STUDY

ON THE POSSIBLE PART PLAYED BY CERTAIN PRIMARY NON-EMPLOYMENT INCOMES IN THE INFLATIONARY PROCESS IN BELGIUM

prepared for the Commission of the European Communities by

Dr. G. VANDEWALLE Professor at the State University Center of Antwerp COMMISSION OF THE EUROPEAN COMMUNITIES

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PREFACE OF THE COMMISSION

It was today generally accepted that action taken solely on prices and wages is insufficient to maintain a non-inflationary growth policy. For these reasons, the Commission has deemed it useful to have independent experts study, in the different member countries, the possible part played by certain primary non-employment incomes in the inflationary process.

For the time being, two of these studies are available: that of Professor MOCKERS concerning France and that of Professor VANDEWALLE for Belgium. Analogous studies are being prepared for Germany, the United Kingdom, Italy and the Netherlands. It is expected that the other member states will be the object of similar studies during the course of next year.

Given that it is an important subject just as much for economic viewpoint as the political, which justifies as large a discussion as possible, the Commission is publishing in the current brochure the complete study presented by Professor VANDEWALLE. The opinions expressed are the sole responsibility of the author and should not be taken to the attitude of the Commission concerning the many questions involved.

Beginning of 1974

FOREWORD

The purpose of this study is to analyse the influence of the development of certain primary forms of non-wage income on that of inflation in Belgium.

The study was carried out under my direction by a research group at the State University Center at Antwerp.

Dr. J. VAN DEN BROECK and Dr. W. WINKELMANS, assistant lecturers, carried out the econometric analyses and assembled the documentation for the other chapters.

Dr. M. VAN HECKE, vice-chairman of the Commission for the Regulation of Prices, supplied invaluable information on Belgian policy on prices. In addition, he checked all the texts and, on my behalf, obtained information and advice regarding the composition of the various chapters.

I myself am responsible for producing the text in its final form.

In conclusion, I should like to thank the officials of the Institut National de Statistique, the Société Nationale du Logement, the Institut National du Logement and other quasi-governmental and Common Market organizations for their cooperation in providing me with additional information concerning certain statistics and certain research done by them.

Dr. G. VANDEWALLE,

Professor at the State University Center in Antwerp

Summary of the study of Professor VANDEMALLE concerning the effect of certain primary non-wage incomes on the development of inflation in Belgium

The study begins with a brief analysis of the advantages and drawbacks of inflation. From this it can be concluded that the harmful effects of inflation on economic development by far outweigh the favourable effect which inflation has on investment. Governments must therefore take appropriate measures to combat the inflationary tendencies which are becoming increasingly prevalent in most neo-capitalist type economies.

The measures raken to curb price rises have generally been based on the neo-classical, Keynesian and post-Keynesian theories which pay little attention to any influence which increases in non-wage incomes may have on price movements and vice versa.

One thing that can be said for the theory of structural inflation is that it outlines the various circumstances and events which can trigger off an inflationary movement, and the economic factors which accentuate or curb the rise in prices; but it has not worked out a complete theory of the role of non-wage incomes in the trend of inflation. The modern Anglo-American theories of inflation stress above all the role of the trade unions and of groupings of enterprises (cartels, trusts) in explaining the lack of downward flexibility in response to falls in demand and also attach much importance to the economic factors which slow down inflation. As in the other theories of inflation, any influence of the rise in non-wage incomes is disregarded.

After this brief look at the theories of inflation which serves as the introduction to the study, an analysis is given of the progression of nonwage incomes in Belgium between 1953 and 1971 as recorded in the national accounts. The first conclusion to be drawn from this analysis is that between 1953 and 1971 the rise in agricultural prices was fairly small and consequently

the increase in incomes in crop farming, horticulture, forestry and livestock farming did not contribute decisively towards higher prices. In 1972 and 1973 the rise in farm prices was sharper but was brought about by a general increase in the world prices of cereals, oils, fats and meat, and was not therefore the consequence of autonomous increases in the income of the farming community in the country. In view of this there is no point in analysing this income, as the results arrived at would not correspond to the aims of the study.

The other types of non-wage income are divided into three groups:

- (a) Income of the self-employed not working in agriculture (traders, craftsmen, the professions);
- (b) Interest and rent;
- (c) Company earnings: distributed (dividends, directors' reumerations) and retained (general and specific reserves, direct taxes).

The first category represents some 40% of the increase in non-wage incomes between 1953 and 1971, while the second accounts for some 26% and the third for 28%. Consumer prices are directly influenced by the income of the self-employed, but not by interest and rents, which are not included in the consumer price index. Corporate earnings depend on companies' profit margins and therefore have much the same effect on the cost of living as the income of the self-employed. It is for this reason that in Chapter III, which analyses the correlation between prices and wage and non-wage incomes, a distinction is made between total non-wage incomes on the one hand, and this total less interest and rent on the other.

The following conclusions were drawn from this econometric research:

(a) The continuous increase in productivity in industry enabled wages to grow much more rapidly than consumer prices have risen.

In services, the improvement in productivity was less, with the result that the rise in the income of the self-employed had a fairly marked repercussion on the prices of services and so indirectly on consumer prices.

- (b) The growth in the income of companies limited by shares did not have much influence on the wholesale prices of industrial products. In most countries higher productivity saved prices from the effects of the increase in corporate earnings.
- (c) Wages and the income of self-employed workers were pushed upwards by adjustments to the consumer price index. This feedback process was apparent throughout the whole period covered by the study but more especially in the latter years. It occurred with a time lag of several months.

Chapter IV contains a detailed study of the various items in the consumer price index, in order to discover which increases in non-wage incomes did influence this index in an important way.

As the prices of few services were incorporated in the consumer price index before 1967, it could not be influenced much by the growth in the income of several categories of self-employed workers. In 1967, however, changes were made in the weighting attached to the prices of various groups of products and the prices of more services were included in the index, with the result that increases in the incomes of self-employed workers came, overall, to have a greater effect on this index.

Since the payment for services accounts for an increasingly large part of private consumption, we can say that the post-1967 consumer price index is a truer measure of the cost of living than that of the previous years. It is for this reason that the movements in the various components of this index were studied much more closely for the period 1967 - 1972 than for the period 1953 - 1966.

We found that the rise in consumer prices between 1967 and 1972 was given additional momentum by:

- (a) Repeated increases in the price of certain basic foodstuff such as bread, beef and veal;
- (b) Higher indirect taxes caused by the introduction of VAT and the increase in certain excise duties (on cigarettes and motor fuel);
- (c) The raising of the charges for most public services (railways, municipal trans and buses, post etc);
- (d) The favourable economic climate throughout most of the period, which created an employment situation which lent itself to wage inflation and increases in wholesale and retail prices.

The very sharp rise in prices cannot therefore be attributed solely to the increase in certain non-wage incomes. It was evident, however, that intermediaries frequently use methods for fixing their selling prices which bring into play the cumulative increase effect (not only is the increase in the purchase price passed on in full in the selling price but the profit margin is also adjusted in line with this increase) and the ratchet effect (intermediaries adjust their selling prices when purchase prices increase but not when they fall).

It is above all when consumers have little information about changes in the wholesale prices of a product or in the prices of the raw materials that the cumulative increase and the ratchet effects are evident (e.g. furniture, magazines and footwear). When, however, these changes are of a seasonal nature and are therefore fairly common knowledge and when, in addition, there is keen competition to find outlets, distributors are forced to adjust their prices in line with the real level of wholesale prices. Consequently it is difficult to say whether, in general, the relative profit margins of intermediaries have increased, or whether, under the influence of competition of supermarkets, they have diminished.

In Chapter V, paragraph 1, we sought to put a figure on the average turnover of small traders and craftsmen between 1953 and 1971 in order to relate it to their income and thus to see approximately how the net profit margins developed.

The series obtained show no clear trend. Up to 1969, average margins hovered around 40%, but in 1970 a downward movement appeared to set in. As no figure was available for 1972, it was impossible to say whether this was a structural movement set off by the proliferation of supermarkets or a temporary setback brought on by the 1971 recession. Supermarkets increased their share in the turnover of retail trade from 10.9% in 1953 to 19.5% in 1971, but the modernization of the distributive trade seems to have had only a limited restraining effect on the rise in consumer prices. Traders' cash margins increased almost as much as the selling prices of manufacturers and wholesalers.

Between 1953 and 1971 there was a very large rise in professional incomes and in particular those of doctors and pharmacists. From 1959 to 1971 the incomes of doctors and dentists calculated on a per capita basis went up at a rate of 7.8% per year. For pharmacists the rate was 7.9%. These rates are slightly above the 7.5% at which gross wages increased in real terms.

Allowing for the fact that tax on the incomes in the higher brackets is heavier in view of the progressive rates, the conclusion arrived at is that the net incomes of doctors, dentists and pharmacists increased almost at the same pace as those of manual workers. But as no sliding scale system exists for adjusting the incomes of the professions in line with rises in prices, the average real incomes of members of the professions fluctuate to a fairly large extent. Doctors' and dentists' fees expressed in real terms increased sharply in 1958 - 1959 and then again in 1964 - 1965 and 1968 - 1971. In the latter years the increase was well above that of the cost of a consultation, and this would indicate that the rise in the incomes of the medical profession in this period was due in part to the fact that more services were rendered. It is also possible that the incomes statistics for the professions for the period 1968 - 1971 overestimate the real increase, being based on tax returns. This is because following a tightening of controls, a number of professional people had to declare a larger proportion of their income than in previous years.

It is furthermore possible that during these years the doctors' professional associations stepped up their action to have charges for their services increased, in response to the desire of many members of the profession to offset the effects of heavier taxes by a rise in their gross fees.

The number of pharmacists grew very regularly from 1953 to 1971, but there were large fluctuations in their gross per capita incomes. Sharp increases occurred from 1958 to 1965 inclusive, then the growth rates fell and in 1969 and 1971 there was even a downward movement. This was probably due firstly to the stricter control of prices of pharmaceuticals between 1969 and 1971 and secondly to the less marked growth in the consumption of medicines. More pharmacists had to share out an almost constant amount of gross profits on sales of pharmaceuticals. It is also possible that the extension of the practice of allowing a 10% refund in response to the keener competition between private pharmacists and cooperative chemists lowered the average earnings of pharmacists.

The income of owners of dwellings did not keep up with building costs, which, between 1965 and 1972, increased much more than consumer prices.

This can be attributed on the one hand to the activities of companies approved by the Société National du Logement, which by building low-rental homes influenced the rents of small dwellings, and on the other hand to the policy of home building subsidies pursued by the Central Government and the provinces.

This policy prompted many young married couples to build or buy a home, regularly reducing the demand for homes to rent, while old houses remained in large supply and affected the trend of average rents.

Interest income grew sharply as a result of the increase in invested capital.

But as the continual increase in consumer prices between 1954 and 1972 steadily reduced the purchasing power of invested capital, much of the increase in interest income is fictitious. In the years when prices climbed steeply (1966 and 1972), most savers lost money. Moreover, the typical "rentier" has almost completely disappeared and the purpose of most investments is not to create income for consumption, but to obtain an income to offset the loss of the purchasing power of capital.

The effect of the increase in interest income on the demand for goods and services **ca**n therefore be considered minimal, or in other words it is not a source of demand-pull inflation.

In view of the movement in prices, the lending rates charged by the SNCI (Société Nationale du Crédit à l'Industrie) and by private banks remained in general fairly low.

This policy encouraged investment and thus contributed towards maintaining a high level of economic activity through almost the entire period from 1960 to 1972.

By making it easier to resort to bank lending, it contributed towards a rise in prices. In view of the complex character of inflationary movements, caution must be the watchword when deciding on economic policy measures to combat inflation.

Since structural inflation as it exists today is above all the consequence of a clash of excessive material aspirations of various social classes, any policy which sets out to combat the rise in the cost of living must conflict with many economic interests.

A rational anti-inflationary policy therefore requires that the government should firstly determine to what extent it is willing and able to get the various interest groups to moderate their demands allowing for any resistance that they might show, so that these demands can be reconciled with greater price stability. This is primarily a political problem rather than an economic one.

In Belgium, the main curb on the upward price movement was the system requiring notice to be given of any proposed rises. By imposing a waiting period on enterprises before they can increase their prices, the government prevents recipients of non-wage incomes from immediately adapting these incomes in line with increases in costs. This system is fairly effective and explains in part - accountmust also be taken of other factors such as the high savings ratio, the moderation shown by the trade unions in their claims, etc - why the rate of inflation has generally been lower in Belgium than in the neighbouring countries. But if the policy of curbing price rises is pushed too far, it creates distortions in the economic structure, for investments will no longer be channelled into industries where selling prices are kept too low in comparison to costs.

It is for this reason that the price commission, which must give the Minister an opinion on every application for price increases, very rarely refuses an increase, but in most cases looks for a compromise between the interests of the applicant firms and the interests of consumers. In general the Minister accepts the commission's opinion or if he considers it too generous or too restrictive, he himself tries to find a more satisfactory solution.

The drawback of this policy is that it prompts organizations in trade and industry to apply for price rises which are well above those required to keep firms profitable.

The action of the commission and Ministry does not therefore restrain price rises as much as could be imagined from a comparison of increases applied for and those granted. Moreover, controls are not always adequate and the penalties imposed by the courts for infringements of the price regulations would not in most cases act as an example to deter others.

In the conclusions a number of measures are proposed (better coordination between the bodies responsible for price policy, setting up of economic courts, powers of the commission extended to cover all prices and charges, strengthening of the consumer representation in the commission) which could make the prices policy more effective. It was also seen that the price commission has in the past almost totally disregarded possibilities of lowering certain prices without jeopardizing the normal profitability of firms. This is because the commission lacks information on the structure of the various markets and the trend of costs in most industries. It would therefore be desirable to set up a commission of specialists, similar to the Monopolies Commission in Britain, to study the markets of various products and to report regularly to the Minister of Economic Affairs and to the price commission on profit margins which are clearly excessive. The Minister would then be able to impose price reductions which would more or less offset, in the cost of living, the price rises which are considered inevitable because of higher prices of raw materials or an increase in wages well above the increase in productivity.

The commission should also look closer at the effects on the cost of living of exclusive dealing agreements and resale price maintenance. Where an exclusive dealer charges selling prices well above those prevailing in the other Community countries, the commission should propose that the Minister lay down a maximum price.

