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PROTECTION, ECONOMIC WAR AND STRUCTURAL CHANGE:

THE 1930s IN IRELAND

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and

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Protection, Economic War and Structural Change:

The 1930s in Ireland

If I were an Irishman, I should find much to attract me in the economic outlook of your present government towards greater self-sufficiency.

J.M. Keynes (1933)

The 1930s were years of political turmoil and economic crisis and change in Ireland. Economic activity had peaked in 1929, and the last years of the Cumann na nGaedheal government (in power since the establishment of the Irish Free State in 1922) saw substantial drops in output, trade, and employment. The policies pursued following Fianna Fail's victory in the election of February 1932 were therefore influenced both by immediate economic pressures and by the party's ideological commitments. The highly protectionist measures associated with De Valera and Lemass - key men of the new regime[1] - sought both to create jobs quickly and, more gradually, to build a large indigenous industrial sector, producing primarily for the home market.

Political controversy complicated matters. De Valera was regarded as a headstrong fanatic by the British establishment (McMahon, 1981: 339). His government's refusal to hand over to Britain the so-called 'land annuities' - a disputed item in the Anglo-Irish Treaty settlement of 1921 - led to an 'Economic War', in which the British Treasury sought payment instead through penal 'emergency' tariffs on Irish imports. The Irish imposed their own duties, bounties, and licencing restrictions in turn.

The Economic War hurt Irish agriculture badly; the prices of fat and store cattle dropped by almost half between 1932 and mid-1935. Farmers got some relief through export bounties and the Coal-Cattle pacts (quota exchanges of Irish cattle for British coal) of 1935-7, but Anglo-Irish relations were not normalized again until the Finance and Trade Agreements of spring 1938, and the resolution of the annuities dispute did not mean an end to protection. The questions "Who won the Economic War?" and "What was the impact of protection on the Irish economy?" are analytically distinct, but they are not that easy to keep apart in practice.

Insofar as there is a standard view nowadays of the 1930s, it is that the economic policies embarked on in 1932 were misguided at best. The reforms associated later with Whitaker (as Secretary of the Department of Finance in the 1950s and 1960s) and Lemass (as Prime Minister from 1959 to 1966) are seen as the victory of common sense over futility: indeed, the change in emphasis detected (by an opponent, it must be said) in Lemass's speeches even over the 1930s has been seen as "an interesting study in gradual political education" (Round Table (1938-39), 29: 377; Bew and Patterson (1982), 1-29). At the outset Lemass was seen as a leading ideologist of self-reliance and state intervention, but he seems to have become increasingly disenchanted with the potential of protected Irish industry over time. In the 1930s, the mainstream economics profession was highly critical of Fianna Fail policy. Prominent economists took turns in berating its alleged anti-rural bias in the influential quar-

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terly Studies, and their arguments were reproduced regularly in the Round Table and the Economist, often with a dash of sarcastic humour added. The Irish Banking Commission's report (1938) was, by implication at least, highly critical of government policy, and some of its findings were repudiated in the Dail by De Valera (De Valera, 1980: 379-410).

Criticism of Fianna Fail tariff and fiscal policy turned chiefly on its neglect of comparative advantage. The creation of industrial jobs through "a heterogeneous shambles of tariffs" must damage agriculture: "While the government have been seeking to build up little industries which can never hope to do an export trade, the Danes, with the aid of their better standards and methods, have captured the huge British market for butter, bacon, and eggs" (Round Table (1938-9), 29: 594; Irish Times, 7 July 1932). Within agriculture, Fianna Fail's preoccupation with cereal production at the expense of "those lines in which [the country should excel] by reason of the natural character of the soil, the natural aptitude and experience of the farming population and the geographical location of the country next to the greatest market for agricultural products", also misallocated resources. The standard inference followed immediately: the output of the economy must decline. W

Critical comment on the Economic War focused on the high economic cost of political principles; in the words of James Meenan, "the Victories of Peace appear to be more costly than those of War" (Meenan (1937): 375). The Agreement of 1938 stipulated that in return for its earlier access to the British market, Ireland had to make a lump-sum payment as a final settlement of all past

financial disputes and, in effect, eventually allow British exporters the conditions available to them in Canadian and Australian markets since the Ottawa agreements of 1932. The latter stipulation was framed in a notoriously ambiguous way, however. The Irish promised to "give reasonable protection to the Irish trade and reasonable competition to British manufacturers", but as a trade union organizer wryly remarked at the time: "if you can give reasonable protection and reasonable competition, well, it is wonderful" (quoted in Curtis (1981): 44). Since the contested payments amounted to about \$5 million per annum ^{land annuities}, the seemingly low sum accepted by the British - \$10 million - was a major focus of attention; and despite his complaint to the Dail that "on the basis of justice ... instead of paying money to Britain ... the payments should be made the other way" (De Valera (1980): 350), the settlement must have inwardly pleased De Valera. It earned him the respect of old foes (Irish Times, editorial, 9 May 1938), and was a contributory factor in the massive Fianna Fail electoral victory of 1938. The context of the Economic War was political, and perhaps the main actors were concerned most with the political costs and benefits. The economic costs and benefits were mentioned, but they have never been measured.

