# Prices, Wages, Unemployment: Inflation in Contemporary Economic Theory

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## Introduction: the inflation-unemployment dilemma

FOR MANY YEARS it seemed self-evident that in the market economies, where supply and demand are regulated by the price mechanism, the path of optimum economic growth was one that cut its way between two distinct phenomena: inflation on the one side, and unemployment on the other. To follow this path was to achieve growth in a context of full employment, that is to say, one in which the whole labour force was fully utilised, except for some minimal and inevitable "frictional" unemployment caused by workers moving from one job to another, primarily for technological reasons.

This assumption having once been accepted, the extent to which economic development keeps to this path becomes a yardstick of both the state of the economy and the skill of those controlling it. Indeed, government intervention takes its cue from the behaviour of clearly established indicators, which point to the need for corrective action of a fundamentally simple nature: if unemployment rises above a certain level, economic activity must be stimulated by increasing public expenditure, or by any other measure giving a fillip to aggregate demand, until all the production factors lying idle, including manpower, are back in use 2; if, on the contrary, prices begin rising steeply, this is due to the "overheating" of the economy and excessive aggregate demand; the latter must therefore be held in check until it no longer exceeds supply, whereupon inflation will cease.

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<sup>&</sup>lt;sup>2</sup> It was Keynes who first pointed out that in practice labour market conditions do not necessarily become stabilised at a level ensuring full employment and maximum total output, and that government action may therefore be required in order to maintain demand and employment at desirable levels.

1971

Year	Canada		United States		Belgium	
	P	U¹	P	U ¹	P	U '
1955	87.5	4.4	87.6	4.4	87.5	5.8
1960	95.9	7.0	96.8	5.6	95.4	5.4
1965	104.3	3.9	103.1	4.5	108.4	2.4
1966	108.2	3.6	106.0	3.8	112.9	2.7
1967	112.0	4.1	109.1	3.8	116.2	3.7
1968	116.6	4.8	113.6	3.6	119.4	4.5
1969	121.8	4.7	119.7	3.5	123.8	3.6
1970	125.9	5.9	126.8	4.9	128.7	2.9

EVOLUTION OF PRICES (P) AND UNEMPLOYMENT (U)

5.9

134.3

2.9

132.3

Notes: The price indices have all been reduced to a common base (1963 = 100). Unemployment rates are shown as a percentage of the economically active population, except for France where they are expressed in thousands, disregarding fractions thereof.

<sup>1</sup> Sample surveys.

129.5

6.4

Sources: Year books of labour statistics and Bulletin of Labour Statistics (ILO, Geneva).

This is the familiar doctrine underlying the traditional policies for regulating economic activity by alternately combating unemployment and inflation. These policies rely on a whole pharmacopoeia of well-known remedies, including monetary measures (with manipulation of exchange rates in order to influence the external component of supply and demand), credit measures (with changes in interest rates), budgetary measures (with budget surpluses or deficits, depending on the situation), and fiscal measures (encouraging or discouraging savings, and steering demand towards or away from the sensitive areas of the economy).

However, in the years following the period of reconstruction after the Second World War, a "new" kind of inflation was discovered, characterised by the disconcerting persistence of significant and even substantial unemployment, notwithstanding a relatively rapid rise in prices—in other words, in a situation in which, apparently, the weakness of aggregate demand could not be invoked as an explanation.

The above table illustrates this situation as experienced in various industrialised countries.

It appears, therefore, that the earlier concepts must be called into question, and that there is no clearly defined middle road between the separate worlds of inflation and unemployment. Instead, it seems that these two worlds can coexist to a certain extent, and a new word, "stagflation" 1, has been coined to describe the phenomenon.

<sup>&</sup>lt;sup>1</sup> Obtained by telescoping together the words "stagnation" and "inflation".

