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Prices in Ireland: Notes for an Inquiry

by

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The object of these notes is to set up a series of preliminary hypotheses with a view to an investigation of the following problems:-

- (a) why are prices rising?
- (b) under modern conditions, is a continual rise in prices a necessary condition for growth?

These are, of course, general questions applying to every country. It is, however, proposed to examine them by reference to the very considerable amount of price data available for Ireland in the post-war period.

John Pratschke and I wish it to be understood that what follows is merely designed as a series of rough notes to help towards the formulation of a statistical study of Irish prices. While certain positive affirmations appear to have been made, such are not intended. The seeming affirmations are usually questions with the interrogation mark missing. It is our hope that our formulation will be more precise and comprehensive as a result of this afternoon's discussion. We would be glad to have accounts of work done by members of the seminar, and references to published work.

In recent years there has come about a very general tolerance or acceptance of a condition of constantly rising prices. Such an attitude would have been inconceivable a generation ago. It was, of course, recognised that prices should recover after such a catastrophe as 1929-30 but still the norm was regarded as one of stationary

prices. In a word, inflation was bad, under any circumstances. As recently as 1958 the writer recalls his dismay when, on a visit to Latin America, he found that manipulation of exchange rates and tolerance of rising prices were regarded by economists in these countries as an accepted method for inducing or forcing savings.

The main objections to rising prices are consequential industrial turmoil and injustice to the fixed (money) income classes. The effects in both cases have been mitigated in recent years: in case (a) by general rounds of wage increases in the determination of which price rises are taken into account; and, as to (b), social security benefits, pensions etc are now adjusted upwards as prices rise. Private life and endowment insurance is a laggard but, no doubt, escalation of benefits will come in time. All this is merely illustrative of the public attitude of acceptance of a system of rising prices.

(a) Why are prices rising?

Almost all actions and attitudes in Ireland (as an example) are conducive to rising prices.

(1) Rising wage rates. Even in the inter-war period a fall in wage rates, under any circumstances whatsoever, was simply inconceivable. Earnings in those days were more closely related to wage rates than they are now. The present regime of periodical rounds of wage increases, uniform without regard to particular industrial activity (whether it is doing well or ill) or to firms within each industry, though it is known that labour productivity firm-wise varies enormously within industry, must be conducive to rising prices.

To see this, it is only necessary to point out that price is the cost of production of the marginal or least efficient firm. According to classical economic theory such a firm would be driven out of business by more efficient firms. Nothing like this happens in actual practice. The least efficient firms remain in business by increasing their prices, the more efficient firms follow suit. On any increase in wage cost, profits are increased more or less pro tanto because of the operation of the principle of the near constancy of the wage-profit ratio. Instead of incurring the social odium of gobbling up the inefficient firms; having to cope with problems of mobility of labour and all the problems incident on substantially increasing output and charging lower prices than cost of production of the formerly least efficient firm, the efficient firms get away with higher prices and higher profits with the least disturbance to the status quo. These considerations apply only in the home market, in which, in the writer's conviction, imperfection of competition is much greater than has been commonly assumed. Bringing the factor of productivity into the argument enhances its force: for the more efficient firms a forced wage increase is a stimulus to increased productivity resulting in increased windfall profits. The argument does not apply to most agricultural products in which something like free competition obtains.

(2) Effect of exports on home prices. It is now fairly well established that economic growth at a high annual rate must be accompanied by an even higher rate in import volume. This phenomenon in the post-war period may be regarded as empirically demonstrated - it is true of Ireland in the recent period of growth - but it is also what one would expect; if imports be considered in the

three categories of use; (i) capital goods (ii) materials (iii) consumption goods, increasing efficiency must ordain increasing imports of plant and machinery, and as regards (ii), materials must be purchased in the cheapest markets, whereas, as to (iii), with increasing household income demand for foreign products increases more than proportionately since these goods tend to have a high income elasticity.

But rapidly increasing imports have to be financed by increasing exports, pro tanto if balance of payments difficulties are to be avoided. This is why governments are now actively engaged in promoting exports by any and every means. The result has been what would in the past have been regarded as "dumping" i.e. selling abroad at lower prices than at home. For instance, it has recently been reported that UK steel is sold at £55 a ton in Britain and £35 in BEC. Of course, the lower export price must carry some profit but this is lower than would have been obtained if the goods could have been sold at home. Exporters recoup themselves by charging higher prices in the home market, so as to obtain what they regard as "fair" profit on all their sales.

(3) Consumers' attitude. There is a considerable degree of consumer tolerance towards constantly rising prices. There are as yet no signs of a "consumers' revolt" to which the famous collapse of prices in May 1920 was, at the time, authoritatively attributed. Of course, these days the impact is mitigated by the rounds of wage increases.