Despite the criticisms, little thorough analysis of economic change in the 1930s exists. [2] The consequences of the new policies for output and employment, and for commodity and factor flows, have yet to be fully examined. This paper makes a start, aiming to show that the period offers scope for the analysis of the effect of tariffs on employment, factor flows, and income.

distribution. Our aim is to show what an economic approach can bring to our understanding of the 1930s in Ireland. Section I sets the scene, providing a quick guide to the period, and assessing the impact of policy through contemporary data. Section II attempts to analyze some key features of the period from a trade-theoretic perspective. Finally, Section III turns to the issue of the costs of the economic war.

I. ECONOMIC POLICY AND PERFORMANCE IN THE 1930S

Though it is natural to see the Fianna Fail victory as marking a clear political and economic break, something is lost by doing so. Parity with sterling was maintained, ruling out an independent monetary policy; Bank Rate remained at three per cent between June 1932 and August 1939; fiscal policy remained sober and, though national debt rose, budgets were balanced or nearly so throughout. Besides, in some respects, the measures adopted in 1932 and later were only what any government would have adopted in similar circumstances. For some time before the election, events were forcing Cumann na nGaedheal into interventionist and protectionist ways that had been frowned on earlier. Cumann na nGaedheal speakers, such as agriculture minister Patrick Hogan, liked to claim in 1930 and 1931 that their attitude to protection was pragmatic rather than dogmatic (PDDE, 36(1930): 109):

We have tariffed, on the admission of anybody who has examined the matter, almost fifty per cent of our tariffable imports. And that is called Free Trade? I accept that definition of Free Trade.

*
The worsening economic situation in 1930-1 put the government in the unfortunate position of seeming to mimic Fianna Fail policy whenever it tried remedial measures. True, there were differences which went beyond rhetoric, and some earlier ministerial statements had betrayed a very deep conservatism. Moreover, the average tariff level rose from 9 per cent in 1931 to 45 per cent in 1936 (Ryan, 1949). Yet the apparent drift in Cumann na nGaedheal policy before 1932 prompts the ecumenical point that Fianna Fail should get neither all the blame nor all the credit for what followed.

Economic policy during the 1920s had been cautious and orthodox. Taxes and public borrowing for capital purposes were kept low, ^{Imports/Exports} budgets were balanced, and the main emphasis was on supporting agriculture (O'Brien, 1936). Agricultural output grew by about 10 per cent during Cumann na nGaedheal's years in office, but farming alone could not produce the jobs needed to put an end to unemployment. The Tariff Commission, created to monitor requests for (and protests against) protection from interested parties, proved (to the satisfaction of most ministers) extremely reluctant to grant protection to industry. Some of the options later associated with Fianna Fail were discussed within government, however, or at least raised in civil service memoranda. For example, an investigation of the efficacy of tariff measures introduced since 1924 considered the ^{*}consequent inflow of capital into the protected sectors, and raised the possibility of licensing foreign investors in the future. This foreshadowed the Control of Manufacturers' Acts, a cornerstone of policy for two dec-

ades after 1932. (See Daly, 1984). Another study attempted to measure the capital value of foreign investment in the Free State in 1927/8. Gordon Campbell, secretary of the Department of Industry and Commerce, recommended in 1927 that the initiative for sanctioning tariffs be passed from the Tariff Commission to his department, reflecting a restlessness with the Commission's over-cautious, snail's-pace approach (McGilligan, 35b/10).

The change of government coincided with the depression and, quite a serious matter for Ireland, a virtual embargo on Irish immigration to North America. Before 1932 Fianna Fail speakers had often berated the government for the continuing high rate of emigration, emphasizing one aspect of the outflow in particular, the associated human capital 'loss'. "If it were possible", claimed Lemass in 1930, "to estimate in terms of money the loss which the State has endured in consequence of emigration, it would be shown that the capital loss . . . would amount to five or six times our national debt" (PDOE, 35(1931): 91). There is no evidence, however, that they saw the United States embargo on immigration as a solution to that problem. On the contrary, it made the need to provide jobs more urgent. The shock given to migration is clear from the recorded numbers: for the first time since the Famine, the movement to the U.S. became insignificant.

Emigration from Ireland 1926-39 (1,000s p.a.)

	US and Canada	Elsewhere
1926-31	18.8	3.9
1932-9	0.7	14.2

In the circumstances, the case for the ambitious public housing programme embarked on in 1932, outlined in the Dail by Lemass a year earlier, makes more sense (FDDE, 35(1931): 36):

There are certain services for which we would like to see money provided on a much more lavish scale than has been provided heretofore, and in respect of which we would place no limit upon the amount the Minister of Finance might seek to secure. The service of housing is a case in point. Apart from the wisdom of embarking upon large development schemes during a time of depression and unemployment, and for that purpose borrowing money, the social need for improved housing is so great that the problem should be faced as one of first magnitude.