IN SELECTED	INDUSTRIALISED	COUNTRIES

France		Denmark		Italy		United Kingdom	
P	U ª	P	U s	P	U¹	P	U ²
78.2 <sup>4</sup>	160		9.7	79.6	<b>7.</b> 6 .	79.4	1.1
103.6 4	131	79.7	4.3	87.3	4.2	90.5	1.6
106.0	142	105.5	2.0	110.6	3.6	108.2	1.5
108.9	147	112.9	2.3	113.2	3.9	112.5	1.5
111.8	196	122.1	2.7	117.4	3.5	115.3	2.3
116.9	253	131.9	5.0	119.0	3.6	120,7	2.5
124.4	223	136.5	3.9	122.2	3.4	127.2	2.5
130.9	262	145.4	2.9	128.2	3.1	135.3	2.6
138.1	338	153.9	3.7	134.4	3.1	148.1	3.4

<sup>&</sup>lt;sup>2</sup> Statistics of employment offices (registered unemployed). trade union benefit funds.

<sup>4</sup> Paris only.

The British economist A. W. Phillips <sup>1</sup> was the first to draw attention, in a striking manner, to the systematic coexistence of inflation and unemployment. In his study, Phillips in fact considers not the relationship between inflation and unemployment, but that between rising (or falling) wages and the level of unemployment. However, in an environment and at a time in which inflationary pressures were commonly attributed to rising costs in general and wages in particular, the rate of wage increase was generally regarded as faithfully reflecting the rate of inflation.<sup>2</sup>

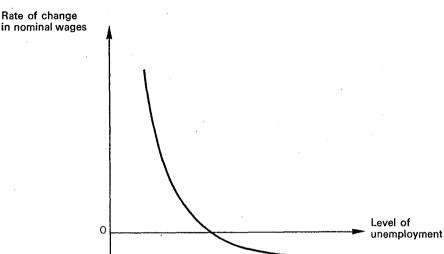
As presented by the author, the relationship studied makes good sense: it simply brings out the point that a reduction in unemployment is accompanied by a steeper rate of increase of nominal wages, which, as a first approximation, tallies with the classical postulate that increasing demand for labour and decreasing unemployment lead to increasing competition for the available manpower among employers, who are consequently obliged to grant larger wage increases. Phillips, however, has further defined the form of this relationship and has found that it is not linear: reductions in unemployment correspond to rates of wage increase which rise more and more steeply the nearer one gets to a state of full employment. The resulting Phillips curve is illustrated in figure 1.

<sup>3</sup> Statistics of trade unions and

<sup>&</sup>lt;sup>1</sup> A. W. Phillips: "The relation between unemployment and the rate of change of money wage rates in the United Kingdom, 1861-1957", in *Economica* (London), Nov. 1958.

<sup>&</sup>lt;sup>2</sup> It is in fact possible to broaden the scope of the Phillips relationship by taking into consideration not only wage increases and unemployment but also prices and the level of utilisation of production factors of all kinds. See, for example, S.-C. Kolm: "La théorie de la courbe inflation-chômage", in *Revue économique* (Paris), Mar. 1970.





The relationship thus established, however, is "classical" only in a first approximation: unemployment is in principle symptomatic of an imbalance between the supply and demand of labour for a given wage level. In strict terms, when wages are in balance (i.e. when the rate of wage increase is zero) there should be no unemployment. But the Phillips relationship shows that substantial unemployment exists in conditions of zero wage increase, and that unemployment remains far from insignificant even when wages are rising quickly.

While this demonstration of the systematic coexistence of unemployment and wage increases (viewed as the driving force behind inflation) is undoubtedly interesting—and even disturbing in its practical implications—the Phillips curve nevertheless provides no explanation of this phenomenon, but merely depicts the economy as oscillating between two poles, namely unemployment with price stability on the one hand, and full employment with inflation on the other. Between these two extremes, a large number of intermediate situations may arise, characterised by a certain level of unemployment accompanied by a certain level of inflation, though less marked than in the case of full employment.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> This kind of analysis, however, is by no means universally accepted by economists. See in particular J. Tobin: "Inflation and unemployment", in *American Economic Review* (Menasha (Wisconsin)), Mar. 1972, pp. 2 and 5, who points out that many theorists believe in the existence of a "natural rate" of unemployment which is compatible with any rate of inflation, since it results from the structural characteristics of the labour and commodity markets and particularly from the imperfections of these markets. This viewpoint has in particular been defended by M. Friedman ("The role of monetary policy", ibid., Mar. 1968, pp. 1 ff.).