(4) Government spending, if it involves merely redistribution of income, i.e. taking from the rich by taxation and giving to the poor does not necessarily result in inflation, though carried to excess in too short a time it may have other deleterious effects. An increase in government

spending of monies derived from taxation or loans, if it does not increase the quantum of goods and services demanded by private consumers to the extent of increased expenditure must result in inflation. Much of government expenditure, though ostensibly "capital" in character has necessarily social rather than economic objectives.

(5) Capital expenditure is increasing at a higher rate than GNP. Such expenditure will ultimately increase the nation's supply of goods and services but, during the period of capital formation incomes are created but without an increased supply of current goods and services, with a temporary increase in consumer good prices. Since the war there has been no sign of prices receding when the products of the increased capital become available.

(6) Full employment. This consideration might seem irrelevant in Ireland where unemployment in toto is endemic. This is not the case. Skilled tradesmen have in recent years been in short supply. Such shortage obviously has its influence on the earnings of such people and, under the system of wage rounds, all employees are successful in getting the increases which the skilled are in a position to demand. The result is increase in cost of production beyond what it would be if full employment did not obtain for the skilled.

7. Services. It is commonly believed though hard to demonstrate satisfactorily that labour productivity in the service trades has not increased as much as in industry and agriculture. Assuming that this is the case and knowing that employees in the service sectors get much the same rates of increase in wages as in industry where productivity is increasing substantially prices of services must increase. It is hoped to include an investigation

into productivity in the retail distribution sector, the most important service sector in the economy.

(8) Spread of demand. It is a characteristic of modern society that all classes tend to demand the same things: motor cars and television sets are very much cases to the point. Purchase by the poorer classes is facilitated by hire purchase when the prices charged are, of course, substantially higher than for cash down. It would appear that this wide public demand for everything must be conducive to higher prices.

(9) Reduction in import duties. Study of the reductions, price-wise and quantum-wise, which have occurred should be revealing. A first impression is that these reductions, though substantial, have not had the deleterious direct effects anticipated. This section of the inquiry might yield some guidance as to the effects on the economy of full EEC membership, on which we are at present unclear.

(10) Prices in a national income setting. The current and constant price models might be (in the usual notation):-

Current prices	Constant prices
$Y = C + I + X - M$	$Y' = C' + I' + X' - M' + T'$
$X - M = N$	$X' - M' + T' = N'$
$N + I = S$	$N' + I' = S'$
$S + C = Y$	$S' + C' = Y'$

Primes (') indicate constant price. T' (a constant price concept) is the gain from the terms of trade. It equals zero at current prices or when import and export prices rise by the same percentage.

(11) An input-output concordance of price rises in gross output and price - like rises in primary inputs. Direct and inverse approaches.

(b) Prices and growth

It is obvious that analysis with a view to decisively answering the question (b) posed at the outset is going to be very difficult. Broadly speaking the past hundred years has been a period of growth broken by short periods of recession, more and less severe. Yet there were well-defined and lengthy periods during which prices moved up or down, as follows (omitting major wars): 1850-1873, prices rising; 1873-1896, prices falling; 1896-1914, prices rising; 1922-1929, prices falling. The catastrophe of 1929 which reached its nadir perhaps in 1933 was, of course, one of severe falls in output and prices and 1933-39 a period of recovery. From 1945 to date the trend in output and prices has been fairly continuously upward. In Ireland there were a few periods of 1-3 years during which prices (on average) remained steady, though there was never a decline. It is evident that a simple juxtaposition of macro price and output curves for the past hundred years would lead to no simple relation between prices and volume of output.

Most studies of relationship between price and output have been at the individual commodity level, namely as supply and demand equations, derived from cross-section data and time series. Both supply and demand equations express quantity as a function of current price (in both cases) and other factors (in general different in the supply and demand equations). It is not so commonly realised that, insofar as these relations are derived by least square regression, they are theories of cause and effect, prices (and other factors included) being the cause and the quantity supplied or demanded being the effect. This, despite the fact that quantity on offer

(e.g. of agricultural products with a low price elasticity) may determine price. The Cobweb Theorem inverts the cause-effect roles of price-quantity at will. Price as a cause only is much more plausible in the case of supply than of demand relationship. The cause-effect problem in this context wants looking into.

It is much easier to envisage a concordance between increased price and increased output than the latter and falling or stable prices. Here the time factor is important. If materials and labour are purchased at the prices of point of time 1 and the product is sold at (later) time 2, the price of the product having risen between times 1 and 2, a larger profit accrues to the producer than if all prices were the same at the two times. A quite small increase in product price, in these circumstances, may result in a proportionately large increase in profit. The increase in profit is a stimulant to increased production.