Of the 90879 houses built between 1923 and 1938 over 65,000 were built after 1932.

Fianna Fail's pot-pourri of measures included a massive increase in protection and a shift in emphasis in agriculture away from pasture towards grain. For a brief period in late-1931 and early 1932, after Britain had introduced its new tariffs and before the change of government in Dublin, Ireland was, as James Meenan has pointed out, virtually the last predominantly free-trading economy in the world (Meenan, 1970: 142). The change from March 1932 on was dramatic:

At the end of 1931, the list of tariffs covered 68 articles including 9 revenue tariffs. At the end of 1936 it covered 281 articles including 7 revenue tariffs. These figures do not include a profusion of quotas and other restrictions. At the end of 1937 it was calculated that 1,947 articles were subject to restriction or control.

The tariff level index calculated by Ryan (1948/49) rose from 9 per cent in 1931 to 45 per cent in 1936.

Before turning to the economic analysis, it remains to provide a brief outline of trends in output, employment, living standards, and prices. The appendix contains the statistical details. The art of national income accounting was in its infancy in Ireland in the 1930s. The first official estimates, for 1938-44, were not published until 1946, but Kiernan had already produced an estimate for 1926 and Duncan for several years during the 1930s. The latter prompted their author to lament the failure of the economy to grow at all during that decade (Duncan, 1940/1). However, sectoral data for agriculture and manufacturing are difficult to reconcile with Duncan's claim. Net agricultural output dropped in real terms by only 4.0 per cent between 1929/30 and 1936/7, and by 2.8 per cent between 1929/30 and 1938/9 (O'Connor and Guimard, 1985), while real industrial output rose by 46.1 per cent between 1931 and 1938.

Employment expanded between 1932 and 1938. The increase was unspectacular compared to Britain's, but notable in the Irish context. It probably represented the first sustained increase in numbers employed since the Famine and was comparable with any subsequent six-year increase. The considerable hardship caused by the Economic War to farmers was matched by increasing prosperity in the towns. Cheap food and better job prospects go a long way towards explaining the substantial working-class support won by Fianna Fail during the 1930s (which they have retained until the present day).

II. MODELS OF STRUCTURAL CHANGE

In this section we ask what light does simple general equilibrium analysis cast on the events summarised in Section I. Our strategy is to consider in turn the predictions of a sequence of simple models with a view to establishing the extent to which they succeed in capturing the stylised facts of the 1930s in Ireland. All of the models considered are variants of the so-called specific-factors model, which seems appropriate for the relatively short-run focus of the analysis.[3] Our basic framework is one of an economy with two sectors, agriculture and manufacturing, each of which produces under competitive conditions a single good whose price is determined on world markets. Each sector makes use of a mobile factor, labour, as well as a second factor specific to that sector: land in agriculture and capital in manufacturing. To begin with, we assume full employment of all factors, but, as we argue below, the models are consistent with more realistic interpretations.

Our first model is the standard specific-factors model of Jones (1971), in which all factors are assumed to be in inelastic supply. Before the imposition of a tariff on manufacturing, the initial equilibrium is represented by the points A and a in Figure 1. The first (left-hand) panel illustrates the labour market, with the equilibrium corresponding to the intersection point, A, of the labour demand schedules of the two sectors, each of which is a decreasing function of the nominal wage rate, w . The locations of these schedules reflect the technology in each sector as well as the exogenously given output prices and stocks

of land and capital. Technology and output price also underlie the shape of the unit cost curve (or factor-price frontier) c_m for the manufacturing sector illustrated in the second (right-hand) panel of the diagram. This curve shows the combinations of the wage rate and the return to manufacturing capital, r_m , which are consistent with zero profits in that sector.

The effects of a tariff on manufacturing are now easily deduced. The labour demand schedule for that sector is shifted upwards from L_m to L'_m and its unit cost curve is shifted outwards from c_m to c'_m by the extent of the tariff. The result is a new equilibrium represented by points B and b: the wage rate rises, forcing agriculture to shed labour and so reduce output, while the expansion in manufacturing output is associated with a rise in the real return to manufacturing capital. The wage does not rise relative to the new (tariff-inclusive) price of manufacturing, however, reflecting what Ruffin and Jones (1977) have called the "neoclassical ambiguity": the change in real wages cannot be predicted without knowledge of the consumption patterns of wage-earners.