It follows that, broadly speaking, there is a choice between two attitudes. One can decide to "live with inflation", or at least with a certain rate of inflation, while attempting to correct such harmful consequences as may arise. Or one may try to discern the causes underlying this dilemma of inflation versus unemployment, with a view to resolving it.

Let us now take a look at these two approaches.

### Inflation, a necessary evil?

If inflation must be viewed as the price of adequate employment—as the Phillips study and its numerous successors tend to show—its elimination would seem to be difficult. Ever since the 1929 slump and the ensuing period of mass unemployment, neither governments nor public opinion are prepared to tolerate more than a very low level of unemployment for any length of time.

But while there may be some political justification for inflation, it is much harder to justify on the social plane: although inflation doubtless enables the employment level to be maintained or increased (provided the rate of inflation is kept low enough to avoid disorganising the economy), by triggering off price rises it penalises all those persons who cannot adjust their incomes to compensate for the higher living costs. As many of these persons are in low-income groups (e.g. small pensioners or retired persons), they may be reduced to destitution.

But inflation is also hard to accept at the economic level: no one has yet succeeded in proving that inflation can help the national income to grow faster. Indeed, it is clearly fraught with serious economic drawbacks, such as the disincentive to save in the face of the falling purchasing power of money, the damage to the balance of payments, and the distorted price structure leading to a sub-optimal distribution of investments and the survival of sub-marginal undertakings.<sup>2</sup>

To the extent that inflation is thus generally seen as an evil, but as one which must be tolerated in order to avoid the greater evil of unemployment, it is possible to conceive of a realistic policy consisting in accepting inflation, while endeavouring to eliminate its adverse effects. After all, a stable currency and stable prices are not ends in themselves, but means to an end, namely the prosperity of the people. This appears to explain the attitude of many governments which, having failed to keep inflation in check, are concerned to mitigate its effects.

<sup>&</sup>lt;sup>1</sup> See, for example, P. Simonnot: *L'avenir du système monétaire* (Paris, Robert Laffont, 1972), pp. 53 ff.

<sup>&</sup>lt;sup>2</sup> See in particular, regarding the harmful economic effects of inflation, OECD: *Inflation*. The present problem (Paris, 1970), pp. 7-9.

<sup>&</sup>lt;sup>3</sup> Simonnot, op. cit., p. 47. See also OECD, op. cit., p. 35, para. 81.

#### International Labour Review

In fact this is the approach that has been openly and deliberately adopted by certain governments. In an interview, the Brazilian Finance Minister described the experience in his country from 1967 up to the present in the following terms: "Instead of combating inflation, we concentrate on eliminating its disadvantages.... In order to counter the adverse effects of inflation [on the balance of payments], it has been sufficient for us... to devalue our cruzeiro from time to time at irregular intervals and by modest amounts in order to deter speculation. As a result of these successive devaluations, the prices of foreign commodities imported into Brazil are, as it were, indexed on the prices of Brazilian products, since with each devaluation they cost more in cruzeiros; thus they are at no comparative advantage on the Brazilian market, and the balance of payments remains in equilibrium. In addition, we have indexed wages on prices... and, finally, we have also indexed interest rates on the cost of living, so as to protect savings." 1

Attempts to offset the effects of inflation—failing action aimed directly at curtailing it—are most frequently imposed by the force of circumstances: corrective measures such as those just referred to, which leave the root causes of rocketing prices untouched, are a commonplace of contemporary economic history. Devaluations are a frequent occurrence, accompanied by official action to upgrade the lowest incomes in an effort to compensate at least in part the losses sustained by the most vulnerable social categories. At the same time, methods are suggested of "skimming" certain excessive incomes regarded as purely inflationary: the tax on income rises proposed in the United Kingdom by Lady Barbara Wootton <sup>2</sup> falls into this category. Such a tax would be imposed on wage increases exceeding a certain predetermined level. It seems, however, that this suggestion, like others seeking to attain the same result, would be extremely difficult to put into practice, even if the principle were to be accepted.<sup>3</sup>

In any event, it is dubious whether it will be possible to go on "living with inflation"—at the cost of corrective action intended to minimise its disadvantages—for very much longer. This pessimistic assessment is based on two considerations. On the one hand, a worsening of the problem is to be feared: to repeat the conclusions of a recent OECD report, it can be said that "several European countries have experienced something like a 'wage explosion'; and in the United States and a

<sup>&</sup>lt;sup>1</sup> Interview given to the Paris newspaper *Le Monde*, 8 Dec. 1970. See also Simonnot, op. cit., pp. 46-47, and "Living with inflation", in "The moving frontier: a survey of Brazil", in *The Economist* (London), Supplement, 2-8 Sep. 1972, pp. 37-43, for a more recent survey of action taken in Brazil to palliate the harmful effects of inflation.