It is to be regretted that in Belgium there is no law which in principle - certain exceptions would have to be allowed - prohibits resale price maintenance practiced by producers and wholesalers. Such a law would enable the Minister to take legal action against firms which use these methods to allow distributors excessive profit margins and would bring to an end the tendency for Belgian Courts to rule that such agreements must be respected.

None of these measures is contrary to maintenance of competition, as only cases where competition has been eliminated from the market are under attack.

In addition, the Belgian Government should, like the governments in the neighbouring countries, seek to establish a policy to promote competition both in production and distribution. This policy should continue, at national level, the efforts made by the EEC Commission. As the EEC Commission directs its action in particular against the powerful cartels and thus seeks to stimulate competition between large producers, the Belgian Government should turn its attention towards restrictive practices and agreements which are likely to limit competition in the distributive trade. This requires not only a complete revision of the law of 27 May 1960 against abuses of economic power, but also a careful watch over all measures taken by professional or other associations which limit competition by restricting the freedom of establishment.

Examples quoted in the study are the efforts made by the association of pharmacists to restrict the right to open new cooperative chemists and other chemists shops, and the efforts of small traders to prevent new supermarkets being established.

We feel it desirable that various forms of distributive outlets (corner shops, chain stores, department stores, cooperative supermarkets) should continue to exist, so that no group can acquire a dominant position.

The conclusions to the study also contain a number of suggestions on the policy to be pursued to hold down rent increases. The conclusion reached is that as rents have increased less than the price of land and building costs, it would not be right to pass a new law prohibiting rent increases. The Government should endeavour to lower the price of building land and to slow down the rise in building costs.

By introducing a special tax on building land in towns which lies undeveloped, the government can prompt owners to sell it to persons wishing to build houses and thus bring about a drop in the price.

The introduction of a tax on second homes, as in Frace, could ease the demand of the well-off for flats and houses and thus curb demand-pull inflation in this sector. The increase in building costs caused by a much faster increase in wages than in productivity could be tempered by standardizing building materials, thus reducing costs, and by introducing industrialized methods to building with systems of prefabrication, thus reducing the number of man-hours spent on each construction.

As regards credit policy, the study explains why we feel that expensive money policy is not a suitable answer to the dangers of demand-pull inflation.

Such a policy is generally only a makeshift solution which does not get at the very sources of inflation, i.e. the claims by various social groups for excessive increases in their income.

THE STUDY

<u>CHAPTER I</u>: <u>The development of non-wage income according to the</u> <u>various theories of inflation</u>

1. Introduction

Inflation has become a serious problem for industrialized and developing countries alike. Whereas it has been held by certain American (1) and Latin-American (2) authors that inflation encourages industry to invest and increase production, most economists are of the opinion that the overall effects of inflation on economic activity are clearly detrimental. The economists maintain that inflation increases demand for high-value luxury goods which can be used as a hedge against monetary depreciation, but makes little contribution towards the enhancement of general wellbeing (3). Production of these luxury goods (jewellery, furniture, furs, second homes, etc.) claims a substantial proportion of available capital and skilled manpower, thereby holding back the development of the industrial potential of sectors which are of more importance from the point of view of economic growth.

This type of unbalanced industrial development is accompanied by the emergence of an unjust social climate which is unfavourable to the encouragement of the will to work and save.

Savers lose the fruits of their sacrifices through the erosion of the purchasing power of money. Manual and clerical workers realise that their real incomes are falling as prices rise steadily, and this creates tensions which can lead to disruption of production through industrial disputes.

A. HANSEN holds that, in the developing countries, savings are at too low a level to finance the capital expenditure required for economic growth. Inflation is necessary to enable the state and industry to find the necessary capital for the development of basic structures and industrial capacity. (A. HANSEN: "Inflation and Growth", in "Stabile Preise in wachsender Wirtschaft", Tübingen, 1960, pp. 181-187.)

⁽²⁾ Particularly members of the United Nations Economic Commission for the Latin-American Countries, among whom Prebisch occupies a leading position (Martin BRONFENBRENNER and Franklyn D. HOLZMAN : "Survey of Inflation Theory", The American Economic Review, September 1963, p.610).

 ⁽³⁾ C. ZEBOT : "Inflationskräfte in pluralistischen Marktwirtschaften", in "Laissez-faire Pluralismus - Demokratic und Wirtschaft der gegenwärtigen Zeitalters", Goets Briefs (Ed.), Berlin, 1966, pp. 397-398.

Steady inflation - with prices rising at an annual rate of not more than 5 to 6 per cent - can be contained by moderate government action which is not very harmful to economic growth. Beyond the 10 per cent threshold it becomes impossible to curb inflation without recourse to sharply deflationary measures, such as a substantial reduction of the money supply (1).

Where prices are rising at an annual rate of more than 5 per cent but less than 10 per cent, the economy is in a transitional situation which, if it lasts too long, almost inevitably leads to an acceleration of the rate of inflation. Rising prices cause a speculative mentality to develop in the various strata of society, and this gives rise to excessive stock-piling and an increase in demand in excess of production capacity, thus causing prices to rise continually (2). It may be observed that, in all the countries of Western Europe, the rise in the cost of living between the first quarter of 1972 and the first quarter of 1973 was in excess of 6 per cent. The figures for each country are : approximately 6.3 per cent in France, 6.9 per cent in the Federal Republic of Germany, 7.0 per cent in Belgium, 7.1 per cent in the Netherlands, 7.6 per cent in Great Britain, 8.2 per cent in Switzerland, 7.8 per cent in Denmark, 8.8 per cent in Italy and 10.1 per cent in Ireland (3).

Responding to the protests of the mass of consumers, who felt that their legitimate interests were being undermined, the governments of these countries have taken measures to reduce the rate of inflation, but without applying the brakes too harshly to economic growth.

Most of these measures have been inspired by neo-classical, keynesian and postkeynesian economic theory. Until the middle of the sixties, they proved successful in keeping the rise in the cost of living below 5 to 6 per cent per annum, but it would appear that their effectiveness has been lessening during the last 5 years.

⁽¹⁾ E.M. LERNER has shown that the galloping inflation which developed in the American Confederacy during the War of Secession was brough under control in April-May 1864 by the expedient of taking a substantial volume of money out of circulation (E.M. LERNER : "Inflation in the Confederacy 1861 - '65", Studies in the Quantity Theory of Money, M. FRIEDMAN (Ed.), Chicago 1956, p. 172). The Gutt experiment in Belgium also proved that a substantial reduction of the money supply can put an end to galloping inflation.

⁽²⁾ C. ZEBOT, op.cit., p. 398.

⁽³⁾ Calculated on the basis of the figures for the period February 1972 to February 1973 (March 1972 to March 1973 in the case of Belgium, the Federal Republic of Germany, Great Britain and Switzerland). Source: United Nations Monthly Statistical Bulletin, May 1973, pp. 176-185 (French version).

Many economists are of the opinion that the reason for this is that the essential causes of inflation can no longer be explained by the neo-classical, Keynesian and post-Keynesian theories and that, consequently, measures based on these theories are no longer suited to actual conditions.

During the Second World War, some economists were already stressing the possibility of cost-push as opposed to demand-pull inflation (1). Keynes, in his "The General Theory of Employment, Interest and Money", had maintained that, even before full employment is reached, wage increases can bring about a general increase in prices (2). In "How to Pay for the War" (1940), however, he no longer took this possibility into account and the only means of combatting inflation recommended were measures designed to reduce overall demand (3).

After the War, the trade unions in many European countries (France, Belgium) and the United States made regular demands for wage increases which were higher in percentage terms than the growth in productivity, thereby making price rises inevitable.

This situation prompted economists to develop the theory of wage-pull inflation which, by its very simplicity, impressed a great many people and led to the adoption of political measures designed to reduce the power of the trade unions (the Taft-Hartley Law of 1948 in the United States).

Politicians gradually realised that wage and price controls alone are not sufficient to prevent cost-push inflation. A distinction must be made between autonomously motivated wage increases and those motivated by external factors, namely a general rise in the standard of living and (or) price increases; in other words, in most cases, wage increases represent only one phase of the overall process of rising incomes and prices. It is just as possible for such an inflationary spiral to be set in motion by an increase in nonwage income as by excessive claims by manual or clerical workers' trade unions (4).

- (2) J.M. KEYNES : "The General Theory of Employment, Interest and Money", London, tenth edition, 1954, p. 301.
- (3) R.J. BALL : "Inflation and the Theory of Money", London 1964, p.63.
- (4) R. GOETZE GIREY : "Salaires et inflation depuis la seconde guerre mondiale", Rapport au Congrès des économistes de langue française (18 May 1953), Revue d'économie politique, May-June 1953, pp.287-289.

T.C. KOOPMANS: "Dynamics of Inflation", Review of Economics and Statistics, February 1942, p.53-65 and A. SMITHIES: "Behaviour of Money, National Income under Inflationary Conditions", Quarterly Journal of Economics, November 1942, p.113-129.

It is for this reason that the French economist Francois PERROUX preferred to use the term "structural inflation" rather than "wage-pull inflation" to describe the type of inflation characterised by regular increases in prices and wages (1). This term has the advantage of placing the accent on the preponderant role of the economic and socialogical structures of modern industrial societies in setting off the acceleration of an inflationary trend. Before making an indepth analysis of the theory of structural inflation, it is necessary, in order to determine the role attributed to the development of non-wage income in this theory, to provide brief parallel analyses of the neo-classical, keynesian and post-keynesian theories of inflation.

2. The development of non-wage income according to the neo-classical theory of inflation.

The neo-classical theory of inflation is primarily a monetary theory. According to Irving FISHER's famous formula, PT = MV + M'V', if V and V' are more or less constant and the elasticity of the supply of goods and services is limited, any increase in M and(or) M' must cause a rise in the price index P.

If the increase in M or M' is caused by a chance event, it is a case of "accidental inflation"; on the other hand, if the growth in the money supply flows from strong expansion of trade and industrial activity during a period of prosperity, this is a case of "cyclical inflation" (2).

In the monetary conception of inflation, there is little scope for an independent theory on the behaviour of social groups. The neo-classical theoreticians assume that all individuals are aware of their interests and behave accordingly. Any increase in the disposable monetary resources of one or more groups of individuals will cause their demand to rise and encourage producers and intermediaries to increase their prices. Wages will adjust to this increase at a certain remove in time. Indeed, it is necessary for several months to pass before industry can adapt production to increased demand and, consequently, before there is any significant increase in demand for factors of production.

F. PERROUX : "Quelques formes contemporaines de l'inflation", Proceedings of the Congress of French-speaking Economists, 1953, pp. 163-164.

M and M' represent money and bank money respectively, V and V' their velocity of circulation, and T the total number of transactions during the period concerned, recalculated at the prices obtained during the base period. (I. FISHER : "The Purchasing Power of Money - Its Determination and Relation to Credit, Interest and Crises", Second Edition, 1922, reprinted New York, 1963, pp. 47-49.)

Knut WICKSELL (1), Irving FISHER (2) and Gustav CASSEL (3) propounded purely monetary theories on the economic cycle. According to them, at the beginning of a period of prosperity, the market interest rate is much lower than what Wicksell calls the natural rate, that is the return on capital invested in factors of production (4). Initially, therefore, prosperity brings about a redistribution of income which benefits entrepreneurs and is detrimental to employees and those living on fixed incomes. Then, as manpower shortages begin to make an impression and wages begin to rise, causing prices to rise more rapidly, it is mainly those living on fixed incomes who suffer from the development of the cyclical situation. Their capital frequently does not earn sufficient interest to make up for its loss of purchasing power caused by inflation.

Towards the end of the boom, wages and interest rates rise more rapidly than prices. The supply of products and services grows fairly rapidly towards the end of the period of prosperity since, at this stage, a high proportion of investments are bearing fruit and this holds back rising prices.

Then, there is a spectacular decline in undertakings' profits, whereas there is an improvement in the position of workers and those living on fixed incomes. According to the neo-classical theory of cyclical inflation, then, there is no general movement of non-wage income, since a distinction must be made a priori between profits and interest. As regards the fees charged by the liberal professions, little research has been carried out into their development. At the beginning of the twentieth century, there were too few doctors, lawyers, architects, chemists, etc. to constitute a social group of sufficient proportions to attract the attention of economists.

- K. WICKSELL: "Interest and Prices", Translation by F.R. Kahn, New York 1965, pp. 110-111.
- (2) I. FISHER : "The Purchasing Power of Money ...", op.cit. pp. 57-60.
- (3) G. CASSEL: "Theoretische Sozialökonomie, Lehrbuch der allgemeinen Volkswirtschaftslehre", L. Pohle (Ed.), deel II, Leipzig, 1919, pp.435-436.
- (4) According to I. FISHER, an increase in prices reduces the real rate of interest, so that as soon as prices begin to rise, investment also increases at such a pace that a boom becomes inevitable (I. FISHER, op.cit., p. 57).

3. The development of non-wage income according to Keynesian and post-Keynesian theory of inflation.

As has already been pointed out in the first section of this Chapter, Keynes in fact developed two theories of inflation, one based on increases in wages and the other on excess demand in relation to supply.

These two phenomena normally occur during the upturn in the economic cycle. Excess effective demand is actually the cause of economic recovery following a period of depression.

It will not cause any substantial increase in prices as long as productive capacity is able to adapt to the growth in demand. As soon as full employment is reached demand-pull inflation will begin to bite.

The multiplier action of excess demand will then materialise through the medium of prices. Prices will rise in such a way that, in real terms, the value of overall demand will be reduced to that of supply.

At the same time, the trade unions will take advantage of the higher demand for labour to press for wage increases exceeding the normal growth in productivity, thus obliging undertakings to increase their prices to maintain their profit margins. This is cost-push inflation (1).

In his book "How to Pay for the War", KEYNES indicated means by which the Government could curb excess demand, but he did not offer any remedy for cost-push inflation. When writing "The General Theory", he was mainly concerned with measures to combat economic stagnation which, at the time, was jeopardising the very existence of the capitalist society.

He was therefore of the opinion that inflation was a lesser evil and that the most important thing was to avoid any action which could cause a recession at the peak of the economic cycle. To hold back wage increases during a period of economic upturn is tantamount to favouring employers and those on fixed incomes at the expense of manual and clerical workers. Since the propensity to save is on average lower among workers than among entrepreneurs and those on fixed incomes, any increase in real wages will place a brake on the growth in overall savings, thereby reducing the risk of savings exceeding the level of planned investment and an economic downturn becoming inevitable (2).