The predictions of this model are reasonably well-known and intuitively plausible. However, this model fails to take account of a crucial issue which, as noted in the last section, attracted considerable attention in Irish debates in the 1920s and 1930s: the possibility that tariffs may induce capital inflows. Our second model attempts to capture this aspect by postulating an exogenously given rental facing the manufacturing sector.[4] With this change in assumptions the new equilibrium represented by

points B and b cannot persist for long, since the increased return on domestic manufacturing capital will encourage the establishment of what Haberler (1936) called "tariff factories" seeking to benefit from the protection now given to the home market. Assuming that the home country has no influence over the world return to capital, the new equilibrium must be that represented by the points D and d. The capital inflow causes a movement along the post-tariff unit cost curve c'_m to point d but a shift in the manufacturing sector's labour demand schedule from L'_m to L''_m . Comparing the predictions of our first two models, it is clear that the presence of international capital mobility implies that there is no trade-off between real wages and industrial employment: both rise together following the imposition of a tariff as foreign capital flows in reinforcing the squeeze on agriculture. Hence, to the extent that the measures to restrict capital inflow after 1932 were successful, [5] they worked against the objective of raising employment. On the other hand, a separate consideration is that, from an orthodox welfare-theoretic perspective, capital inflow is undesirable in the presence of a tariff. This is because the capital inflow reinforces the tendency of the tariff to induce additional production of the "wrong" commodity. [6]

So far, we have assumed that full employment prevails at all times. This might be reconciled with the facts of the Irish labour market in the 1930s by arguing that it represents a moving equilibrium, in which a constant stream of labour out of agriculture is absorbed by emigration and the expanding manufacturing

sector. However, there are at least two difficulties with this interpretation: first, as noted in the last section, emigration fell by a third in the early 1930s. As can easily be checked by manipulating Figure 1, this should have put considerable downward pressure on the wage rate. Secondly, the bias against agriculture in the new government's policies might have been expected to accelerate the flight from the land. Was the increase in manufacturing employment alone sufficient to offset both these influences?

Consideration of a third model suggests an offsetting influence whose significance in this context has not been noted by other commentators: the change in the product mix in agriculture towards more labour-intensive tillage, which doubled the share of crops in value added (see Appendix). The model, due to Gruen and Corden (1970), is similar to the first model in assuming that manufacturing capital and agricultural land are specific and immobile. Its new feature is the disaggregation of agriculture into pasture and tillage, the first of which is assumed to require at all times a higher ratio of land to labour than the second.[7] The initial equilibrium in this model is illustrated by the points a , A and A' in the three panels of Figure 2. The curves in the first panel of this diagram (like that in the second panel of Figure 1) are unit cost curves, illustrating combinations of the wage and the return to land, p , consistent with zero profits in tillage and pasture. (The assumption that pasture is relatively land-intensive is reflected in the fact that the unit cost curve for that sector has a higher slope than that

in agricultural incomes, especially from the point of view of land-owners. Thus, taken together, the models highlight the pro-labour and small farmer bias in Fianna Fail's programme.

The models we have examined draw attention to a number of plausible features of the changes in the structure of the Irish economy in the 1930s as a result of external shocks and policy changes. We have not sought to test the validity of the models; their usefulness rests on their ability to identify implications and contradictions of policy which cannot be pinned down with precision in discursive accounts.

III. COSTS AND BENEFITS OF THE ECONOMIC WAR

The economic war is over. It is, I suggest, complete waste of time to discuss who began it. The important thing is that we won it.

Sean Lemass (1938) PDOE 41: 163

It was to a great extent a bluff... We had these catch cries of the Minister that we could get markets elsewhere; that we could cut off Britain's supplies and would have Great Britain on her knees in no time ... The Fianna Fail Government has made a demonstration to the world of exactly what our strength is.

Patrick McGilligan (1935) PDOE 59: 650

Though 'economic war' is perhaps a misnomer for what passed between Ireland and Britain between 1932 and 1938, the economic costs of measures taken by each state against the other were appreciated on both sides. The Irish decision to make the annuity payments a domestic tax source and to freeze other disputed payments was based on both legal and 'fairness' arguments which need not concern us here. [8] The extra duties imposed by Britain

on a wide range of imports in July 1932 were immediately countered by Irish tariffs and quotas. The effects on Irish agricultural exports are well known; British exports of coal, electrical goods, cement and sugar to Ireland were seriously hurt also. Britain's claim that it was recouping virtually all the loss from the annuities and other frozen payments is supported by a mutinous memo written in 1937 by four of Ireland's foremost civil servant mandarins (MacMahon (1979), 333). But is this plausible in the light of what is known about Irish exports? Surely Ireland had some little monopoly power in the cattle trade at least? As one British M.P. put it (quoted in McKeever (1979), 161):

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It is disputed as to whether these taxes will be paid by the exporter or whether as I believe, they will in the long run be paid by the importer ... The farmers of Leicestershire earned their living by fattening Irish stock and by buying store cattle. The same is the case in South Scotland. Livestock is going to be subject to taxation and that not only means injury to our own farmers but must be reflected in the price of fresh meat. I know that it is arguable, but it is not a very sound argument that there are other sources of supply. That is open to question.

