to be realized, the outflow of employees from the IDA would be massive!

It seems to me that, while exporting indigenous industry has some potential, this potential is limited, requires a lot of effort to realize and may still be low compared with returns in the non-traded sector. What the Telesis Report fails to emphasize is that the lack of expansion of the Irish exporting and import-substituting sectors is primarily due to the higher financial rewards in other sectors. Despite the lip-service paid by successive governments to the importance of expanding the trading manufacturing sector (by increasing exports and import-substitution) and the generosity of incentives available, the financial rewards to human and physical capital still seem to be much higher on average, in many parts of the non-traded sector. For example, compare the salaries of those in the professions, public sector and financial institutions with equivalent and less certain salaries in exporting industries. It is not surprising that university graduates rarely think of the manufacturing sector as their first employment choice. Furthermore, the real, after tax returns to investing in the non-traded sector (property, government bonds, import agencies) are often much higher than in manufacturing, because of government intervention through the tax system and creation of local monopolies.²⁵

Until some attempt is made to rectify the imbalance between trading and non-trading sectors, in the economy as a whole and not just within the manufacturing sector as discussed by Telesis, any new approach (e.g. company-by-company analysis) will have little effect on our indigenous business-men, despite the best efforts of the semi-state sector. Furthermore, if the IDA accumulated wisdom on market potential, company organization, etc. is to be made available to industrial private firms, may I suggest that such firms cover some of the costs of these services, as they pay for management consultancy services the world over.²⁶

Control of Policy

Like many strangers to the vagaries of Irish policy making, the Telesis Group indicates some surprise and concern about the structures controlling industrial policy and the combination of promotional and evaluation activities in some organizations. This problem has been discussed elsewhere²⁷ and results in the main from the general consensus among politicians about the value of the targets for the industrial sector. This consensus led then to abnegate their responsibilities in formulating the policies which would achieve these targets, leaving them almost entirely to the industrial

²⁴Shortage of investment funds does not now, as it did in the 1950s seriously constrain domestic investors. The 'bluntness' of this policy instrument is in striking contrast with and unrelated to the precise problems of Irish industry and, as well established in economics, could be better overcome by 'sharper' instruments.

²⁵Neary and Ruane (1982) found that the tax treatment of different assets was crucial in explaining the persistently higher return from owner-occupied housing, compared with all other assets.

²⁶Exactly the same point applies to the advisory services of other agencies, such as CTT. See Ruane (1982).

²⁷See Ruane (1976), (1979a).

promotion agencies. A second source of the problem lies in the institutional context in which policies are formulated and administered, namely, the semi-state sector, which is at the delicate border between public and private sectors. The justification for semi-state enterprises is that they can achieve the flexibility necessary for dealing with the private sector, which is especially important when discretionary policies are being operated. However, it is becoming increasingly clear that these agencies are encountering difficulties in operating discretionary policies, because the rules of discretion are being formulated by the very people who administer the policies.²⁸ For their own sakes, as well as the sakes of the tax-paying public, these agencies must be brought more firmly under government control.

4. CONCLUDING REMARKS

The NESc review of industrial policy has raised the discussion of industrial policy to a new level. In place of such platitudes as 'expenditure' on industry represents good value for money' or 'expansion of indigenous industry into export markets is desirable', we have precise recommendations about how funds should be allocated within the industrial sector, and some specific policy suggestions about how indigenous industry should be helped overcome particular exporting difficulties. Furthermore, the Telesis group has produced some new results from the IDA employment survey and introduced an 'outside' dimension to the discussion of a topic which has for too long been treated at a very parochial level. That said, much remains to be done, and in this paper I have dealt with a few issues which I consider to be of major importance; in particular, the need to measure correctly the results of policy and the associated costs, and to examine whether or not policies, taken as a whole, adequately emphasize the trading section of the industrial sector.²⁹

In conclusion, I wish to raise one further point: the government must formulate a view on when, if ever, it intends to let industry 'go it alone'. Tariffs in the 1930s were justified as a support for our infant import-substituting industry; the introduction of grants and tax holidays in the 1950s were intended to support infant exporting industries, will the infants ever grow up? Grants are favoured by administrators and also permitted under EEC regulations because they supposedly do not represent an on-going subsidy to industry; however, if all expansions are grant-aided and re-equip-

²⁸See, for example, the discussion in McKeon (1980) of how project appraisal is used to verify rather than determine the grant which the IDA gives to a project (i.e. the payment of some grant is assumed) and the statement by P. A. White in the *Business and Finance* interview: 'If there is a grant programme where 25 per cent is available and somebody re-equips and they look profitable etc. then you find it difficult to say no just because they have the money. In a small community you have to be quite clear as to why you are saying no. If you refuse a grant because of over-capacity, for instance, that person is bound to come along and complain that we have given money to some foreigner but that we won't give it to the local company and then they'll usually lobby the media or politicians'.

²⁹I have not dealt at any length with the many obvious criticisms which can be levelled at the quality of some analysis and the presentation of results in the Telesis Report. In particular, strong criticisms about the lack of comparability of different results, the poor explanation of how and from where different estimates were derived, are justified. While these weaknesses are substantial in certain instances, they should not distract from some of the more general issues usefully discussed in the Report.

ment³⁰ is supported by grants and fiscal incentives, this must surely constitute an 'on-going' subsidy. In a world of rapidly-changing technology, any government which commits itself to generously funding re-equipment (which will increase the profitability of the firms in question), might as well hand every company in the country a key to the state coffers!

³⁰In the *Business and Finance* interview, P. A. White makes some reference to the possibility of re-introducing re-equipment grants, which accounted for 43% of the total grant assistance to indigenous industry in 1970-79. It is not simply the case that such grants should not have gone to non-traded companies, as Telesis points out, but the principle of giving such grants to supposedly viable traded firms is highly questionable, and encourages the development of a 'dole mentality' among industrialists.

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