<sup>&</sup>lt;sup>2</sup> B. Wootton: "Why not a tax on income rises?", in *The Observer* (London), 13 Dec. 1970.

<sup>&</sup>lt;sup>3</sup> See J. J. Hughes: "Enforced saving as an alternative to taxation policy in the fight against cost inflation", in *Industrial Relations Journal* (London), Summer 1971.

number of other countries it is an open question whether, when a normal growth rate is resumed after a period of cooling off, price rises may not accelerate again more quickly than expected ".¹ One of the reasons behind such fears is that people very quickly become accustomed to inflation, and that in business circles no less than in trade union bargaining, the policy is to allow in advance for anticipated price increases. The desire to protect oneself against rises in prices and costs before they occur, and the widespread impression that these future increases are inevitable, cause the rate of inflation to accelerate continuously. And this statement is by no means purely hypothetical: a report recently published in the United States ² indicates that in that country the expectations of the various economic agents as regards inflation are built on the experience of the two previous years.

Furthermore—and this may be another aspect of the same phenomenon—it would seem that the trade-off between inflation and employment, that is to say, the degree of inflation that must be accepted in order to attain or maintain a given level of employment, has tended to become costlier in recent years. For example, still as regards the United States, it has been shown that the rate of inflation required in order to hold the unemployment rate at 4 per cent in the late 1960s was 1.5 points higher than that required to produce the same result in the mid-1950s.<sup>3</sup>

Similar observations can be made in respect of a number of industrialised countries; they are clearly apparent in the case of the United Kingdom, France and the Federal Republic of Germany, and somewhat less so in that of Italy and the Netherlands. Expressed in graphical terms, this phenomenon appears to be tantamount to a shift in the Phillips curve towards the right, that is to say, from position I to position II in figure 2, with a new unemployment level  $u_2$ —which is higher than the previous level  $u_1$ —corresponding to an unchanged wage growth rate  $w_1$ . The situation might also be represented by tilting the Phillips curve into a more vertical position.

It is likely, therefore, that corrective measures will no longer prove sufficient; the evil must be tackled at its roots, and for that purpose its real causes must be identified.

<sup>&</sup>lt;sup>1</sup> OECD: op. cit., p. 7, para. 3.

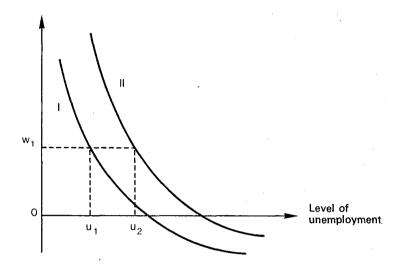
<sup>&</sup>lt;sup>2</sup> O. Eckstein and R. Brinner: *The inflation process in the United States*; a study prepared for the use of the Joint Economic Committee, Congress of the United States (Washington, US Government Printing Office, 1972), p. 2.

<sup>&</sup>lt;sup>3</sup> G. L. Perry: "Changing labor markets and inflation", in *Brookings Papers on Economic Activity* (Washington), 1970, No. 3. See also, by the same author: "Inflation versus unemployment: the worsening trade-off", in *Monthly Labor Review* (Washington), Feb. 1971, pp. 68 ff. C. L. Schultze ("Has the Phillips curve shifted? Some additional evidence", in *Brookings Papers on Economic Activity*, 1971, No. 2) considers that the deterioration in the trade-off is in fact higher than that calculated by Perry and evaluates it at 2 or 2.5 points compared to the 1950s.

<sup>&</sup>lt;sup>4</sup> See Bank for International Settlements: 41st annual report (Basle, 1971), quoted and supplemented in this respect by Simonnot, op. cit., pp. 82-85.