In the same vein, the dispute's disastrous effect on certain coal mines in South Wales was repeatedly raised (e.g., Irish Times, 4 January 1935). On the other hand, British exporters were probably well able to pass on some of the Irish duties to Irish consumers.

Calculating the costs and benefits to Ireland of the Economic War requires more information on such questions. A full examination of store and fat cattle prices in both countries before and after July 1932 would be a starting point. The data below refer

to older store cattle only, but reflect a common pattern (see also Johnson (1979), 47).

Store Prices, U.K. and Ireland, 1927-38 (\$)

	Ireland	United Kingdom	N. Ireland
1927	15.30	15.98	15.27
1928	15.24	15.91	14.44
1929	15.25	15.38	14.23
1930	15.63	16.20	15.05
1931	14.38	15.80	13.10
1932	12.39	14.30	12.15
1933	8.96	12.35	11.02
1934	6.86	10.70	10.58
1935	6.89	11.15	10.13
1936	8.53	12.20	10.94
1937	10.53	13.85	12.52
1938	13.04	14.30	12.85

Source: the Irish and Northern Irish data are those used by Johnson (1979); the U.K. data refer to second quality two-year old shorthorn stores as reported in Agricultural Statistics.

Such numbers seem to suggest that the wedge between Irish and British prices fully matched the special duties imposed by Britain. If so, the Irish deficit - totalling about \$28.7 million between 1932 and 1938 - was collected through the duties. The ensuing loss of producers' surplus must also be considered. Deriving a preliminary 'ball-park' estimate is simple (see e.g. Corden, 1975). Over the period, Irish exports to the United Kingdom averaged about \$10 million per year. Given the presumption that United Kingdom tariffs were fully reflected in Irish prices, in the absence of the Economic War the volume of Irish exports would have been the same but export earnings would have been \$4 million greater. For a supply elasticity of two, for

instance, the triangular loss in producers' surplus would have been about \$1.6 million annually; for a unitary elasticity, half that sum.

The other main items in the calculation are the loss in consumer surplus from special Irish import duties and the lump-sum payment of \$10 million at the end. Since demand for commodities subject to special duties - items such as coal and steel manufactures - was probably inelastic, consumer surplus losses are likely to have been small. During the negotiations of 1938, the value of total outstanding annuity and related Irish obligations was reckoned at about \$80-100 million. Both sides acknowledged the wisdom of a once-and-for-all settlement, but the Irish side would neither concede nor be in a position to raise a sum of that size. The eventually agreed sum of \$10 million was raised with ease at 3.75 percent, about \$1 million of the money coming from British investors.

Elements in the calculation, then, are the 'deadweight' losses to Ireland between 1932 and 1938, the payments not made after 1938 and the lump sum. The outcome cannot be judged with precision. A very high elasticity of Irish export supply and a high elasticity of Irish import demand could have tilted the balance against Ireland. But otherwise the outcome may have been a 'good deal' for Ireland in economic terms.

IV. CONCLUSION

In both political and economic terms the victory of Fianna Fail in 1932 marked a watershed. The new administration's commitment to tariff protection transcended the depressed conditions of the day. In this paper we have attempted a preliminary exploratory analysis of the new policies pursued.

In focusing on the imposition of tariffs, the theoretical model considered in Section II showed clearly that, from the perspective of increasing industrial employment, the strict limitation on capital inflows after 1932 was misconceived. On the other hand, from an orthodox welfare-theoretic perspective, given the introduction of tariffs, the exclusion of capital, to the extent that it was effective, was welfare-improving. Finally, it was noted that the bias in the new government's policies towards labour-intensive tillage rather than land-intensive pasture may have somewhat slackened the flight from the land.

Two more general points may be added. Firstly, from a longer-term perspective, such gains as the policies gave rise to were not costless. The tariff-induced growth in employment could not continue, and industrial employment rose by barely ten per cent between 1938 and 1958. The policies involved an intertemporal trade-off: since the infant industries established in the 1930s failed to grow up, the redundancies in older industries which followed the movement back to free trade in the 1960s and 1970s may be seen as the price of the extra employment in 1932-8. Secondly, we have not explicitly considered here the issue of wheth-

er tariffs themselves may have been justified as a response to a decline in world demand in a small open economy with a relatively underdeveloped fiscal system. A consideration of such issues would require a more Keynesian analysis than that provided above (but see also Butt, 1846: 63).

Finally, just as the post-1932 tariff structure was partly political in origin, the Economic War of 1932-8 was a reflection of post-colonial tensions. Nevertheless, in concentrating on the purely economic aspects, a case can be made on orthodox welfare grounds for the claim that Ireland under Fianna Fail rule did not lose the Economic War.