J.M. KEYNES : "The General Theory", op.cit. pp. 253 and 301.
Ibidem.

On similar grounds, Keynes was opposed to the raising of the rate of interest when the economic cycle is at its peak (1). He was in favour of a monetary policy designed to keep the rate of interest down to a level at which there is always sufficient investment to maintain full employment (2).

The fact that this can lead to a partial expropriation of the assets of those on fixed incomes - the rate of interest they receive will be lower than the annual rate at which the value of their capital is eroded by inflation - was a matter of indifference to Keynes, since he did not believe in the traditional theory of the benefits to be derived from saving (3). According to his conception, the monetary system should be sufficiently elastic to be able at any moment to make available the resources required for investment purposes. In his view, recession is not caused by shortage of financial resources, but by a lack of sufficiently profitable investment projects (4).

In "How to Pay for the War", he called for increased direct taxation and compulsory saving to reduce private sector demand to the level of production available for civilian needs.

This is the basis of the inflation gap theory (5).

At first, Keynes's disciples concentrated entirely on demand-pull inflation, which was the great problem of the warring countries during the Second World War and the early post-War years. Two trends emerged. One school of thought, represented by A.H. HANSEN (6) and

- (1) J.M. KEYNES : "The General Theory...", op.cit., pp. 320-323.
- (2) Ibidem, p. 375.
- (3) Ibidem, p. 373.
- (4) Ibidem, p. 323.
- (5) S.A. HARRIS : "Keynes' Influence on Public Policy" "The New Economics -Keynes' Influence on Theory and Public Policy, S.F. HARRIS (Ed.), London, fifth edition, 1968, p. 23.
- (6) In his book "Fiscal Policy and Business Cycles", A.H. HANSEN placesemphasis on the decline in the profitability of investments towards the end of the peak in the economic cycle. This decline is the result of the exhaustion of the opportunities for exploiting new technological processes. Inevitably, it brings about an economic downturn sooner or later. An increase in the interest rate caused by a shortage of money can accelerate the downturn. (A. HANSEN : "Fiscal Policy and Business Cycles, New York 1941, pp. 315-319.) In his book "Monetary Theory and Fiscal Policy" (1949), he expressed a fear that the monetary expansion necessary to economic growth could not be sustained until 1975. (A.H. HANSEN : "Monetary Theory and Fiscal Policy", New York, Toronto, London, 1949, pp. 194-195.)

J.R. HICKS (1), believes that, after a long period of economic expansion, a slowing-down becomes inevitable because of the exhaustion of monetary reserves. Others, like J. TOBIN (2), have emphasised the great elasticity of the monetary system which, through the creation of "inside money" (3), adapts relatively easily to the economist's liquidity requirements.

If one adopts the monetary version of the post-keynesian theory of the trade cycle, the development of the various types of non-wage income is roughly the same as if one accepts the neo-classical theory.

Those on fixed incomes lose money at the beginning of the peak of the cycle but regain the advantage towards the end of the peak and during the recession, when rates of interest are high and the rise in prices is held back by expanding production and falling demand.

If, on the other hand, there is no monetary ceiling, inflation can continue ad infinitum, but need not necessarily accelerate. Various braking mechanisms can be used to prevent prices from rising at a rate of more than 5 - 6 percent.

DUESENBERRY (4) lists them as follows :

- A time lag in the adjustment of wage increases to price increases. This increases profits, a high proportion of which is normally withheld, thus bringing about an increase in the level of savings, which has a distinctly deflationary effect;
- 2) A time lag in the adjustment of dividend increases to increases in profits. Commercial companies normally only pay a dividend at the end of the year. If their profits rise, the volume of money which they keep in hand to pay dividends will become higher, in other words, their savings will grow;

(4) J. DUESENBERRY : "The Mechanics of Inflation", The Review of Economics and Statistics", 1950, p.145.

In his book "A Contribution to the Theory of the Trade Cycle", J.R.HICKS used the term "monetary ceiling" to indicate that the nominal expansion of national income by inflation will be held back by lack of liquidity. (J.R. HICKS : "A Contribution to the Theory of the Trade Cycle", Oxford 1950, pp. 136-138).

⁽²⁾ J. TOBIN : "Money and Income : Post Hoc ergo Propter Hoc?", Quarterly Journal of Economics, May 1970, pp. 301-303.

⁽³⁾ The theory of "inside money" has been fully developed by J.G. GURLEY and E.G. SHAW in their book : "Money in the Theory of Finance", Washington, sixth edition, 1970, pp. 72-75.

- 3) The rise in prices diminishes the purchasing power of the pensions and interest received by pensioners and those on fixed incomes, benefitting the public authorities, institutions and undertakings. This transfer produces a deflationary effect, since those on fixed incomes and pensioners spend most of their income on consumer goods, which is not the case of the authorities, institutions and undertakings, which bear the cost of the acquired rights of those on fixed incomes and pensioners.
- 4) Direct taxation, being progressive, increases in volume as the cost of living rises and incomes are adjusted to the rise. This also causes a reduction in the purchasing power of private individuals, which shifts to the State and its dependencies.
- 5) Any increase in production creates additional income, part of which will normally be saved, so that the supply of goods and services will rise more rapidly than demand.

If the growth in production is due to increased productivity, two possible situations can occur.

Either selling prices will be reduced, in which case there is a direct deflationary effect on the general level of prices, or the majority of the additional income will remain in the hands of the undertaking, which will keep it in its reserves during a certain period (there may be an increased dividend later), thereby bringing about a reduction in overall demand from which a deflationary effect will result.

The theory of braking mechanisms can explain why, in a modern industrial economy characterised by substantial growth of productivity and a high level of savings, the inflationary process generally remains steady. At the same time, this theory places the accent on the structural rather than cyclical nature of this type of inflation.

In fact, if there is no monetary ceiling, but only a series of braking mechanisms, the period of prosperity need not be followed by one of downturn, but, under the influence of the braking mechanisms, it may lose some of its strength and be followed by more moderate growth.

This in fact is what took place during the period of the sixties. In most countries, even during the 1961-62 and 1966-67 recessions, the gross national product did not stop growing and nor was inflation completely

eliminated (1).

In fact, prices continued to follow a steady upward trend and cyclical fluctuations only caused rates of increase to vary. This gave rise to a situation which Keynes did not foresee (2), namely one in which the various social classes are confronted with a gradual erosion of their incomes by inflation.

The efforts of these various groups to adapt their incomes to rising prices in turn become an important factor contributing to rising prices. This is the very basis of the structural inflation theory which, unlike the neo-classical, Keynesian and post-Keynesian theories of inflation, does not attribute as much importance to the factors which set off the inflationary trend as to those which ensure that it continues.

4. <u>The development of non-wage income according to the structural</u> inflation theory.

The structural inflation theory had its origins in France, where the inflation of the post-War years had shown that a strong, constant rise in prices cannot be explained by either the neo-classical mechanism of the quantity theory of money nor by the post-Keynesian inflationary gap theory. Henri AUJAC gave a succinct version of what may be called the structural inflation theory in an article published in 1950. He maintained that

⁽¹⁾ From 1962 to 1963 the gross national product calculated at constant prices rose by 4.8 per cent in Belgium, 4.6 per cent in Great Britain, 5.3 per cent in France and 3.2 per cent in the Federal Republic of Germany. From 1966 to 1967, these countries' gross national products rose by 3.7 per cent, 2 per cent, 4.4 per cent, and zero respectively. (Monthly Statistical Bulletin, United Nations, December 1969, pp. 196-197). Between 1962 and 1963, consumer prices rose by 2.15 per cent in Belgium, 1.94 per cent in Great Britain, 4.82 per cent in France and 2.88 per cent in the Federal Republic of Germany. Between 1966 and 1967, they rose by 2.52 per cent in Belgium, 2.49 per cent in Great Britain, 2.66 per cent in France and 1.74 per cent in the Federal Republic of Germany. (Ibidem, pp. 176-183).

⁽²⁾ In "The General Theory", Keynes did indeed envisage the possibility of continual inflation in the event of demand exceeding supply to such an extent that full employment results and wages rise more rapidly than prices. He did not visualise the repercussions of this situation on the behaviour of the social classes, but took the view that, in this event, the rise in prices would, in accordance with the neo-classical theory, be proportional to the growth of MV, that is the product of the quantity of money and its velocity of circulation (J.M. KEYNES : "The General Theory ...", op. cit., p. 289).

"it is the behaviour of the various social groups in relation to the network of monetary interrelationships which causes inflation" (1). By network of monetary relationships, AUJAC means the general habits of the various social groups and public authorities regarding policy on cash holdings, frequency of payments, levels of saving and hoarding, and also legal obligations concerning the payment of wages, interest, dividends, contributions and remuneration. All these relationships go to make up a structure, and this structure is contested from time to time by one or another social group which attempts to break down or modify certain monetary relationships that it deems to be prejudicial to its interests. Such rejection gives rise to a series of reactions from the other groups in their attempt to avoid becoming victims of the changes to the monetary relationships brought about at the behest of the challenging group. If, for example, the workers in an industrial sector demand and obtain a wage increase, the entrepreneurs in this sector will attempt to pass on the cost to the consumer who, in turn, will seek to adjust his income to this rise in the cost of living and his behaviour in so doing will lead to the disruption of other monetary relationships.

The relative economic power of the various social groups determines which of them will benefit from this inflationary process and which will suffer. H. AUJAC has illustrated his theory with a number of examples proving that it is possible for fortuitous incidents (the laying-off of a workers' delegate) to spark off a dispute resulting in an inflationary spiral (2).

As an extension of the concept of structural inflation, it may be pointed out that the breakdown of relationships need not necessarily be brought about by a social group. Circumstances outside the control of the various groups, such as a bad harvest, an increase or decrease in external demand, a rise in raw materials prices or the application of new production processes, can also set off an inflationary movement.

The factor giving rise to a price increase, therefore, is not necessarily a root cause of all inflation. It may be concluded from this that it is often more important to analyse the manner in which increases in prices and incomes spread and accelerate than to determine the point at which the movement begins.

(2) Ibidem, p. 287.

H. AUJAC :""L'influence du comportement des groupes sociaux sur le développement d'une inflation", 2 Economie Appliquée, April-June 1950, p. 287.

H. AUJAC also stressed the need for the establishment of a new type of compatibility between the behaviours of the various social groups (1). The "dominant" relationships, as described by F. PERROUX in various articles (2) and in his book "L'économie du 20ième siècle" (Paris 1961), play a decisive role in establishing this new structure of monetary relationships and in obtaining acceptance of it by the various social groups (3).

H. AUJAC did not make any detailed analysis of the causes of the deceleration or reversal of an inflationary trend. This problem was studied by Jean GABILLARD in his doctoral thesis entitled "Recherches sur la fin de l'inflation" which he submitted at the University of Poitiers in 1950. GABILLARD put forward the opinion that inflation can be brought to an end by :

- a) the disappearance of the tensions which gave rise to it;
- b) resistance to the spread of inflation;
- c) the creation of deflationary tensions.

Where inflation has been caused by a decline in production or by an excessive increase in demand or a reduction in consumption or capital, expenditure will relax the situation and take the impetus out of the inflationary trend, or even cause it to disappear (4).

The principal cause of resistance to the spread of inflation, according to GABILLARD, lies in the inertia of the behaviour of the various social classes and in the structural and institutional rigidity arising out of the banking and financial structure and the existence of the State, which will normally seek to hold back the rise in prices (5).

As regards deflationary trends, they may arise out of external factors (exceptional harvest, influx of goods from abroad) or they may be caused by inflation itself (excessive expansion of production capacity in certain sectors, exhaustion of the banks' capacity to create money, need

- J. GABILLARD : "Recherches sur la fin de l'inflation", Paris, 1952, pp. 38 and 234-257.
- (5) Ibidem, pp. 199-233.

⁽¹⁾ H. AUJAC: op. cit., p. 300.

⁽²⁾ F. PERROUX : "Esquisse d'une théorie de l'économie dominante", Economie Appliquée, April-June 1948 and "Note sur le dynamisme de la domination", Economie Appliquée, April-May 1950.

 ⁽³⁾ E. JAMES : "Problèmes monétaires d'aujourd'hui - Etude des fondements d'une théorie et d'une politique monétaire moderne", 2nd edition, Paris, 1970, p. 193.

to clear stocks which have risen to excessive levels (1). In general, deflationary trends will not only put an end to inflation, but they will bring about a reversal of the trade cycle (2).

Neither H. AUJAC nor GABILLARD gave any explicit description of the role of self-employed workers, members of the professions and those living on fixed incomes in the development of structural inflation, but they did however give some information concerning the possible contributions of these social groups to the setting in motion, spreading or restraining of inflation. AUJAC attributed great importance to the pricing policies of undertakings. According to him, where entrepreneurs accupy a dominant position in the market and are able to obtain sufficient credit from the banks, they are always able to maintain their income, even when production is falling, while employees and those on fixed incomes are obliged to accept limitations on their purchasing power (3). If employees manage to adapt their incomes to rising prices by the application of scales of pay geared to the cost of living, there is a risk that inflation will continue indefinitely (4), or at least until other factors (for example, increased production) intervene to block its development. J. GABILLARD laid stress on the inertia of the behaviour of self-employed groups who helped to restrain inflation through actions ill-suited to their own interests. He found, for example, that when food prices rise, farmers use their increased income to repay their debts and increase their savings (with a view to land purchases and investments) rather than increasing their current consumption (5). Thus, an increase in farm prices will not normally give rise to demand-pull inflation, but it will bring considerable pressure to bear on wages, since workers will wish to defend their purchasing power, and therefore on costs (6).

Like AUJAC, GABILLARD finds that those on fixed incomes have no means of defence against inflation. They are unable, during a period of inflation, to obtain an increase in the rate of interest so that the income from their capital compensates for the loss caused by the reduction of its purchasing power.

- (2) H. AUJAC, op.cit., pp. 298-299.
- (3) Ibidem, pp. 298-299.
- (4) Ibidem, p. 298.
- (5) J. GABILLARD, op.cit., pp. 211-215.
- (6) Ibidem, pp. 216-217.