FIGURE 2. EFFECT OF THE SHIFT IN THE PHILLIPS CURVE





#### Looking for an explanation of the inflation-unemployment dilemma

The most widely held theory explaining the existence of this unfavourable trade-off between unemployment and inflation as expressed by the Phillips relationship, as well as its constant deterioration, rests on the hypothesis of the heterogeneous labour market. This theory may assume several forms <sup>1</sup>, which are not mutually exclusive and may in fact even be complementary.

The first of these forms is based on the finding that full employment is not attained simultaneously in all sectors or branches, but successively in different sectors or branches. The result of this state of affairs is that increased demand produces bottle-necks which render supply relatively or totally inelastic and give rise to price increases, followed by wage increases. These price increases spread by a process of infection before a state of full employment has even been reached in all sectors.<sup>2</sup>

According to this explanation, therefore, it is the failure to achieve perfect mobility of the labour force between undertakings as well as at the occupational level and physically which is responsible for the coexistence of unemployment and inflation. Indeed, theoretically speaking, it is

<sup>&</sup>lt;sup>1</sup> For an exposition of these various forms see, for example, R. E. Hall: "Prospects for shifting the Phillips curve through manpower policy", in *Brookings Papers on Economic Activity*, 1971, No. 3, pp. 660-661.

<sup>&</sup>lt;sup>2</sup> Simonnot, op. cit., p. 62. This is also, in particular, an explanation suggested in the case of France by A. Sauvy in his monthly notes on the economic situation published by *Revue française de l'énergie* (Paris); see, for example, the issue for July-Aug. 1972, p. 512: "Illusions sur la demande".

possible to go still further and to dispute the very significance of the Phillips curve, on the grounds that it is based on averages and therefore presupposes the existence of a single labour market—imperfect, no doubt, but nevertheless real—whereas careful consideration of empirical evidence points rather, it would seem, to the simultaneous existence of several different markets with only indirect lines of communication between them.

The second form of explanation lays emphasis on the fact that for some years now substantial changes in the composition of the labour force have been generally observable. The over-all level of unemployment, as recorded and reflected in particular in graphs based on Phillips curves, does not cover the same persons now as it did a few years ago, since the proportion of young persons under 20 years of age and of women in the working population is now substantially greater. The increase in these groups—the so-called secondary labour force—is held responsible for a somewhat artificial increase in the level of unemployment for a given rate of inflation or wage increase. This is all the more true because this secondary labour force generally lacks the qualifications required in order to fill the extra jobs created by the increase in demand.

### Manpower policies as remedies for inflation

If one accepts the arguments outlined above, it becomes clear that to escape from this dilemma it will be necessary: (1) to improve the operation of the labour market; (2) to eliminate the bottle-necks; and (3) to integrate the unemployed portion of the "secondary" labour force in the employed and productive labour force.

The solutions most commonly advocated are indeed generally on these lines.<sup>2</sup> They can in fact easily be reduced to three types of measures corresponding to the three objectives just mentioned.

First of all, there is the action taken to improve the efficiency of the labour market. Its purpose is to secure a more effective matching of potential supply of and demand for labour, with the object, for example, of avoiding shortages of certain types of workers in one place while there is an oversupply of the same workers elsewhere. Measures will be taken to promote the circulation of information and of the workers themselves; this result may be attained by developing employment services, organising clearing-houses at the national level for job-seekers and employers having vacancies, as well as by establishing or extending schemes for encouraging the geographic mobility of workers (payment of compensation for re-

<sup>&</sup>lt;sup>1</sup> Perry: "Inflation versus unemployment: the worsening trade-off", op. cit., pp. 68-69.