To envisage an increase in output during a period of falling prices is more difficult and indecisive. A contributory factor is the well-known phenomenon that when product prices are declining prices of constituent materials decline proportionately more. It is possible for increased profit to be made in such circumstances, possible but not very likely. We are here on the fringe of business cycle theory which in our study on prices we shall try to avoid. The theory is singularly indecisive in its failure to explain changes in the economic trend e.g. in 1920 and 1930 and gives no indication whether present rising trends in either prices and output are likely to break in the future. The common-dictum "1930 cannot occur again" is only an unproven article of faith which implies an exaggerated measure of confidence in the

ability of governments to influence the economic trend. Of course, as stated above, governments can always create employment if they have no regard to rising prices. It is quite true that if a choice had to be made between an undesirably large rise in prices and a lesser increase (if any) in output, prices must be allowed to rise. In a closed economy can full employment always be attained granted a sufficiency of native materials?* This is an academic question which need not trouble us since in the world today, as already pointed out, foreign trade is an ever-increasing proportion of GNP. The curb on too great a rate of increase in GNP in money terms is the balance of international payments. It seems likely in future that, while unfavourable balances will be of proportionately larger dimensions, credit-worthy countries will be allowed more time to recover to normal than heretofore through a properly functioning international bank. Nonetheless undisciplined national practices must sooner or later come up against the curb of the balance of payments.

In Ireland the steeper trend in prices has been accompanied by a progressive deterioration in the balance of payments. This, of course, does not necessarily mean that there is a functional relation between the phenomena. In any study of price trends this aspect is worthy of examination.

In many theories in the form of systems of stochastic systems general price indexes appear explicitly. Nevertheless it is evident that the analysts (with the notable exception of OHerlihy in his Institute paper recently published) accord them merely a subsidiary role.

*Probably not unless there is complete mobility of labour and capital within the nation. With immobility, regions can develop balance of payments difficulties.

In this study we shall try to set prices at the centre of the stage. We shall not eschew elementary analysis if this is apt to our purpose. It is interesting to note that analysts, elementary as well as more sophisticated, have seemed somewhat uncomfortable in the presence of the phenomenon of price, except workers in the derivation of demand and supply relationships. We are much more at our ease with quanta, i.e. current values deflated by appropriate price indexes.

We would hope to keep our methodology as rudimentary as possible, using econometrics only as the need absolutely requires. The conscience of the Institute is easy on the use of econometric methods in the study of prices, from the work of Leser (on demand analysis), OHerlihy (on the inter-relationships of prices, wages and other entities) and Cowling (now in proof, extending the work of OHerlihy). OHerlihy's price equation uses as independents wages and unemployment. He has also an equation for wages; in fact he has a system of equations. Cowling in his wages equations uses OHerlihy's variables and, in addition, profits and trade unionization. Both authors are very thorough, using experimentally a great number of equations; both are good on distributed logs, OHerlihy especially so. Generally speaking, the relationships found are not very good (judged by R^2), though significant. Even their more negative results have the value that they spare other researchers from trying to till unfruitful fields, however promising a priori.

We shall probably bring government expenditure into our equations, not very hopefully but, if you like, in deference to widely held opinion as to price rise causality. We of this seminar may recall, in a cautionary spirit, O'Loghlens tentative thesis that government

spending largely follows, rather than leads the economy generally; it may be an effect rather than a cause; in Baker's terminology at the national level it may be induced rather than autonomous.

We feel emboldened in our decision to confine ourselves to primary research as much as possible by the treatment of the problem in the large OECD volume (Paris 1964) by a group of six scholars of whom two are econometricians in the offensive sense of the term. Yet their report does not contain a single equation. Also, it must be confessed, the findings are rather indecisive.

Our work may not lead to firm conclusions on all the questions raised. At least we shall prepare selectively many tables and charts which will describe the price trend in Ireland in the post-war period.

Table 1

Index of Prices and Services and Other Items
included in the
Consumer Price Index
1953-1965

Base: August 1953 as 100

Year (August)	Services		Other Items	All Items
	Incl. Rent	Excl. Rent		
1953	100.0	100.0	100.0	100.0
1954	101.6	101.1	101.1	101.1
1955	104.5	103.7	102.6	102.7
1956	111.0	111.0	107.4	107.8
1957	112.6	111.0	114.5	114.1
1958	117.0	116.7	116.9	116.9
1959	119.0	118.6	115.2	115.6
1960	122.6	122.1	116.7	117.2
1961	125.4	124.1	120.0	120.5
1962	133.0	132.9	125.0	125.9
1963	137.7	136.9	126.1	127.3
1964	150.7	152.6	137.1	138.8
1965	157.8	158.6	143.1	144.8

Irish Price Index Numbers
Annual, 1946-1965