J. GABILLARD : "Recherches sur la fin de l'inflation", Paris 1952, pp. 152-186.

The trader, on the other hand, is in the privileged position of the bull who, being obliged to hold stocks, makes easy profits with each price rise (1). From this it may be deduced that, whereas farmers and those on fixed incomes generally contribute by their behaviour to the curbing of inflation, the trader is tempted during a period of rising prices to increase his stocks, thereby fuelling demand-pull inflation (2).

The structural inflation theory has the merit of placing inflation in an economic and sociological context, but it has not yet been developed in sufficient depth to furnish a valid answer to the many questions raised by such a complex phenomenon. Consequently, it is necessary to graft theories explaining certain specific mechanisms of the inflationary process in detail onto the structural inflation theory, which is of a general nature. During the last two decades, most such partial theories have been developed by the Anglo-American school.

5. The modern theories of inflation of the Anglo-American school.

In America and England towards the end of the 1940s, there arose a lively controversy between the proponents of the demand-pull inflation theory and those of wage-pull inflation. This controversy has continued until this day, but has not led to any definitive conclusions since, in most cases, it is not possible to determine by statistics whether the setting-off of an inflationary trend is the result of higher demand or of autonomous wage increases beyond the level of the normal rise in productivity (3).

Most observers have concluded by accepting the idea that all inflationary trends are mixed in character. This "mixed inflation" (4) can be brought about by one or more of the following mechanisms :

⁽¹⁾ J. GABILLARD, op.cit., p. 216.

⁽²⁾ GABILLARD points out that, in general, during a period of inflation, wholesale prices rise more rapidly than retail prices and wages, this being attributable to speculative profit-making by traders (Ibidem.p.216).

⁽³⁾ If prices and wages are rising virtually continually, it cannot be claimed that the rise in prices pre-dates that in wages, or vice versa, except by making an arbitrary decision as to the starting point of the period of inflation. (F. MACHLUP "Another View of Cost-Push and Demand-Pull Inflation", Review of Economics and Statistics, May 1960, and again in "Inflation Demand Pull or Cost Push", R. PERLMAN (Ed.), Boston, Englewood, Chicago, London, 1965, p. 72.)

⁽⁴⁾ The expression "mixed inflation" was employed by the Australian J.D. PITCHFORD, in his article "The Inflationary Effects of Excess Demand for Goods and Excessive Real Income Chains", Oxford Economic Papers, February 1961, p. 59.

- a) shifts in demand from one sector to another as a result of economic growth and technological progress (sectorial shift in demand inflation). Such shifts lead to an increase in prices in certain sectors without there being any compensatory reduction in others, where there is generally little flexibility for price reductions because of oligopolistic situations and resistance from the trade unions to any reduction in wages. A rise in certain prices causes an increase in the cost of living which, in turn, causes wage adjustments to ensue inevitably. In other words, the "sectorial shift in demand inflation" sets wage-pull inflation in motion (1).
- b) rising costs caused, for example, by increased prices of raw materials or labour lead to rises in selling prices in excess of the increase in production costs. In particular, manufacturers and intermediaries usually increase the cost price by what is considered to be a reasonable fixed percentage in order to cover overheads and make a profit. This practice causes a general increase in prices, since what is produced by one factory is used as a raw material or component by another. Finally, the increase works through to consumer goods and services, prompting claims from the trade unions.

Thus, "mark-up inflation" leads to generalised inflation (2).

c) The benefits of higher productivity in sectors with monopolistic or oligopolistic markets are not passed on to consumers, but are used initially to increase the profits of the companies concerned. Subsequently, in order to avoid industrial disputes, these companies grant wage increases and other benefits to their personnel. Workers in other sectors where there is a less marked rise in productivity feel that they are not receiving just reward for their efforts, since they receive less pay than their counterparts doing identical work. Such a situation leads to industrial disputes and wage increases far in excess of increased productivity.

Undertakings pass on the costs to the consumer, thereby creating what the English economist, P. STREETEN, has called "productivity inflation"(3).

 (2) J. DUESENBERRY : "The Mechanics of Inflation", op.cit., pp. 144-145 and G. ACKLEY : "Macro-economic Theory", New York, 1961, pp. 452-454.

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C. SCHULTZE: "Recent Inflation in the United States", Joint Economic Committee, Study Paper No.1, 1959, and again in "Inflation Demand Pull or Cost Push", op.cit., p. 33.

⁽³⁾ P. STREETEN : "Wages, Prices and Productivity - Labour and Inflation", Kyklos, 1962, fasc. 4, pp. 726-727.

It is clear that these mechanisms fit in very well with the structural inflation theory. It may be said that the "sectorial shift in demand inflation", "mark-up inflation" and "productivity inflation" theories explain how, once inflation has been set in motion in one sector, it can spread to other areas of the economic structure; put another way, these forms of inflation act like "driving belts".

From the point of view of non-wage income, the "mark-up inflation" theory is by far the most important. According to this theory, in the event of a general rise in prices, the earnings of all intermediaries (wholesalers, small traders, craftsmen) rise in parallel with prices, so that the rise in prices becomes cumulative. We shall use the term "cumulative increase effect" to describe this phenomenon and, in Chapter IV, we shall be trying to determine whether this is what occurred in Belgium during the period between 1953 and 1971. English and American economists have also developed a number of theories explaining the phenomenon of the curbing of the inflationary movement. In general, these are new formulations of theories already developed by neo-classical or post-keynesian authors. There are nevertheless some new theories, notably :

a) theory of the curbing of excessive wage increases by the trade unions : The trade union organizations oppose excessive wage increases in situations which are highly favourable to the workers. One of their motives for this is that they foresee that, if such increases became widespread, a certain number of firms would disappear and some of their union members would lose their jobs. As long ago as 1951, A. REES suggested that the fact that there was a system of collective contracts for the whole steel sector in America had been instrumental in causing the trade unions representing the workers in this sector to accept wage increases below the levels which the major firms were prepared to grant (1). His paper was severely criticised by the champions of the wage-pull inflation theory.

L. ULMAN, for example, maintained that this was a special case (2), but studies carried out by other authors maintained that, although the trade unions try to reduce wage differences between different firms, they do not however try to bring about the complete elimination of the influence of differences of marginal productivity from one undertaking to another on the

A. REES: "Wage Determination in the Basic Steel Industry, Postwar", American Economic Review, June 1951, pp. 389-404

⁽²⁾ L. ULMAN pointed out that the steel workers had enjoyed a position of advantage during the war so that, after the World War, their trade union could not make substantial wage claims without provoking protests from the other trade union organizations and a vigorous press campaign which would have been damaging to the image of trade unionism (L. ULMAN "The Union and Wages in the Basic Steel : A comment", American Economic Review, June 1958, pp. 409-410).

earnings of workers (1).

Donald E. CULION has proved that the same phenomenon as that indicated by REES occurred on the occasion of the conclusion of a collective agreement between a civil engineering undertaking, which was to carry out a major contract in the north of the United States (construction of the St.Lawrence Seaway), and the construction workers' trade union (2).

b) limited price flexibility theory :

Neo-classical theory makes the assumption that an increase in demand beyond the level of supply will normally cause an increase in prices, but it does not take any account of the fact that, in an oligopolistic market, in which prices are usually fixed at a level at which even the least efficient producer still makes a reasonable profit, it is often not in the interests of undertakings to increase their prices. They prefer to take advantage of the opportunity to increase their turnover, thereby reducing their fixed unit costs. This explains a certain degree of price inflexibility in relation to fluctuations in demand (3).

The English and American theoreticians have paid little attention to the development of the prices and profit margins of small traders and craftsmen; at this level, ologopolistic structures are non-existent, but the major producers and wholesalers often impose selling prices on retailers to the exclusion of all free competition. We shall return to this problem in Chapter IV.

⁽¹⁾ J.T. DUNLOP : "Productivity and the Wage Structure", published in Income Employment and Public Policy : Essays in Honor of Alvin H. HANSEN (1948) taken up again in "Wage Determination-Market or Power Forces?", R.PERLMAN (Ed.) Boston, 1964, pp. 59-62 and C. KERR : "Wage Relationships - The Comparative Impact of Market and Power Forces", published in "The Theory of Wage Determination", London 1957 and again in "Wage Determination ...", op.cit., pp. 84-83.

⁽²⁾ D.E. CULION : "Union Wage Policy in Heavy Construction", American Economic Review, March 1959, pp. 70-75.

⁽³⁾ G. AKLEY, op.cit. p. 449, R.J. BALL, op.cit. pp. 97-99 and R.F. LANZILIOTTI : "Pricing Objectives in Large Companies", American Economic Review, December 1959, pp. 931-940.
CONCLUSIONS.

1) The role of the development of non-wage income in that of inflation has not been analysed in detail in any of the theories of inflation. Neoclassical, Keynesian and post-Keynesian theory merely makes a distinction between employees, entrepreneurs and those on fixed incomes and shows little interest in the analysis of the development of the income of self-employed workers (small traders, craftsmen, members of the professions, farmers). The structural inflation theory has the merit of providing a general outline of the various circumstances and events which can set inflation in motion, the forces which cause it to accelerate and obstacles to its development, but it has not formulated a complete theory on the role of non-wage income in the development of inflation.

The primary concern of modern Anglo-American theory on inflation has been the role of the trade unions and the groupings of large manufacturing companies, and they have not paid very much attention to the role of intermediaries and other self-employed workers.

- 2) A complete study of the influence of the development of non-wage income on inflation should answer three questions, namely :
 - a) under what circumstances has an increase in certain non-wage income set inflation in motion ?
 - b) to what extent have induced increases in non-wage income contributed to the generalisation and(or) acceleration of inflation ?
 - c) has resistance by certain non-wage income to upward movements contributed to curbing or reversing inflationary trends ?

For the purposes of our study, it is almost superflous to enquire whether increases in certain types of income have had the effect of setting inflation in motion, since the rise in consumer prices was unbroken throughout the period studied, 1953-1972. Only in the autumn of 1954 and the spring of 1955 was there any pause in the upward trend (1). The interruption was too short in

 [&]quot;Prix à la consommation", Bulletin d'information et de documentation, January 1954, p. 39, January 1955, p. 47 and January 1956, p. 38.

duration for it to be possible to maintain that the resumption in the upward trend during the summer of 1955 was exclusively attributable to new factors rather than to the effects of factors and situations obtained prior to 1954.

Our research has therefore been directed towards the formulation of valid answers to questions b) and c).

CHAPTER II : Analysis of the development of non-wage income within the context provided by the national accounts.

A. Introduction.

The analysis covered the period from 1953 to 1971 inclusive. The year 1953 was chosen because it marked the beginning of a quasi-normal period. Indeed, before 1953, prices and incomes had been influenced heavily, first by the shortages of goods during the post-war period and then by the effects of the speculative cycle to which the Korean war had given rise.

1971 was the latest year which could be chosen for the end of the period in view of the delay in the publication of national accounts data. When the study was carried out, the statistics for the year 1972 were not yet known. Before proceeding to a group-by-group analysis of non-wage income, it is desirable to compare its overall development with that of wages.

We have found that, during the period 1953-1971, non-wage income declined steadily as a proportion of national income. In 1953, non-wage income accounted for 45.77% of national income, but only 35.2% by 1971, so that there was an average annual fall of about 0.55%. Should it be concluded from these overall statistics that, if there has been cost-push inflation, the main cause will have been too rapid a rise in wages and that non-wage income has only followed in the wake of the trend ?

No, because it is necessary to take into account the fact that the economic functions of family businesses, the income from which is either exclusively or mainly of the non-wage type, have been transferred to capitalist companies with large numbers of employees. This phenomenon has been particularly striking in the commercial, banking and insurance sector, where the number of self-employed fell from 254,200 in 1960 to 230,100 in 1971 (1), whereas the number of employees rose from 277,300 to

Calculated on the basis of the statistics on overall employment and wage-earning employment in the various sectors as published in the Annuaire Statistique de la Belgique, Bruxelles 1972, volume 92, pp. 488-489.

454,900 (1).

It is also discernible to a less marked extent in the transport sector. The number of self-employed operators in this sector rose by 7.38%, from 29,800 in 1960 to 32,000 in 1971 (2), whereas the number of employees rose by 14.88%, from 225,200 in 1960 to 258,700 in 1971 (1).

Consequently, details of the overall development of wages and non-wage income cannot serve as the basis for conclusions regarding their repercussions on prices. It is necessary to make an in-depth study of the various categories of non-wage income in order to determine the extent to which they are to be held responsible for inflation.

B. <u>Study of the development of the various categories of non-wage</u> income.

1. Classification of non-wage income :

According to the Belgian national accounts, the following are deemed to be non-wage income :

- 1) the income of individual entrepreneurs and associations of persons;
- 2) private individuals' income from property;
- 3) undistributed profits of commercial and civil companies;
- 4) direct taxation levied on commerical and civil companies;
- 5) the State's income from property and entrepreneurial activities.

An increase in any of these components can trigger off a double inflationary effect, on the one hand through its repercussions on costs, and on the other by its effects on demand for goods and services.

⁽¹⁾ Annuaire Statistique de la Belgique 1972, op.cit., pp. 488-489.

⁽²⁾ Calculated on the basis of the statistics on overall employment and wage-earning employment in the various sectors as published in the Annuaire Statistique de la Belgique, Brussels 1972, volume 92, pp. 488-489.

An effect of the cost-push type occurs if the increase in income is not compensated for by an increase in turnover and/or productivity, so that the weight of this income becomes greater in terms of units produced or sold. It is therefore necessary to determine the repercussion of each type of income in terms of units produced or sold. In retail trade, it is possible in this way to calculate average profit margins.

According to the national accounts rules, income from property is looked upon as services rendered by capital. An increase in the rate of interest will normally create an inflationary situation, since entrepreneurs will attempt to recover the higher cost of money by increasing their prices. In order to assess the inflationary effects of an increase in income from property, it is therefore necessary to compare it, not with the value of the services rendered, but with the capital invested.

As regards the undistributed profits of commercial and civil companies, any increase in such profits per unit produced or sold leads directly to cost-push inflation. In so far as they are passed on to the consumer by companies, direct taxes levied on commercial and civil companies have a comparable effect on selling prices to that of indirect taxes, which are almost always included in the price to the consumer. This is the general rule in monopolistic and oligopolistic markets.