<sup>&</sup>lt;sup>2</sup> See in particular Hall, op. cit., pp. 661 ff., as well as C. C. Holt, C. Duncan MacRae, Stuart O. Schweitzer and R. E. Smith: "A manpower approach to the unemployment-inflation dilemma", in *Monthly Labor Review*, May 1971, pp. 51-54.

moval expenses, offers of housing, etc.). There are any number of measures of this kind, many of them well known and perhaps requiring only to be extended and reinforced.<sup>1</sup>

Secondly, there is the possibility of taking action to eliminate manpower bottle-necks, or even to prevent their occurrence. For this purpose it is necessary, above all, to influence the supply of manpower, especially from the standpoint of quality, by means of appropriate policies for training, retraining and vocational guidance. These, however, are longerterm measures and careful forecasting is needed. It is no longer merely a question of improving the operation of the labour market so as to facilitate the matching of supply and demand, but of changing the conditions on that market in order to reach a more acceptable point of balance.<sup>2</sup>

The third type of measure consists of action to promote the integration of "secondary" and marginal manpower in productive activities, with the double aim of reducing the unemployable or hardly employable fraction of the labour force, i.e. the apparent unemployment, and improving the elasticity of supply in the face of expanding aggregate demand, by making additional production facilities available to the economy. The action required towards this end relates intrinsically to the vocational training and upgrading of workers who are at a disadvantage owing to their lack of experience or for any other reason (sex, race, religion or age, for example).

The "recipes" thus proposed appear to flow logically from the dominant analysis of the reasons for the coexistence of inflation and unemployment to which we have referred. It seems, nevertheless, that policies seeking to influence manpower supply and demand are generally regarded as inadequate. There are a number of reasons for this.

In the first place, the record to date casts some doubt on the effectiveness of these policies: for many years now, the majority of the industrialised countries have been energetically pursuing active manpower policies<sup>3</sup>, and yet they are still experiencing inflation accompanied by some unemployment.

In the second place, it seems that it is not the inefficient functioning of the labour market which is responsible for the imperfect co-ordination of offers of and applications for employment; the causal link is rather the other way round: in actual fact, employers make decisions about the

<sup>&</sup>lt;sup>1</sup> A description of possible measures will be found in ILO: *Employment and economic growth*, Studies and Reports, New Series, No. 67 (Geneva, 1964), pp. 116 ff.

<sup>&</sup>lt;sup>2</sup> Such measures are advocated in particular in the report by the Secretary General of the OECD (*Inflation*, op. cit.). See in particular p. 13, para. 20.

<sup>&</sup>lt;sup>3</sup> For example, the programme implemented in the United States under the Manpower Development and Training Act, 1962 (see ILO: *Legislative Series*, 1962—USA 1); the "active manpower policy" which has long been applied in Sweden; the creation of the National Employment Fund (Act No. 63-1240, dated 18 December 1963; ibid., 1967—Fr. 1D) and numerous associated measures in France.

hiring of staff and level of remuneration in a relatively independent fashion, in the light of criteria and conditions which are peculiar to them. and the role of the labour market is perhaps less important than it is often thought to be at first sight. If the labour market fails to operate as it should, it is not because it is defective but because the various economic agents, and undertakings in particular, are independent of it. This appears to be the outcome of recent studies on the subject of wage differentials undertaken, inter alia, in France 1 and confirmed by certain American researchers. Thus it has been stated that the majority of employers fill their vacancies without resorting to the open market, for one of three reasons: because they choose not to do so (they prefer to promote their own employees, about whom they have much better information), because they cannot (they are prevented by certain institutional restrictions, by the need to obtain official permission or by preferential hiring clauses in collective agreements), or because they can do without it (when the personnel department of an undertaking has a waiting list of job applicants, the employer has no need to resort to the labour market or the official employment services).2

Finally—and this is the third reason for questioning the effectiveness of action confined to manipulating the supply of and demand for labour—bottle-necks and production tie-ups cannot all be blamed on an inflexible labour market. The shortage preventing an expansion of supply to keep pace with increasing demand may stem from a shortage of physical production factors (materials, equipment or capital), and inflation must then be attacked from other angles. Instead of attempting to increase supply, one must perforce attempt to control demand and costs and have recourse to income-oriented policies.

#### The role of incomes in the inflationary process

The fact that a *single* labour market, properly speaking, does not exist, but that each undertaking relies as it were on its own particular market means that wage increases may easily originate in one sector of the economy and then spread to the whole system.