FOOTNOTES

[1] Eamon De Valera (1882-1975), revolutionary nationalist, founder of Fianna Fail, Prime Minister (1932-47, 1951-4, 1957-9), President (1959-73); Sean Lemass (1899-1971), revolutionary and politician, Minister of Industry and Commerce (1932-47, 1951-4, 1954-9), Prime Minister (1959-66). Good introductions to the period discussed here include Hancock (1937), Meenan (1967), Whitaker (1973), Johnson (1974) and Fanning (1983).

[2] A notable exception is W.J.L. Ryan's unpublished thesis (Ryan, 1949). Ryan provides estimates of tariff changes and calculates their effect on the cost of living. He also calculates the "excess cost" of protection in 1936 - the sum, over all economic activities, of the differences between the prices charged by Irish producers and free trade prices.

[3] See Jones and Neary (1984) for a recent review and for further references. Other applications of this model to issues in economic history are presented in Jones (1971) and Hueckel (1973).

[4] The implications of international capital mobility in the Jones specific-factors model were first examined by Caves (1971), and the same formal model has been applied to the "staples" issue in Canadian economic history by Chambers and Gordon (1966). The present analysis draws on Neary and Ruane (1984).

[5] Daly (1984) presents substantial documentary and anecdotal evidence to suggest that these restrictions were successfully evaded in many cases.

[6] See Neary and Ruane (1984) for an elaboration of this argument.

[7] For an earlier application of this model to Irish economic history, see Ó Gráda (1973).

[8] A despatch from De Valera to J.H. Thomas, Dominion Secretary in April 1932 reflects his officials' advice to emphasize the 'fairness' aspect. He referred to the "financial tribute" which "relatively to population, puts a greater burden on the people of the Irish Free State than the burden of the war reparation payments on the people of Germany, and relative to taxable capacity, a burden ten times as heavy as the burden on the people of Britain of their debt payments to America" (quoted in McMahon (1979), 115).

APPENDIX: A note on output, employment and price data 1930-38

1. TRADE: The decline in Irish trade between 1932 and 1938 was massive, even by contemporary standards. Merchandise trade (imports plus exports) as a share of national income dropped from 67 per cent in 1929 to 39 per cent in 1934 and 41 per cent in 1938. Exports, particularly agricultural exports, were worst hit. Between July-December 1931 and July-December 1934 the value of livestock and butter exports to Britain fell by two-thirds; the so-called Coal-Cattle pacts brought some respite thereafter.

In addition, the composition of trade changed considerably. In some lines trade was almost wiped out:

Imports of Shoes, Spirits, Wool Stockings 1929-38

	Boots and shoes (doz. pr.)	Spirits (gals.)	Wool Stockings (doz.)
1929	336367	174613	279648
1931	325383	197021	289886
1936	65335	29498	41786
1938	16377	33896	68655

Imports of some machinery and semi-processed goods - boiler-house plant and milking machinery, for example - increased, however. The U.K. share of the total dropped from 76.6 per cent in 1932 to 50.4 per cent in 1938.

2. AGRICULTURE: Agricultural output fell in real terms between 1929/30 and 1938/9, by about 3 percent. The output of livestock and livestock products fell - a drop of 7.3 per cent - and this was just about matched by a big rise in the output of

some crops, notably wheat and sugar beet. The acreage under corn rose by an eighth; that under beet quadrupled (see Statistical Abstract, 1931: 26-9 and 1939: 46-7). Crops made up 16.3 per cent of output in 1929, 25 per cent in 1938 (O'Connor and Guilmond, 1985).

3. INDUSTRY: Industrial output and employment increased. In current value terms output of "principle industries and trades" rose from \$23m in 1926 and \$24.9m in 1929 to \$35.5m in 1938; the output of transportable goods rose faster than that (from about \$18m in 1929 to \$28m in 1938). In volume terms gross output rose 47% over 1931-38. The numbers employed in transportable goods and services rose from 102515 in 1926 to 110588 in 1932 and 166174 in 1938, while nominal capital rose from \$48.1m to \$50.9m and \$76m.

Industrial Employment 1926-1938

Year	JuvM	JuvF	AdltM	AdltF	Total
1926	3000	3533	80893	16151	105526
1929	3650	4348	84335	18206	112460
1931	3435	4330	84728	18895	113323
1936	6959	9396	109452	29384	157980
1937	7163	9186	114933	30270	161572
1938	6486	8041	115330	31370	161227

Key: Juv=juvenile, Adlt=adult

This increase occurred without any remarkable drop in output per worker (\$225 in 1926, \$233 in 1929, \$214 in 1938). If brewing is excluded the numbers are \$183, \$192, and \$197. The averages mask a wide variation across industries. Some - notably bacon curing, grain milling, paper making - performed very well; others,

including brewing and vehicle assembly, registered quite a decline in net output per worker.