Income earned by the State from property and entrepreneurial activities has only limited influence on consumer prices. Rent from property accounts for the majority of this income, which is both expenditure and revenue and does not therefore play any role in the determination of the level of taxation. It cannot therefore have any effect on the cost of living, so that this type of non-wage income can be ignored for the purposes of a study on inflation.

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The effect of increased income on the rise in prices is also dependent on the growth in demand which it causes. If a rise in one type of income is counterbalanced by an equivalent fall in one level of another type of income, there will be no demandpull inflationary effect.

If, for example, a rise in selling prices has led to an increase in the income of entrepreneurs and reduced the purchasing power of consumers by an amount equal to the additional profits of the entrepreneurs, overall demand will normally remain static. If the proportion of income normally set aside for the purposes of saving is higher in the case of income in the form of profits than in that of income in the form of wages, it is possible that the rise in prices will lead to a decline in overall demand, thereby exerting a deflationary influence, at least in the short term.

If, on the other hand, the increase in prices occurs mainly in the capital goods sector, the increase in the amount of investment caused by this rise will generally be financed by additional bank credit or by more extensive recourse to the money market.

In this event, there will be no counterbalancing factor and overall demand will rise by the proportion of the additional profits used to finance consumption and investment. Demand-pull inflation will result.

These examples will serve to show how difficult it is to make an a priori assessment of whether an increase in income will contribute to inflation by increasing demand.

2. <u>Development of the income of individual entrepreneurs and associations</u> of persons :

The following table shows the rise in the various forms of non-wage income between 1953 and 1971.

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where we are not the second se					Contraction of the local division of the loc					
	<u>Sub-headings</u>	Percentage growth between 1953 & 1971	Percentage growth Share in the g between 1953 & 1971							
			of the sub- heading	of the heading	of all non-wage income					
1)	Farming, horticulture and forestry, including stock- breeding	+ 72	100	12,0	5 , 3					
2)	Professions :									
	 doctors and dentists chemists barristers, solicitors and 	+ 428,3 + 448,8	50,1 16,1							
	notaries - other	+ 192,6 + 222,7	9,6 24,2							
	total	+ 322,8	100,0	22,4	9,9					
3)	Self-employed traders and craftsmen	+ 117,6	100	60 , 4	26,8					
4)	Income of associations of persons	+ 133,3	100	5 , 2	2,3					
	Total for the heading	+ 125,0		100,0	44,3					
			1							

<u>TABLE 1</u>: Share of the income of individual entrepreneurs and associations of persons in the growth of non-wage income (1953 to 1971)

Source : Calculated on the basis of I.N.S. data.

In 1953, the income of traders and craftsmen represented 41.7% of non-wage income but, by 1971, had fallen to 35.5% (1), an annual fall of 0.33%. The I.N.S. estimates the income of this group on the basis of data from the tax authorities. To eliminate underestimation of these data, the I.N.S. adds a factor of 50 per cent (2). Thus, these statistics are only very approximate.

⁽¹⁾ See Table 2.

⁽²⁾ Institut National de Statistique, Etudes Statistiques et Econométriques -Comptes Nationaux 1953- 62, 1963, No. 4, p. 34.

However, since the same process is applied each year, it is possible to derive an idea of the real movement of this income from these data. The progress of the major trading concerns has brought about a decline in the number of individual entrepreneurs in the retail and crafts sector. On 31 December 1947, there were 312,903 wholesale and retail trading undertakings and by 31 December 1961, there were only 206,288, a reduction of 34.1 per cent, or 3.02 per cent per annum (1). The number of such undertakings has undoubtedly falled further since 1961. This, then, is a group which still accounts for a substantial proportion of total non-wage income, although the proportion is declining slowly. The income of members of the professions only accounted for 5.6 per cent of non-wage income in 1953. By 1971, the figure had risen to 9.2 per cent (1). The most rapid rise has been among chemists, reflecting the steady increase in the consumption of medicines. Little is known concerning the turnover in pharmaceutical products or the development of profit margins in this sector. It is not therefore possible to determine whether this substantial rise in the earnings of chemists has contributed to cost-push inflation.

Doctors and dentists constitute a larger group whose total income rose between 1953 and 1971 by the same order of magnitude as that of chemists, namely by 428.3 per cent.

The doctors' strike in 1965 led to a sharp rise in their income in 1965 and 1966. During the years following, their total income stabilised at approximately 4.2 per cent of all non-wage income, as against 2.1 per cent in 1953. It fell back slightly during the period 1967-70, but, by 1971 had risen again to 4.3 per cent (1).

(1) See Table 2.

TABLE 2: Income of individual entrepreneurs and associations of persons as a percentage of non-wage income.

		53	54	55	56	57	58	59	60
1)	Farming, horticulture and forestry, including stock- breeding	13,6	12,4	12,1	11,2	12,8	12,4	12,5	12,1
2)	Professions :				1			1	1
	- doctors and dentists - chemists - harmisters solicitors and	2,1 0,7	2,1 0,6	2,1 0,7	2,2 0,6	2,2 0,6	2,5 0,9	2,6 1,0	2,6 1,0
	notaries - other	0,8 2,0	0,9 2,0	0,8 1,9	0,9 1,8	0,9 1,8	0,8 2,0	0,9 1,9	0,9 1,9
	total	5,6	5,6	5,5	5,5	5,5	6,2	6,4	6,4
3)	Self-employed traders and craftsmen	41,7	41 , 2	40,4	39•7	38 , 7	39,9	39,7	38,8
4)	Income of associations of persons	3,2	3,3	3,5	3,6	3,4	3,1	3,3	3,3
	Total	64,1	62,5	61,5	60,0	60 , 4	61,1	61,9	60,6

Source : Calculated on the basis of I.N.S. data.

61	62	63	64	65	66	67	68	69	70	71
13,1	11,8	12,2	11,9	11,8	10,7	10,3	10,4	10,8	8,8	9,0
2,5 1,0 0,9 2,0	2,7 1,1 0,9 2,0	2,8 1,1 0,9 2,1	2,7 1,0 0,9 2,2	3,6 1,5 1,0 2,3	4,2 1,5 1,0 2,3	4,2 1,4 1,0 2,3	3,7 1,6 1,0 2,3	3,8 1,4 1,0 2,2	3,9 1,4 0,9 2,4	4,3 1,4 1,0 2,5
6,4 38,3 3,4	6,7 38,3 3,3	6,9 40,0 3,4	6,8 41,1 3,4	8,4 39,7 3,2	9,0 41,0 3,1	8,9 39,9 2,9	8,6 39,3 2,8	8,4 37,4 2,9	8,6 35,9 3,0	9,2 35,5 2,9
61,2	60,6	62,5	63,2	63,1	63,8	62,0	61,0	59 , 5	56 , 3	56,7

TABLE 2a: Income of individual entrepreneurs and associations of persons as a percentage of non-wage income.

Source : Calculated on the basis of I.N.S. data.

In Chapter V, a more detailed analysis will be made of the factors which have contributed to developments in the income of doctors and dentists.

The income of barristers, solicitors, notaries and other categories (architects, estate agents, stockbrokers) accounted for only 2.8 per cent of all non-wage income in 1953. By 1971, their share had risen to 3.5 per cent (1). It is unlikely that this increase has made any great contribution to rising prices. Indeed, these are groups offering services for which demand has grown considerably, so that the rise in their overall income is probably more attributable to the increase in the volume of services rendered than to higher fees. The overall income of farmers, horticulturalists, foresters and stockbreeders has risen little in comparison with other groups. It rose by only 71 per cent between 1953 and 1971. Consequently, the share of this group in total non-wage income fell back from 13.6 per cent in 1953 to 9.0 per cent in 1971 (1). This cannot be looked upon as proof that the position of farmers and those in related occupations deteriorated during the period 1953-1971, since account must be taken of the decline in the number of farmers.

The income of associations of persons is of only slight importance by comparison with that of the other groups making up the total of non-wage income. It accounted for only 3.2 per cent in 1953, and 2.9 per cent in 1971 of the total (1).

(1) See Table 2.

3. Increase in private individuals' income from property as a proportion of the growth of non-wage income.

TABLE 3.

Sub	-headings	Percentage growth between 1953 & 1971	Shar	e in the ,	growth
			of the sub- heading	of the heading	of all non-wage income
1) a)	<u>Interest</u> savings deposits and capitalisation operations	+ 761.5	22.1		
b)	bank deposits	+1803,3	13,6		
c)	insurance policies	+ 497,2	7,01		
a) e)	debenture and	+ 433,3	33,4		
	mortgage loans	+ 205,5	3,4		
f)	imputed interest (1)	+ 548,7	_20,5		
	total	+ 551 , 2	100,-	55,3	20,2
2) a) b)	<u>Rentals</u> buildings properties not built	+ 122,7	228,4		
c)	on charges (depreciation)	+ 31,0 - 209,1	7,4 -135,8		
	total	+ 64,9	100,-	15,8	5,8
3)	Dividends, preference and directors' shares, gifts				
a)	dividends from Belgian	± 133 3	24 1		
b)	dividends from Belgian	+ 100,0	<u> </u>		
	companies abroad	- 3,3	-0,1		
0)	investment	+1869,0	70,6		
d)	preference and direct-	. 49 0			
e)	gifts	+ 207,0	3,0 2,4		
	total	+ 325,2	100	28.9	10.6
tot	al for the heading	+ 231,2	1	100,-	36,6

Source : Calculated on the basis of I.N.S. data.

⁽¹⁾ The I.N.S. lists as imputed interest the difference between the interest received by banks and the interest paid to their creditors. This difference should be considered as income for the banks which they should normally pay to their creditors, but retain in consideration of services rendered free of charge to their clients.

		53	54	55	56	57	58
1) a) b) c) d) e) f)	<u>Interest</u> savings deposits and capitalisation operations bank deposits insurance policies public securities debenture and morgage loans imputed interest	1,1 0,3 0,5 2,8 0,6 1,4	1,1 0,3 0,6 3,0 0,6 1,4	1,2 0,3 0,6 3,2 0,6 1,4	1,2 0,3 0,7 3,3 0,5 1,5	1,3 0,3 0,7 3,5 0,5 1,6	1,5 0,3 0,8 4,0 0,5 1,8
	total	6,7	7,0	7,3	7,5	7,9	8,9
2) a) b) c)	<u>Rentals</u> buildings properties not built on charges (depreciation)	20,9 2,7 -7,3	22,0 2,6 -7,3	21,9 2,4 -7,2	21,5 2,3 -7,3	22,0 2,4 -7,8	23,3 2,5 -8,5
	total	16,3	17,3	17,1	16,5	16,6	17,3
3)	Dividends, preference and directors [*] shares, gifts						
a) b) c) d) e)	dividends from Belgian companies in Belgium dividends from Belgian companies abroad income from foreign investment preference and directors' shares gifts	3,5 0,4 0,7 1,1 0,2	3,1 0,5 0,8 1,1 0,2	3,5 0,5 0,9 1,1 0,3	3,7 0,6 1,1 1,2 0,3	4,0 0,6 1,1 1,3 0,3	3,8 0,6 1,0 1,3 0,2
	total	5,9	5 , 7	6,3	6,9	7,3	6,9
	total for the heading	28,9	30,0	30,7	30,9	31,8	33,1

TABLE 4: Private individuals' income from property as a percentage of non-wage income.

Source : Calculated on the basis of I.N.S. data.

59	60	61	62	63	64	65	66	67	68	69	70	71
1,6 0,4 0,9 4,1 0,5 1,9	1,7 0,6 0,9 4,3 0,4 2,1	1,8 0,7 0,9 4,5 0,4 2,1	1,9 0,6 1,0 4,7 0,5 2,4	1,9 0,7 1,0 5,1 0,4 2,6	1,9 0,8 1,0 4,9 0,4 2,6	1,9 1,0 1,0 4,8 0,4 2,7	2,1 1,1 1,1 5,1 0,5 3,0	2,1 1,2 1,1 5,3 0,5 3,1	2,7 1,2 1,1 5,3 0,7 3,1	2,8 1,6 1,2 5,4 0,7 3,3	3,3 2,1 1,2 5,4 0,7 3,4	3,6 2,1 1,2 5,9 0,7 3,5
9,4	10,0	10,4	11,1	11,7	11,6	11,8	12,9	13,3	14,1	15 , 0	16,1	17,0
23,1 2,5 -8,4	22,5 2,4 -8,4	21,9 2,3 -8,4	21,8 2,2 -8,7	22,0 2,1 -9,3	20,6 2,0 -9,3	20,3 1,9 -9,2	21,6 1,8 -9,6	21,1 1,7 -9,5	20,2 1,6 -9,0	18,7 1,5 -8,5	17,8 1,4 -8,4	17,9 1,4 -8,8
17 , 2	16,4	15,8	15,3	14,8	13,3	13,0	13,8	13 ,3	12,8	11,7	10,8	10,5
3,4 0,5 1,0 1,0 0,2	3,7 0,6 1,2 1,0 0,2	3,9 0,3 1,6 0,9 0,3	4,1 0,2 1,8 1,1 0,3	3,6 0,1 1,7 0,9 0,3	3,1 0,1 1,8 0,8 0,3	3,2 0,1 2,1 0,8 0,2	3,1 0,0 2,5 0,9 0,2	2,9 0,1 2,6 0,7 0,2	3,2 0,1 2,8 0,7 0,3	3,2 0,1 3,5 0,7 0,3	3,4 0,1 5,1 0,7 0,3	3,1 0,2 5,6 0,6 0,3
6,1	6,7	7,0	7,6	6,6	6,1	6,4	6,7	6,5	7 , 1	7,8	9,6	9,8
32,7	33,1	33,2	34,0	33 , 1	31,0	31,2	33 , 4	33,1	34,0	34 , 5	36,5	37,3

TABLE 4a: Private individuals' income from property as a percentage of non-wage income.

Source : Calculated on the basis of I.N.S. data.

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Interest accounted for 6.7 per cent of non-wage income in 1953 and 17.0 per cent in 1971. The proportion rose steadily between 1953 and 1967, but accelerated sharply from 1968 to 1971 (1). This is attributable to the combined effects of rising rates and a more rapid increase in the volume of savings. Approximately 33.4 per cent of the growth in income in the form of interest is due to the issue of public securities, and this shows that the major cause of this sharp rise is the major public spending policy pursued over the later years in the period considered.