The mechanism whereby wage increases occur and spread may be explained, for example, as follows: undertakings generally feel a need to expand their business when their profits are rising; it follows that they take on more labour in a situation of high or rising profits. On their own particular labour market, the restricted size of which has already been noted, the pressure of demand is likely to trigger off wage increases. In

<sup>&</sup>lt;sup>1</sup> In particular by the Labour Economy and Sociology Laboratory at Aix-en-Provence, the results of which were published in *Revue économique*, Mar. and May 1971. See especially the section entitled "Présentation théorique" by J.-J. Silvestre in the March 1971 issue.

<sup>&</sup>lt;sup>2</sup> Hall, op. cit., p. 666.

addition, the increase in the profit margin encourages the trade unions to pitch their demands higher, while at the same time undermining resistance on the part of the employers. The latter will be all the more inclined to give way since, in the favourable situation we have assumed to exist, they will be free to pass on the higher costs resulting from the higher wage bill in the form of higher prices to the consumers. And so we find ourselves faced with an increase in profits, wages and prices in a given sector.

Although, as already pointed out, there is no such thing as a single, homogeneous labour market, it is probable that the wage increase granted will tend to spread from the sector originally concerned to the rest of the economy. This will occur in particular because wages are not determined solely by the interplay of supply and demand in a perfect market. In the "social conscience", and—which is more to the point—in the minds of the negotiators who sit down at bargaining tables, there exists a certain conception of the hierarchy and relative structure of wages, both as between occupations and as between the various branches of industry. The shape of the over-all wages structure can only be changed relatively slowly; an upward movement of one of the components of this structure will normally induce similar movements of the other components in an endeavour to catch up with the first and re-establish the original relationship of the different wages, but at a higher level.<sup>1</sup>

This general rise in wages will normally lead the entrepreneurs, who are concerned to safeguard their profit margins, to react by raising their prices whenever the economic situation permits. In fact, it does so permit ordinarily, since the increase in wage earners' incomes—possibly supplemented by a policy of increased public expenditure to combat unemployment—will operate to prevent a falling-off in demand.

On being confronted with this price rise, the workers, in their turn, will seek to recover their former position by negotiating new wage increases—either generally, or starting from a sector in which they are in a strong bargaining position, whereupon the increase will be spread by the mechanism already described—and a new lap of the inflationary race (or spiral) between wages and profits will have begun.

Furthermore, there is no reason, theoretically speaking, why the process should ever come to a stop by itself. As one writer put it recently, "capitalists and wage earners win and lose alternately in the inflation game. Inflation goes on indefinitely satisfying their demands in turn." Inflation is the by-product of a struggle over income distribution in which entrepreneurs and wage earners fight to preserve or increase their share of the national income, by using whatever "market power" they can

<sup>&</sup>lt;sup>1</sup> In this connection see in particular J. Mouly: "Wage determination: institutional aspects", in *International Labour Review*, Nov. 1967, especially the graph on p. 508 and the table on p. 511.

<sup>&</sup>lt;sup>2</sup> Simonnot, op. cit., p. 90.

summon up.¹ The reasoning behind it can be exemplified by the following model: "A society is composed of [say] five groups. The income of each group is 20. The aim of each group is to earn 25. Five times 25 makes 125. The only way in which these aims, which are ex ante incompatible, can be made compatible is by increasing the social income, either in fact, by increasing wealth, or fictitiously, by increasing prices [which will happen to the extent that production bottle-necks exist], or by both of these methods simultaneously." ²

### Income policies in the fight against inflation

How can this vicious circle be broken? The solutions most commonly advanced have consisted in concentrating on one or the other of the two alternating driving forces, wages and prices, to the extent that rising prices reflect the attempts of entrepreneurs to maintain or increase their profits.

While they have taken various shapes, ranging from strict authoritarianism to the framing of mere recommendations to employers and workers, the policies adopted in this respect have almost universally comprised the fixing of wage increase "norms", a ceiling being set on such increases by linking them to the increase in productivity, measured at a level of aggregation (undertaking, branch of industry, economy as a whole) varying with the country concerned.<sup>3</sup> This type of wage regulation is most frequently accompanied, at least in its more authoritarian forms, by price regulation and sometimes by price freezing.<sup>4</sup>

It must be admitted, however, that these policies have rarely encountered any lasting success. It is hard to avoid wage drift <sup>5</sup>, and it appears that price controls and freezes have always been circumvented with relative ease, at least in the medium term; in any event, they can never be totally effective.