4. EMPLOYMENT: Between 1926 and 1936 total numbers at work rose marginally, from 1,223,014 to 1,235,424. Agriculture's share dropped from 648,475 to 609,178, but the only other sectors to lose numbers were domestic service, brewing, vehicle assembly, transport, and fishing. The increase in construction was notable - from 36,456 to 55,764. Interestingly, too, public administration and defence hardly changed. No reliable continuous unemployment series exists; administrative changes were such as to make comparisons of official data over time almost meaningless (see, for example, Statistical Abstract, 1939: 111-2, 117-21). An official memorandum (The Trend of Employment and Unemployment in the Saorstát, P.1852, 1935) argued a meliorist position, although it failed to convince some sceptics (Hancock (1937), p. 365). It is worth noting that in Northern Ireland the percentage of the insured workforce unemployed rose from 19 in 1923-30 to 27 in 1931-9 (Johnson (1985), pp. 190-1).

5. WAGES AND LIVING STANDARDS: A massive drop in rural living standards during the mid-1930s is not in dispute, although, O'Connor and Guionard's estimate of a 3 per cent drop in output volume between 1929/30 and 1938/9 is matched by a 6.2 per cent drop in the farm labour force. Relative prices moved against agriculture too, however (Statistical Abstract, 1931: 166 and 1942: 172-3). The effect was mitigated to some extent by rural

employment schemes and the introduction of a farmers' dole scheme, albeit of a very restrictive kind. Despite qualitative accounts suggesting greater prosperity in the towns and cities (for example, Round Table, 28(1937-8): 74), the trend in real wages seems to have been 'little change'.

6. PUBLIC FINANCES: Minor current budget deficits had been an annual event since 1923. This did not change after 1932 (Statistical Abstract, 1939: 156-7). However, the size of the budget rose substantially during the 1930s, and so did public capital liabilities:

Year	1925/6	1931/2	1938/9
(a) Exchequer Tax Receipts (\$m)			
Customs	7.0	8.3	10.1
Excise	6.3	5.5	6.1
Other taxes	11.1	11.7	15.7
Total	24.4	25.5	31.9
(b) Capital Assets and Liabilities (\$m)			
Liabilities	14.6	31.8	61.4
Assets	3.3	15.7	30.6

7. NATIONAL INCOME: Official national accounts begin in 1938. For earlier years, there is Kiernan's estimate for 1926 and those prepared by Duncan for the Banking Commission (Duncan (1938)). Duncan's claim that at no point during the 1930s did national income regain the levels of 1929 are reflected below:

Estimates of National Income (\$m)

1926	167.5
1929	161.7
1931	150.8
1932	145.5
1933	140.1
1934	143.8
1935	149.2
1938	155.4
1939	164.4
1940	179.1

The data are all in nominal terms. Two points: (a) Duncan's allowances for industrial output - \$30.7m in 1929, \$28.7m in 1932, and \$35.1m in 1935 - do not seem to fully capture the increase suggested by Statistical Abstract data (\$24.9m in 1929 and \$35.5m in 1935); (b) Constant price estimates of National Income for the period do not exist, but the rise in import and export prices, about ten per cent between 1932 and 1938, suggests - unless one amends Duncan's numbers - at best no change in volume terms.

If Duncan's data are right, this puts the Irish performance between 1929 and 1938 in a very bad light, comparatively speaking. Few European economies failed to register an increase in real terms over the period; in Britain GDP dropped by 5 per cent in 1929-32, but grew by 25 per cent in 1932-8 (compare Ryan, 1949: 362). However, as pointed out in Section I, there is reason to suspect Duncan's estimates.

REFERENCES

- Bew, P. and H. Patterson (1982): Sean Lemass and the Making of Modern Ireland, Dublin: Gill and Macmillan.
- Blythe, Ernest: Papers (University College, Dublin, Archives Department, P7).
- Butt, Isaac (1846): Protection to Home Industry: Some Cases of its Advantages Considered, Dublin.
- Caves, R.E. (1971): 'International corporations: the industrial economics of foreign investment', Economica, vol. 38, 1-27.
- Chambers, E.J. and D.F. Gordon (1966): 'Primary products and economic growth: an empirical measurement', Journal of Political Economy vol. 74, 315-332.
- Corden, W.M. (1975): 'The costs and consequences of protection: a survey of empirical work', in P.B. Kenen (ed.): International Trade and Finance: Frontiers for Research, London: Cambridge University Press, 51-91.
- Curtis, M. (1981): 'Trade union activity and the boot and shoe industry in Ireland' (unpublished master's degree thesis, National University of Ireland).
- Daly, M. (1984): 'An Irish-Ireland for Business?: the Control of Manufactures Acts, 1932 and 1934', Irish Historical Studies, vol. 34, 246-72.
- De Valera, E. (1980): Speeches and Statements of Eamon De Valera 1917-1973 (Maurice Moynihan, ed.): Dublin: Gill and Macmillan.
- Duncan, G.A. (1938): 'The national income of the Irish Free State,' Appendix 7 in Commission of Inquiry into Banking, Currency and Credit, Appendices, Addenda, etc., Dublin: Stationery Office.
- Duncan, G.A. (1940-1): 'The social income of Eire, 1938-40', Journal of the Statistical and Social Inquiry Society of Ireland, vol. 16,
- Fanning, R. (1978): The Department of Finance 1922-58, Dublin: Institute of Public Administration.
- Fanning, R. (1983): Independent Ireland, Dublin: Helicon.
- Gruen, F.H. and W.M. Corden (1970): 'A tariff that worsens the terms of trade', in I.A. McDougall and R.H. Snape (eds.): Studies in International Economics: Monash Conference Papers, Amsterdam: North-Holland, 55-58.