The income derived from rents on buildings and unbuilt property increased by only 1.65 times from 1953 to 1971. Rents did of course rise sharply, but maintenance costs rose even more quickly, so that net rents did not follow the strongly rising trend in income from property. In 1971, it accounted for only 10.5 per cent of income from property as against 16.3 per cent in 1953, an annual fall of 0.31 per cent.

On the other hand, earnings in the form of dividends, preference and directors' shares and gifts rose almost as rapidly as those made in the form of interest.

When income from foreign investment is excluded, the rise is seen to be very much weaker, no stronger than the overall growth rate of income from property. Income from foreign investment has made much better progress than other forms of income from property; since it does not affect prices in Belgium, it cannot give rise to cost-push inflation, but it has no doubt contributed to an increase in domestic demand and sustained demand-pull inflation.

(1) See Table 4.

4. Undistributed company profits.

This heading covers :

- a) the undistributed profits of joint stock companies,
- b) the undistributed profits of autonomous public sector undertakings.
- <u>TABLE 5</u>: Increase in undistributed profits as a proportion of the growth of non-wage income (1953-1971).

Percentage Share in the growth	
Sub-headings 1953 & 1971 beading income	
1) Undistributed profits of joint stock companies 333,3 97,7 7,6	
2) Undistributed profits of autonomous public sector undertakings 12,9 2,3 0,2	
Total 316,- 100,- 7,8	

Source : Calculated on the basis of I.N.S. data.

All the growth in the income classified under this heading is attributable to the undistributed profits of joint stock companies. The rate of growth is higher than that of the dividends of Belgian companies. Consequently, companies are devoting an increasing proportion of their profits to self-financing. This development may be regarded as the consequence of the integration of the Belgian economy into the framework of a wider market economy. Belgian undertakings have had to cope with sharper foreign competition, and this has obliged them to modernise their production facilities. At the same time, the expansion of their market has induced them to increase production and this again has called for substantial investment. Part of this investment has been covered by self-financing and part by the raising of loans, most of them placed with para-State organizations.

This policy has had a twofold inflationary influence : firstly, the need for self-financing has caused the large companies to pursue a policy of high prices for most of their new products; secondly, the strong demand for capital goods has contributed towards the creation of a climate of prosperity, which is favourable to the raising of prices.

The autonomous public sector undertakings have not followed these same policies because, in its efforts to curb inflation, the State has generally prevented them from increasing their prices in proportion to their costs.

5. Direct taxes levied on companies of all types.

Direct taxation of companies rose more rapidly than profits appropriated to self-financing. In 1971, it was at a level 307.89 times higher than that of 1953, whereas self-financing increased by only 233.33 times. Companies were obliged to increase their profits more substantially in order to attain in 1971 a level of self-financing equal to that of 1953. Without doubt, this has contributed to cost-push inflation. The growth in State expenditure covered by these taxes compensated for the reduction in purchasing power caused by rising prices.

6. The State's income from property and entrepreneurial activities.

This heading includes imputed rents and interest, dividends and profits received by the State, the other public authorities and the social security organizations.

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Sub bashings	Percentage growth	Share	in the gr	owth
<u>Sub-neadings</u>	between 1953 & 1971	of the sub- heading	of the heading	of all non-wage income
1) Immuted rents				
a) central authority	+ 611 , 4	50 , 5		
authorities	+ 294,3	49,5		
total	+ 402,2	100,-	262,9	1,9
 Interest, dividends, profits 				
a) central authority b) interest from math- ematical reserves	- 1775 , 4	-372,3		
under pension legislation	+ 234,5	96 ,-		
authorities	+ 382,9	176 , 3		
total	- 92,6	100,-	<u>-162,9</u>	<u>-1,2</u>
Total for the heading	+ 41,1		100,-	0,7

<u>TABLE 6</u>: The increase in income in the form of imputed rents and interest, dividends and profits of the public authorities as a proportion of the growth of non-wage income.

Source : Calculated on the basis of I.N.S. data.

Imputed rents play no part in explaining inflation, since they did not give rise to any disbursement by the State. As to interest, dividends and profits received by the public authorities, they represent a small negative net balance, in other words, the public authorities had to cover deficits which were slightly larger than the dividends and other profits they received from public sector undertakings. It may therefore be stated that, whereas some charges (for electricity, for example) were kept at rates higher than necessary, thereby exerting an inflationary influence, others (rail fares, for example) were kept at levels below cost, so that they exerted a moderating influence on rising prices, and that these two influences more or less cancel each other out.

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CONCLUSIONS.

The following Table summarises the proportions of the total growth of non-wage income between 1953 and 1971 accounted for by the various sub-headings.

<u>TABLE 7</u>: The various forms of non-wage income as a proportion of the growth of non-wage income between 1953 and 1971.

1)	Agriculture, horticulture and forestry, including stockbreeding	5,3
2)	Professions	9,9
3)	Self-employed traders and craftsmen	26,8
4)	Income of associations of persons	2,3
5)	Interest	20,2
6)	Rent	5 , 8
7)	Dividends, preference and directors' shares, gifts	10,6
8)	Undistributed profits of joint stock companies and public sector undertakings	7,8
9)	Direct taxes paid by companies	10,6
10)	Imputed rents of the State and State profits	0,7 100,0

The table proves that, at least until 1971 (farm prices rose more rapidly in 1972 and 1973), the increase in the income of farmers, horticulturalists, foresters and stockbreeders probably did not play any decisive role in the rise in prices. We can therefore ignore this form of non-wage income for the purposes of our study. As for the other forms of non-wage income, they may be classified in three broad groups which played a role of almost equal importance in accounting for the rise in prices.

The first group is made up largely of the income of self-employed persons working outside the farming sector, who account for 40 per cent, or somewhat more than a third, of the growth in non-wage income between 1953 and 1971. In second place, there are interest and rents, that is, income from capital which is more or less fixed and subject to little or no risk. This income accounted for 26 per cent, or somewhat more than a quarter of the growth in non-wage income between 1953 and 1971.

Finally, there are all the forms of income associated with joint stock companies (dividends, preference and directors' shares, gifts, undistributed profits, direct taxes paid by companies), which together account for 28 per cent or, once again, somewhat more than a quarter. Before proceeding with the detailed analysis of these various groups, it will be of interest to examine whether there is any correlation between the development of the overall income of each of these groups

and the development of consumer prices, which is taken as the criterion by which to judge the intensity of inflationary trends.

CHAPTER III: Econometric analysis of the relationships between the various forms of non-wage income and prices.

1. General development of the various indices :

Analysis of non-wage income has enabled us to group these indices into four categories, namely:

- a) farmers' income;
- b) the gross income of joint stock companies (distributed and undistributed profits plus direct taxes);
- c) the income of self-employed workers (traders, craftsmen, members of the professions);
- d) income in the form of interest and rent.

An appropriate means of assessing the inflationary effect of the growth of these forms of income is to calculate the coefficient of correlation between the indices for these forms of income (base year 1953) and the various price indices. Since we may assume that wage increases also played an important role in the inflationary process, it is necessary to include them in the analysis.

In order to determine the extent to which these indices have been influenced by the phenomena of economic growth and cyclical factors, it is also useful to calculate coefficients of correlation between the series on prices and incomes and the series indicating progress over the years and overall cyclical development. For the purposes of measuring this development, we have used the indices devised by the "Kredietbank". The results of all these calculations are shown in the two matrices contained in Table 8.

In the first matrix, non-wage income has been treated as a single entity, and in the second, a distinction has been made between the non-wage income of self-employed workers and the income of joint stock companies.

Since rent and interest are not represented in the wholesale price and consumer price indices, it may be assumed that increases in these forms of

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income will only become discernible indirectly (through the rise in the costs of companies and in household expenditure), and only after a considerable delay in relation to the development of these indices.

It is therefore preferable to restrict the analysis to two categories of non-wage income, namely those of self-employed workers and those of joint stock companies. In the calculation of overall non-wage income, the income of farming units was included, but rent and interest were not.

	PD	A	NA	U	PG	L	M	I	S	<u>5</u> *	Т	С	
	D		<u> </u>			Key :	PD : (Consumer	(retai	1)pric	e index		
	1.00		\sim				PG :	Wholes	ale pri	ce ind	ex		
1	•998	1.00					A	: Food	prices				
۱ I	•998	•994	1.00					NA : No	n-food	prices			
,	•998	•994	•997	1.00				U : P	rices o	f serv	ices		
;	•968	•970	•961	•963	G 1.00			L:	Prices	of agr	icultura	al prod	luc
	•935	•949	•923	•928	•950	1.00	$\overline{}$	м	• Raw	meteri	ale prid	-	
ſ	•397	•389	• 392	• 387	•554	•393	1.00	<u> </u>	T : P	rices	of manual	acture	he
	•954	•950	•94 8	•949	.991	.899	.602	1.00	g	oods	JI MAIN	acture	302
					s	1			_> s	: Wage	ae		
5	•996	.992	.993	.997	.973	.934	.423	. 961	1.00	s *:	Non-waę	ge inco	me
*	.988	•987	.979	.988	.973	.941	426	- 958	.988	1.00	T: Tin	ne	
1	.963	.961	.967	.970	•913	.886	278	.897	.954	.955	1.00	с:	Tr
, r													су ~-
	С												
; [•983	•981	•985	•987	•946	•915	•338	•931	•978	•975	•995	1.00	
	т	PD	PG	S	<u>s</u> *	s el	<u></u> ड℃M	\overline{s}^{SA}	С				
1	1.00					Kev :	SEL	· Non-w	age inc	ome of	undents	kinge	
)	•9 63	1.00					-	inclu	ding fa	rms	unuer ve	**********	
	•913	•968	1.00				ន	M: Non	-wage i	ncome d	of self-	-	
		D	G	S				empi —SA	loyed w	orkers	(middle	-class	;)
	•954	•996	•973	1.00				S : N	on-wage tock co	income mnanies	e of joi	.nt	
	•955	.988	•973	•983	1.00			2	our co.				
L V	•967	•994	•971	•992	• 99 6	1.00							
M	•960	•995	•974	•994	•995	•999	1.00						
A	. 869	•939	•946	•958	•962	•941	•943	1.00					
k)		046	070		0.05							

TABLE 8: Matrix of correlation coefficients for various components contributing to the phenomenon of inflation.

Source : Own calculations.

With the exception of the price indices for raw materials, the coefficients relating the indices for prices, wages and non-wage income to the time factor are all in excess of 0.85, which proves that the growth movement has prevailed over the cyclical movement. Indeed, the coefficients of correlation between these series and the trade cycle indices are scarcely higher than those between these series and the time factor.

In connection with non-wage income, a distinction has to be made between the income of self-employed persons and that of companies. The coefficient of correlation between the income of self-employed persons and the time factor is scarcely lower (0.960) than that between this income and the trade cycle indices (0.981), which leads to the supposition that this form of income is very little influenced by cyclical movements. It should nevertheless be borne in mind that the calculation of the income of self-employed persons is based almost exclusively on their tax declarations, and that it is in their interests to level out their declared income in order to avoid the effects of the sharply rising rates applied. It is therefore possible that the actual income of self-employed persons is more influenced by cyclical trends than the indices used would lead one to imagine.

The influence of cyclical factors is no more marked in the case of the movement of the income of companies, since the coefficient between these indices and the time factor is 0.869 whereas it becomes 0.904 when the time factor is replaced by a series of trade cycle indices.

Moreover, most of the price indices are free of any strong cyclical influence. The coefficient between the indices for raw materials price and the trade cycle indices is low and not significantly different from zero.

Farm prices follow the same general upward trend as all prices, but their progress was less marked during the years 1958-61. Although it is also necessary to take account of developments in the quantities produced, this is part of the reason why farm incomes also rose less rapidly than other non-wage income.

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The coefficient between the farm prices indices and the cyclical factor is scarcely higher than that between these indices and the time factor, and this is explained by the fact that most of these prices are determined by the public authorities (initially by the Belgian Government, then, after 1958, by the Council of Ministers of Agriculture of the Common Market), whose decisions have been guided more by political and social considerations than by the market situation.

The movement of the food price indices was not parallel to that of farm produce, but followed closely the general upward trend, showing slightly faster progress during periods of prosperity. The same phenomenon occurs in the case of the prices of non-food products and services, and because of this, in the case of the indices for consumer prices in general also.

Consequently, the simple correlation coefficients between the components of the consumer price index and non-wage income are high without it being possible to establish any cause-effect relationship between the growth of non-wage income and the rise in consumer prices.

One finds the same phenomenon when comparing the development of consumer prices with that of wages, or even the development of wholesale prices with that of wages and non-wage income.

Since wages and non-wage income follow the same upward trend throughout the period under consideration, there is a strong collinearity between the two series of indices, so that any calculation of multiple correlations between price series on the one hand and series of indices of wages and non-wage income on the other, cannot establish the extent to which increases in wages and non-wage income respectively are responsible for rises in various prices.

This, nevertheless, is the purpose of our study. In order to avoid this difficulty, we shall have to employ more sophisticated statistical methods, as explained in the following section.

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Analysis of multiple relationships between the development of consumer prices and that of wages and non-wage income during the period 1953-71.

Three methods of calculation have been applied (see Table 9). First, the coefficient of determination was calculated from the indices of the three series of variables related to the base per year 1953 (= 100). It is not possible to eliminate the collinearity between the development of wage: and non-wage income by use of this method. The Col. value is only 0.44 (1) and, in addition, the residuals are autocorrelated, which proves that the explanatory value of the variables is not entirely satisfactory. It is not possible to eliminate this auto-correlation by transformation of the variables according to the Johnston method (2), and moreover the collinearity defect remains, while the estimated parameter for non-wage income (0.05) is not significantly different from zero at the 95 per cent level.

It follows that it cannot be asserted that the development of non-wage income has had a strong influence on the consumer price index for the same year.

A second approach is to assume that the elasticities of consumer prices in relation to wages and non-wage income are constant so that $D_t = mS_t^{\alpha} \cdot \overline{S}_t^{\beta}$ or $\ln D_t = \ln m + \alpha \ln S_t + \beta \ln \overline{S}_t$

The coefficients m, \propto and β are determined by means of multiple regression applied to the series of the logarithms of the variables. It is not possible to eliminate the collinearity or to avoid auto-correlation by using this method. In addition, the coefficient of $\ln \overline{S}_t$ is not significantly different from zero at the 95 per cent level.