Instead of directly controlling wages or prices, attempts have accordingly been made to influence the behaviour which leads to their upward movement. Various tactics can be used for this purpose, ranging from compulsion to mere persuasion.

<sup>&</sup>lt;sup>1</sup> See Gardner Ackley: "An incomes policy for the 1970's", in *Review of Economics and Statistics* (Cambridge), Aug. 1972, in particular p. 218.

<sup>&</sup>lt;sup>2</sup> Simonnot, op. cit., p. 91. This theory of inflation was first formulated by H. Aujac: "Une hypothèse de travail: L'inflation, conséquence monétaire du comportement des groupes sociaux", in *Economie appliquée* (Paris), 1950, pp. 280-300.

<sup>&</sup>lt;sup>3</sup> For details of some of these policies, see in particular OECD, op. cit., pp. 77-90.

<sup>&</sup>lt;sup>4</sup> Such as the 90-day price freeze accompanying the wage freeze imposed in the United States in August 1971. But during the last few years many other countries have resorted to such action, sometimes for longer periods (as in Sweden, for example, between August 1970 and January 1972).

<sup>&</sup>lt;sup>5</sup> See in this respect Mouly, op. cit., pp. 515-519.

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The purpose of compulsive measures is to penalise whichever of the social partners indulges in inflationary behaviour, so as to make them adopt an attitude more consistent with monetary stability and the maintenance of stable prices which is one of its corollaries. An instance of this approach can be found in the suggestion of an excess wage settlement tax, which would be imposed on employers who paid wages exceeding the established "norm". In contrast to the policies referred to earlier, this system leaves the social partners entirely free to settle the terms of their agreement, and the flexibility of the wage structure is preserved. The criticism has been made, however, that there is nothing to prevent such a tax being simply passed on to the customer in addition to the cost increase resulting from the higher wages, and this will certainly happen whenever demand is sufficiently elastic to absorb it; it follows that in practice the rate of inflation may well be accelerated by this process.<sup>2</sup>

Persuasion, therefore, must be regarded as the preferred course. Indeed, it has been rightly pointed out that, if it is to succeed, any system of stabilising wages and prices—whether described as "compulsory" or "voluntary"—demands the consent or at least the tolerance of those who actively participate in fixing them. For this consent to be forthcoming, it is essential that those who are regulated—and the general public as well—are convinced that the system is fair and equitable, in other words, that it does not impose any unilateral sacrifices and that everyone will "play the game", with the State always ready to make anyone attempting to flout the public interest toe the line, if need be by resorting to compulsion. Everyone must also be profoundly convinced that the sacrifices called for are worth while and that the goal to be reached is useful, legitimate and universally beneficial.3 Concern with these desiderata certainly explains, for example, the comparative success encountered in recent years by Austria in implementing its prices and incomes policy; it appears that during the wage negotiations in 1971 and 1972, the trade unions agreed not to over-exploit the advantageous situation resulting for them from the pressure of demand; this attitude in itself may no doubt be attributed to the smooth operation of the Parity Commission, in which employers' and workers' organisations co-operate voluntarily, and also to the direct action taken by the Government against rising prices and in the field of income tax.4

Inflation is essentially a phenomenon related to the behaviour and therefore to the expectations of the various economic agents. The fight against inflation requires first and foremost a strong faith in the stability

<sup>&</sup>lt;sup>1</sup>S. Weintraub: "An incomes policy to stop inflation", in *Lloyds Bank Review* (London), Jan. 1971.

<sup>&</sup>lt;sup>2</sup> See Hughes, op. cit.

<sup>&</sup>lt;sup>8</sup> Ackley, op. cit., pp. 220-221.

<sup>4</sup> OECD: Economic surveys: Austria (Paris, 1972), pp. 15 ff.

of the economy. This faith will be acquired all the more easily and consolidated all the more firmly if a climate of social co-operation and trust is allowed to develop and the social partners know that there is if necessary an arbiter—the State—who will see to it that the general interest is duly respected and who will prevent either or both of the parties from exploiting temporary situations for their sole benefit.