- Haberler, G. von (1936): The Theory of International Trade, London: William Hodge.
- Hancock, W.K. (1937): Survey of British Commonwealth Affairs, Volume 1, Oxford: Oxford University Press, chaps. 3 and 6.
- Hueckel, G. (1973): 'War and the British Economy, 1793-1815: A general equilibrium analysis', Explorations in Economic History, vol. 10, 365-396.
- Johnson, D.S. (1974): 'The economic history of Ireland between the wars', Irish Economic and Social History, vol. 1, 49-61.
- Johnson, D.S. (1979): 'Cattle smuggling on the Irish Border, 1932-38', Irish Economic and Social History, vol. 6, 41-63.
- Johnson, D.S. (1985): 'The Northern Ireland economy, 1914-1939', in L. Kennedy and P. Ollerenshaw (eds.): An Economic History of Ulster, 1820-1939, Manchester: Manchester University Press, 184-223.
- Jones, R.W. (1971): 'A three-factor model in theory, trade, and history', in J.N. Bhagwati et al., eds., Trade, Balance of Payments and Growth: Papers in International Economics in Honor of Charles P. Kindleberger, New York: American Elsevier Publishing Co.
- Jones, R.W. and J.P. Neary (1984): 'The positive theory of international trade', in R.W. Jones and P.B. Kenen (eds.): Handbook of International Economics, Volume I, Amsterdam: North-Holland, 1-62.
- Keynes, J.M. (1933): 'National self-sufficiency', Studies, vol. 22, 177-93.
- McAleese, D. (1970): A Study of Demand Elasticities for Irish Imports, Dublin: Economic and Social Research Institute, Paper No. 53.
- McGilligan, Patrick, Papers (University College Dublin, Archives Department, P35).
- McKeever, G. (1979): "Economic Policy in the Irish Free State, 1922-38" (unpublished ph.d. thesis, McGill University).
- MacMahon, D. (1979): 'Anglo-Irish relations 1932-1938' (unpublished ph.d. thesis, Cambridge University).
- MacMahon, D. (1981): 'A transient apparition: British policy towards the De Valera government 1932-5', Irish Historical Studies, vol. 22, 331-61.
- Meenan, J. (1937): 'Derating as a means of agricultural relief', Studies, vol. 26, 367-82.

Meenan, J. (1943): 'Irish industry and industrial policy 1921-1943', Studies, vol. 32, 209-18.

Meenan, J. (1967): 'From free trade to self-sufficiency' in F. McManus (ed.): The Years of the Great Test, Cork: Mercier Press.

Neary, J.P. and F.P. Ruane (1984): 'International factor mobility and the cost of protection', Working Paper No. 32, Centre for Economic Research, University College Dublin.

O'Brien, G. (1936): 'Patrick Hogan', Studies, vol. 25, 353-68.

O'Connor, R. and C. Guiomard (1985): 'Agricultural output in the Irish Free State area before and after independence', Irish Economic and Social History, vol. 12, 89-97.

Ó Gráda, C. (1973): 'Models of post-famine adjustment', chap. 4 of Ph.D. thesis, Columbia University.

Parliamentary Debates Dail Eireann (PDDE).

Round Table: unsigned articles in successive issues, 1930-38.

Ruffin, R.J. and R.W. Jones (1977): 'Protection and real wages: the neoclassical ambiguity', Journal of Economic Theory, vol. 14, 337-348.

Ryan, W.J.L. (1948-9): 'Measurement of tariff levels for Ireland for 1931, 1936, 1938', Journal of the Statistical and Social Inquiry Society of Ireland, vol. 18, 109-133.

Ryan, W.J.L. (1949): 'The nature and effects of protective policy in Ireland, 1922-1939' (unpublished Ph.D. dissertation, Trinity College, Dublin).

Statistical Abstract, Dublin: Department of Industry and Commerce.

Whitaker, T.K. (1973): 'From protection to free trade: the Irish experience', Administration, vol. 21, 405-23.

Figure 1: Effects of a Tariff on Manufacturing with and without International Capital Mobility

Figure 2: Effects of a Subsidy to Tillage with Labour
Mobile between Tillage, Pasture and Manufacturing