A third method is to replace the variables by their growth percentages. By using this method, it is possible to achieve a Col. value of 0.99, or in other words to eliminate the collinearity completely. Moreover, the residuals no longer display auto-correlation, since the

The Col. value is the value of the determinant of the matrix of the simple correlation coefficients. This value reaches 1 if the correlations between explanatory variables are very low; it is near zero if there is perfect collinearity.

⁽²⁾ After this iteration, the Durbin-Watson statistic reaches 1.21, which is too low for it to be possible to maintain that there is no autocorrelation at the 95 per cent level of significance.

Variables	FUNCTIONS (typical divergences)	R ² % (F-ratio)	' ^r x _i y:	x _j S	S	<u>s</u>	1 1 D.W.	COL.	l It , n	erat:	ions ⁰ 2	D.L. v ₁ v ₂	F .01
1	0	1	1 2	5	3		1 4	4	15	6	6•	7	8
indices	$D_{t} = 0,21 S_{t} + 0,05 \overline{S}^{*} + 0,001 $ $(0,023)^{t} (0,038)^{t} (0,27)$	97 % (280)	 •92 	•33	•29	•07	 1.21 	•44	2	•69	- I	2/15	6,4
log	$\ln D_{t} = 0,321 \ln S_{t} + 0,03 \ln S_{t} - 0,004 (0,04) (0,06) (0,001)$	1 94,8 % 1 (156) 1	, ,.91 ,	 •13 	•32	•03	1 1 1 1.63 1	1 1 •51 1	1 1 1 1	•75	- 1	2 /1 5	6,4 1
as a per- cent- age of growth	$D_{t} = 0,31 S_{t} + 0,02 \overline{S}_{t}^{*} + 0,65$ $(0,07)^{t} (0,06)^{t} (0,02)$	1 50 % 1 (9,4) 1 1	I I •73 I I I		•31	•03	1 1.69 1 1	•99 •99	 1 	-	- 1	2/15	16,4 1 1 1

TABLE 9.: Multiple research into relationships between the development of prices (1953-1971).

<u>Key</u> :

- D = consumer prices
- S = wages
- \overline{S} = non-wage income
- \overline{S} = non-wage income excluding interest and rent
- \overline{R}^2 = coefficient of determination adjusted for degrees of freedom
- \mathbf{x}_{i} y: \mathbf{x}_{j} = partial correlation coefficient
- \mathcal{E} = elasticity
- $D_{\bullet}W_{\bullet} = Durbin-Watson statistic$
- COL. = coefficient of collinearity
- ρ = coefficient of self-regression (Johnston transformation)
- $D_{\bullet}L_{\bullet} = degrees of freedom$
- F = non-significant result for $\propto = 0.01$

Durbin-Watson statistic is in excess of the value $D_u = 1.54$ (1).

Application of the other methods only produced such a result after transformation by the Johnston method. The coefficient of determination has fallen to 0.50, but it is significantly different from zero (2).

Thus, there is a certain degree of determination. When calculating the partial correlation coefficients, one finds that the determination is much stronger in the case of wages than in that of non-wage income (0.73 as opposed to 0.11). The influence of the coefficients of growth of non-wage income is very weak and, basically, its level of significance is negligible (value $t = 0.333 \leq t.95 = 2.131$).

In the case of the rates of growth of wages, however, the coefficient of 0.31 is very significantly different from zero, even at the 99% level of significance. Accordingly, we can conclude that, although the influence of the rates of growth of non-wage income on consumer prices during the period 1953-1971 is not demonstrable, the growth of wages did have a clear effect on consumer prices.

Taking into account the fact that the rate of growth of prices was very low throughout the period 1953-1959 inclusive, we can assume that this difference will emerge more clearly if we limit the study to the period between 1960 and 1971.

R.J. WONNACOTT and T.H. WONNACOTT : "Econometrics", New York, London, Sydney, Toronto, 1969, pp. 427-428.

⁽²⁾ The F-ratio 9.4 is higher than the critical value of F_{.01} = 6.4. (Ibidem, pp. 254-256 at Table VII, p. 422).

Varia- bles	Functions	R ² as a %	r _{x,} y:,	۲ _j	٤		D.W.	COL.	It	erati	ons	DL	F
		F-ratio	S	ธ	S	ธ			n	v _l	v2	v ₁ / v ₂	•01
	0	1	2		3		4	5	6	7	8	9	10
log	$\ln D_{t} = 0,007 + 0,332 \ln S_{t} + 0,071 \ln \overline{S}_{t} (0,001) (0,032) (0,05)$	98,6 % (360)	•96	45	•33	•07	1,18	•44	2	•56	-	2/7	8,65
	$\ln D_{t+1} = 0,006 + 0,41 S_{t} - 0,07 \overline{S}_{t} \\ (0,002) (0,01)^{t} (0,11)^{t}$	87,6 % (28,6)	•87 •	.23	•41	•07	1.	•45	3	•44	• 50	2/6	10,91
	$ ln D_{t} = 0,003 + 0,306 ln S_{t+1} + 0,109 ln \overline{S}_{t} (0,001) (0,0307) t+1 (0,046) $	99,7 % (1668)	•96	64	• 30	•11	1.22	•21	1	-	-	2/8	8,65
	$\ln D_{t} = 0,03 + 0,27 \ln S_{t+1} + 0,15 \ln \overline{S}_{t+1} \\ (0,001) (0,04) + (0,05) + (0,05)$	99 , 7 % (2000)	•93 •	71	•27	•15	1,997	. 16	1	-	-	2/8	8,65
% of gro- wth	$D_{t} = 0,28 + 0,24 S_{t} + 0,06 \overline{S}_{t}$ (0,11) t	30 % (3)	•63 •	43	•43	•25	1,47	•997	2	•60	-	2/7	9,55

TABLE 10	:	Multiple	correlations	between	the	development	of	consumer	prices	and	the	development	
		of wages	and non-wage	income	(196)	1-1971)							

Key : See Table 9.

•

The multiple correlation between the price indices on the one hand and wages and non-wage income on the other was not calculated for the period 1960-1970, because it could be foreseen that the collinearity defect could not be eliminated. We tried the logarithm approach, but without success, since the Col. value remained low and the residuals were auto-correlated.

The results obtained by the introduction of lags were scarcely any better, since the Col. value fell still further, although the autocorrelation disappeared.

Calculation in terms of growth percentage did not provide a solution to the problem either. The coefficient of determination fell to 30 per cent, which is no longer significantly different from zero (1).

The accentuation of the inflationary movement during the period 1960-1971 caused no change in the relations between the variables. The collinearity between wages and non-wage income held good and, when it was eliminated by the substitution of the variables by their growth percentages, the coefficient of determination became so low that it was impossible to draw any conclusions as to any cause-effect relationship.

Accordingly, the multiple regression method had to be abandoned and a calculation was made of the simple correlation (2) between, on the one hand, consumer prices and wages, and that between prices and non-wage income on the other.

⁽¹⁾ It is possible to avoid the problem of collinearity by using the Bavesian method, but this method is not sufficiently developed for it to be possible to avoid the phenomenon of auto-correlation at the same time.

⁽²⁾ J. DUBOS : "Liaisons stochastiques en économie", Paris, 1971, p. 268.

3. <u>Analysis of simple regression between consumer prices and wages and</u> between consumer prices and non-wage income.

In order to determine directly the elasticity of prices in relation to wages and non-wage income, we calculated the coefficients of correlation using the logarithms of the variables.

For the period between 1953 and 1971, the coefficient of correlation between consumer prices and wages is far higher than the value $r_{x:v}$ necessary (0.59) for it to be significantly different from zero. Nevertheless, the residuals are strongly auto-correlated, which proves that wages alone do not provide a complete explanation of variations in consumer prices. This auto-correlation can be eliminated by means of an iteration using the Johnston method, without the coefficient of correlation diminishing appreciably. It remains at the level of 0.97, which proves that there is a strong correlation. If one reduces the series of variables by one or two years, the correlation weakens slightly. Thus, the parallelism between prices and wages occurred mainly during the later years. When the same method is applied to the variables for the years 1960-1971, 1960-1970, and 1960-1969 instead of to the years 1953-1971, 1953-1969, the coefficients of correlation obtained were much higher, which proves that the parallelism became much more marked during the sixties.

Correlation is not synonomous with causality. We find that, if we bring the consumer prices series forward by one year, the autocorrelation of the residues becomes stronger and elimination of this auto-correlation by the Johnston method causes a slight fall in the coefficient of correlation. If, on the other hand, we bring forward the wages series by one year, the auto-correlation becomes weaker or disappears completely (when one limits the calculations to the period 1960-1971).

In addition, the coefficient of correlation increases (from 0.97 to 0.98 for the period 1953-1971 and from 0.99 to 0.998 for the period 1960-1971). This proves that the influence of prices on wages is at least as strong as that of wages on prices, and that this influence is felt

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[FUNCTIONS	-2 B 4	r	s	ЪW	Iter	rations	D 7	^r 0₊01	Portoda	
	(typical divergences)	(F-ratio)	'x:y	٤	Dewe	n	٩	Dere	(^f 0.01)	Torroad	
Ī	0	1	2	3	4	5	6	7	8	9	
s	Ln D = 0,375 ln S - 0,006	98,3 %	•99	• 37	1.27	2	•59	9	•73	1960 - 71	
	Ln D = 0,383 ln S - 0,007	97,6%	•99	•38	1.40	2	•60	8	•76 (11.2)	1960 - 70	
	Ln D = 0,3998 ln S - 0,008 $(0,025) - (0,001)$	97 % (26 <u>3</u>)	•99	•40	1.59	2	•62	7	.80 (12,2)	1960 - 69	
	Ln D = 0,338 ln S - 0,003 (0.020) (0.001)	94,4 %	•97	•34	1.76	2	•77	16	•59 (8,5)	1953 - 71	
	Ln D = 0,336 ln S - 0,004 (0,023) (0,001)	93,1 %	•97	• 34	1•74	2	•76	15	•61 (8.7)	1953 - 70	
	In D = 0,336 In S - 0,004 (0,026) (0,001)	91,6 % (165)	•96	• 34	1.72	2	•76	14	.62 (8,9)	1953 - 69	
s	$Ln D = 0,551 ln S^{*} - 0,007$ (0.030) (0.003)	96,8%	•985	•55	1.50	1	-	10	•71 (10)	1960 - 71	
	Ln D = 0,527 ln S - 0,005	96,7 %	•985	•53	1.31	1	-	9	•73 (10.6)	1960 - 70	
	Ln D = 0,532 ln S - 0,006 $(0,039) - (0,003)$	95,4 % (188)	•98	•53	1.34	1	-	8	•76 (<u>1</u> 1,2)	1960 – 69	
	In D = 0,520 In S - 0,008	97,1 %	•986	•52	1.12	1	-	17	•58 (8,4)	1953 - 71	
	Ln D = 0,504 ln S - 0,006 (0.022) (0.002)	96,8 %	•985	•50	1.04	1	-	16	•59 (8,5)	1953 - 70	
	Ln D = 0,503 ln S - 0,006 (0,026) (0,003)	95,9 % (376)	•98	•50	1.03	1	-	15	.61 (8,7)	1953 - 69	
ľ	WITH EFFECT OF THE SLIDING S	CALE									
1	$ \text{In } D_{t} = 0,376 \text{ ln } S_{t+1}^{-0,004} \\ (0,008) (0,001) $	99,6 % (2226)	•998	•38	1.25	1	-	9	•73 (10,6)	1960 - 71	
	Ln $D_t = 0,335$ in $S_{t+1} = 0,011$ (0,018) (0,002)	97,3 % (376)	•988	•34	1.67	2	.80	9	•73 (<u>1</u> 0 <u>•</u> 6)	1960 - 71	
[$ \text{Ln } D_t = 0,357 \text{ ln } S_{t+1} - 0,004 \\ (0,018) t+1 (0,001) $	96,2 % (406)	•98	•36	2.04	2	•70	15	. ⁶¹ (8,7)	1953 - 71	
	$ \text{In } D_t = 0,311 \text{ in } S_{t+1} - 0,004 \\ $	89,5 % (137)	•95	•31	•99	2	•74	15	• ⁶¹ (8,7)	1953 - 71	

TABLE 11: Simple research into the relation between prices and incomes.

Key : See Table 9.

at a certain remove in time (1).

This phenomenon is accounted for by the adjustment of wages to prices by the sliding scale method which is applied in virtually all industrial sectors in Belgium. This method, which consists of adjusting wages to consumer prices, each time the consumer price index exceeds a certain threshold several months in succession, causes wages to rise in parallel with rising prices, but at a certain remove in time.

The consequence of this time lag is that the correlation between wages and prices is highest when one shifts the wages series forward by one year $(2)_{\bullet}$

The auto-correlation phenomenon does not occur if we calculate the simple correlation between consumer prices and non-wage income. It is difficult to draw any conclusion from this finding because, as must not be forgotten, non-wage income is a composite macroeconomic aggregate whose various components probably have differing behaviour patterns. It may be noted that the coefficients of correlation, which are probably overestimated because of the collinearity between wages and non-wage income (see the previous section), tail off slightly when the figures for the years 1972 or the years 1971 and 1972 are not taken into account in the calculations. This proves that the parallelism between the rise in nonwage income and consumer prices became stronger during the last two years.

For the method of interpretation, see : Edward J. KANE : Economic Statistics and Econometrics - An Introduction to Quantitive Economics -International Edition, London, 1969, p.360.

⁽²⁾ The correlation was calculated on the basis of the logarithms of the variables, but a similar result if obtained if one uses the indices calculated on the basis 1953 = 100. Without the time-lag, a strong auto-correlation occurs (the Durbin-Watson statistic is only 0.7183, so that even at the 99 per cent level of significance, the non-auto-correlation thesis must be rejected (see R.J. WONNACOTT and T.H. WONNACOTT, Table IX, p. 428). If the wages series is brought forward by one year, this auto-correlation disappears completely (the Durbin-Watson statistic is 1.456) and the coefficient of determination becomes 0.996 (with $F_{1.16}=4581$) as against 0.993 with no time lag.

The elasticity of consumer prices in relation to non-wage income is more than 0.50, whereas that of prices in relation to wages is only 0.34, or 0.36 if the wages series is brought forward by one year. This is probably attributable to structural differences between the industrial sector and the services sector. In industry, wages generally represent a larger percentage of selling prices than non-wage income, whereas in the services sector, there are many sub-sectors (small traders, for example) in which non-wage income accounts for a much larger proportion than wages. In the industrial sector, with rapid improvements in productivity, it is possible to increase wages without introducing corresponding increases in selling prices, whereas in the services sector, where productivity improvements are too limited, entrepreneurs are obliged to increase their prices in order to meet all wage increases.

In view of the complex make-up of non-wage income, it is necessary to make a distinction between the income of self-employed workers (traders, members of the professions and associations of persons) and the income of joint stock companies, making separate analyses of the extent to which parallelism occurs between these forms of income and consumer prices.

4. <u>Simple regression analysis between the various types of non-wage income</u> and consumer prices.

The results of this analysis are shown in Tables 12 and 13. In the case of the income of self-employed workers (traders, members of the professions and associations of persons) (middle class), we find the same phenomenon as with wages. If we bring forward the series for the income of selfemployed workers by one year, the auto-correlation disappears and the coefficient of determination between consumer prices and the income of self-employed persons rises substantially (from 91.1 to 99.1).

Moreover, the F-ratio is multiplied by 10, from 175 to 1,887, which means that the reliability of the relationship is confirmed.

Functions	R ² % (F-ratio)	rx:y		D.W.	Iternations $n p_1 p_2$		D.L.	r _{.01} (F.01)	Periods	
0	(1)	(2)	(3)	(4)	5	6		7	8	9
$\ln D_{t} = 0,526 \ln \overline{S}_{t}^{CM} - 0,00 (0,03) (0,00)$	96 % (241)	•982	•53	1.77	2	•52	-	9		1960 - 71
$\ln D_{t} = 0,495 \ln \overline{S}_{t}^{CM} - 0,007$ (0,03) (0,001)	96,8 % (277)	•986	•50	2.01	2	• 50	-	8		1960 - 70
$\ln D_{t} = 0,487 \ln \overline{S}_{t}^{CM} - 0,007$	95,8 % (<u>184</u>)	•982	•49	1.98	2	•50	-	7		1960 - 69
$\ln D_{t} = 0,498 \ln \overline{S}_{t+1}^{CM} - 0,003$ (0,01)	99 , 4 % (1575)	•997	•50	1.36	1	-	-	9		1960 - 71
$\ln D_{t} = 0.487 \ln \overline{S}_{t+1}^{CM} - 0.003$	99,3 % (1301)	•997	•49	1.56	1	-	-	8		1960 - 70
$\ln D_{t} = 0,479 \ln \overline{S}_{t+1}^{CM} - 0,002$ $(0,015) - (0,001)$	99,2 % (9 <u>3</u> 5)	•996	•48	1.74	1		-	7		1960 - 69
$\ln D_{t} = 0,466 \ln \overline{S}_{t}^{CM} - 0,001 (0,035) (0,001)$	91,1 % (175)	•957	•47	1.14	2	•70	-	16		1953 - 71
$\ln D_{t} = 0,481 \ln \overline{S}_{t+1}^{CM} - 0,001$ (0,011)	99 , 1 % (1887)	•996	•48	1.00	1	-	-	16		1953 - 71

<u>TABLE 12</u>: Correlation between consumer prices and the income of self-employed workers, and between this income and the prices of services.

Key : See Table 9.

 U_{t} = consumer prices, services heading.

 \overline{S}_{t}^{CM} = non-wage income of traders, members of the professions and associations of persons (middle class).

Functions	R ² % (F-ratio)	r x: y		D.W.	It n	erations °1°2	D.L.	r.01 (F.01)	Periods
0	(1)	(2)	(3)	(4)	5	6	7	8	9
$\ln U_{t} = 0.79 \ln \overline{S}_{t}^{CM} - 0.01 \\ (0.03) \qquad (0.00)$	98,4 % (697)	•993	•79	1.01	1		10		1960 - 71
$\ln U_{t} = 0,757 \ln \overline{S}_{t}^{CM} - 0,008 \\ (0,026) \qquad (0,002)$	98,9 % (877)	•995	•76	1.18	1		9		1960 - 70
$\ln U_{t} = 0,742 \ln \overline{S}_{t}^{CM} - 0,006 \\ (0,03) \qquad (0,003)$	98,6 % (645)	•994	•74	1.22	1		8		1960 - 69
$\ln U_{t} = 0,804 \ln \overline{S}_{t+1}^{CM} - 0,002 \\ (0,03) \qquad t+1 (0,003)$	93,6 % (690)	•994	•80	1.46	1		9		1960 - 71
$\ln U_{t} = \begin{array}{c} 0,782 \ \ln \overline{S}_{t+1}^{CM} - 0,006 \\ (0,03) \end{array}$	98,3 % (536)	•993	•78	1.63	1		8		1960 - 70
$\ln U_{t} = 0,765 \ln \overline{S}_{t+1}^{CM} - 0,000$ (0,04)	97 , 8 % (364)	•991	•77	1.71	1		7		1960 - 69
$\ln U_{t} = 0.818 \ln \overline{S}_{t}^{CM} + 0.007 \\ (0.06) \qquad (0.003)$	92,6 % (215)	•964	.82	1.11	2	. 60 –	16		1953 - 71
$\ln U_{t} = 0,818 \ln \overline{S}_{t+1}^{CM} + 0,008 \\ (0,06) \qquad \qquad$	93 , 2 % (219)	•968	•82	1.40	2	•64 –	15		1953 - 71

TABLE 12a : Correlation between consumer prices and the income of self-employed workers, and between this income and the prices of services.

Key : See Table 9.

 \overline{S}_{t}^{CM} = non-wage income of traders, members of the professions and associations of persons (middle class).

U_t = consumer prices, services heading.
This proves that the income of self-employed workers adjusts to consumer prices after a certain time lag, so that there is a degree of feed-back, as in the case of the relationship between wages and prices.

If we use the index for the prices of services instead of the overall price index, the auto-correlation effect subsists after application of a shift in time. This is attributable to the shortcomings of the index for prices of services prior to the reform of the overall index in 1966. The index for the prices of services had been calculated on the basis of five headings only, and was therefore not at all representative of the development of the prices of all services.

The index for the prices of services is more representative from 1967 onwards. This explains the disappearance of the auto-correlation when we limit the calculation to the period 1960-1971. There is no autocorrelation when a time shift is not applied and, in addition, the coefficients of correlation are very high (more than 0.99).

This suggests that the influence of the incomes of self-employed workers on the prices of services is as great as or greater than the influence of these prices on them. This is not surprising, since self-employed persons work mainly in the services sector and any increase in their incomes is reflected directly in prices. The high elasticity of the prices of services in relation to the income of selfemployed workers (0.80 during the period 1960-1971; 0.82 from 1953 to 1971) demonstrates the impossibility in the services sector of compensating for the effects on prices of an increase in incomes by improving

productivity (1).

It should be noted that, in the case of the relationship between prices and non-wage income as in that of the relationship between prices and wages, the correlation is always slightly higher when the years 1970 and 1971 are included than when they are excluded. With the income of selfemployed workers, the parallelism with overall consumer prices (and also with the prices of services) became established mainly during the later years. The behaviour of the gross income of joint stock companies is entirely different from that of the income of self-employed workers. If one calculated the simple correlation between this income and consumer prices, one is confronted with the phenomenon of auto-correlation, which cannot be eliminated by iterations using the Johnston method.

 The regression between the series for food and non-food prices and the non-wage income of self-employed workers, which also confirms our earlier conclusions, is as follows:

a)	$-\ln A_{t} = \frac{0.51}{(0.03)} \ln t$	$\overline{S}_{t}^{CM} - \begin{array}{c} 0,007 & \overline{R}^{2} = 0,975 \\ (0,002) & D_{\bullet}W_{\bullet} = 1,72 \\ o = 0,42 \end{array}$	D.L. = 9 F = 401
	$-\ln A_{t} = \frac{0.50}{(0.01)} \ln$	$\overline{s}_{t+1}^{CM} = 0,001$ $\overline{R}^2 = 0,994$ (0,001) D.W. = 2,54	D.L. = 9 F = 1726
ъ)	$-\ln NA_t = \frac{0.37}{(0.03)}$ ln	$ \overline{\mathbf{S}}_{\mathbf{t}}^{\text{CM}} - 0,009 \overline{\mathbf{R}}^2 = 0,94 (0,002) \mathbf{D}_{\bullet} \mathbf{W}_{\bullet} = 1,42 o == 0,42 $	D.L. = 9 F = 171
	$-\ln NA_{t} = \frac{0.35}{(0.01)} \ln$	$\overline{S}_{t+1}^{CM} - 0,003 \overline{R}^2 = 0,987$ (0,001) $D_0W_0 = 1,65$	$D_{\bullet}L_{\bullet} = 9$ F = 797

After the second iteration using this method, the Durbin-Watson statistic is still only 0.77 whereas, for a 0.05 level of significance, it should at least reach a D_u value of approximately 1.41 for it to be possible to assume that the coefficient of auto-correlation is close to zero.

Moreover, if one makes a multiple correlation calculation choosing wages and the income of companies as independent variables, the coefficient obtained for these forms of income is so low (0.008) that it is not significantly different from zero. This proves that one cannot demonstrate any effect of the movements of the incomes of companies on consumer prices.

If, on the other hand, we calculate the correlation between the incomes of companies and wholesale prices (manufactured goods heading) we obtain a coefficient of correlation of 0.96 for the period 1953-1971 and one of 0.95 for the period 1960-1971 without any auto-correlation effect. Consequently, increases in the prices of these products have an undeniable although minimal influence on the income of companies and vice versa. The elasticity of wholesale prices (manufactured goods heading) to the income of joint stock companies is only 0.17, which explains why the indirect influence of the incomes of companies on consumer prices is negligible and cannot be demonstrated by the econometric method.

CONCLUSIONS :

The following conclusions may be drawn from the econometric research carried out in the context of this chapter :

 The steady improvement in productivity in industry has enabled wages to rise much more rapidly than consumer prices. In the services sector, productivity has not improved at the same pace, so that the rise in self-employed workers' incomes has had a fairly marked influence on the prices of services and, thereby, an indirect influence on consumer prices.

- 2) The growth in the incomes of joint stock companies has had a limited influence on the wholesale prices of industrial goods and, thereby, an indirect influence on consumer prices. This influence has remained limited thanks to improvements in productivity in most industrial sectors.
- 3) Wages and the incomes of self-employed workers have been pushed upwards by adjustments to the consumer price index. This "feedback" process was a strong feature throughout the period studied, but particularly during the later years. It occurred with a lag of several months.

These conclusions are illustrated in schematic form in Figure 1. They do not contain a complete answer to the question of the relative contributions of its various components to the development of the consumer price index. For the present, we only know that the increase in the prices of services played a major role and that the influence of the wholesale prices of manufactured goods is probably minimal. We do not know the extent of the influence of the development of the wholesale prices of farm produce or that of the profit margins taken at the various stages of marketing.

In the following chapters, we shall be studying first, the role of the various components of consumer prices in accounting for their development, and then the development of profit margins in the distributive sector.

Functions	$\frac{\overline{R}^2}{R}$	r _{xy}	ε	D.W.	COL.	Ite	rations	D.L.	Period
	(1-12010)		_			م 1	. ^р 2 г		
$\ln D_{t} = 0,170 \ln \overline{S}^{SA^{+}} + 0,011 \\ (0,051) \qquad (0,003)$	38,8 % (11,1)	•65	0,17 0,33	0,77	1,00	•55	.51 3	15	11
$\ln D_{t} = 0,008 \ln \overline{S}^{SA^{+}} + 0,328 \ln S_{t} - 0,004 \\ (0,02) \qquad (0,025) \qquad (0,001)$	95,7 % (190)	•09 •96	0,00 0,33	1,60	0,69	•71	- 2	15	11
$\ln I_{t} = 0,165 \ln \overline{S}_{t}^{SA^{+}} - 0,004 (0,12) (0,002)$	91,1 % (186)	•96	0,17	1,29	1,00	-	- 1	17	n
$\ln I_{t} = \begin{array}{c} 0,175 \ln \overline{S}_{t}^{SA^{+}} - 0,002 \\ (0,019) \end{array} (0,002)$	88,5 % (85)	•95	0,17	1,30	1,00	-	- 1	10	"

TABLE 13 :	Correlation between	consumer prices	and the w	holesale prices
	(manufactured goods	heading) and the	e incomes	of companies.

Key : See Table 9.

 $I_t =$ wholesale prices, manufactured goods heading $\overline{S}_t^{SA^+} =$ non-wage income of joint stock companies including direct taxation.

FIGURE 1.





CHAPTER IV: Study of the various components of the consumer price index.

1. Introduction.

The structure of the consumer price index was changed considerably in 1967. The prices of services which, according to the conclusions of Chapter III influenced the development of the income of self-employed workers considerably, have accounted for 21.43% of the overall index since 1967, as against only 7.7% during the earlier years.

The proportion attributed to food products was reduced to 41.55% and that attributed to non-food products to 37.02%, as against 53.9% and 38.5% respectively prior to the reform. In fact, the importance of food products is still overestimated since, according to the national accounts, expenditure on these products represented 30.6% of private consumption in 1966 (1). This distortion was eliminated in March 1972, since when food products only account for 30% of the overall index, whereas 40% is now attributed to nonfood products and 30% to services.

Since we are to devote all our attention to the development of the prices of services, it is desirable to make a deeper study of the development of the various components of the consumer price index between 1967 and 1972.

Before proceeding to this in-depth study, it will be useful to make a brief analysis of the development of the various components of the index during the period 1953-1972.

2. <u>General outline of the development of the various components of the</u> consumer price index between 1953 and 1972.

Graph I shows the growth rates of the three groups of prices according to which the overall consumer price index is calculated. In order to compare their development to that of the trade cycle in general, we have added a curve representing the annual averages of the trade cycle index calculated by the research and documentation department of the Kredietbank.

Calculated on the basis of "Comptes nationaux 1957-'66 et balances de paiements 1962-1966", Statistical Office of the European Communities, Brussels, 1967, pp. 72-73, 100-101, 126-127, 156-157 and 184-188.

This index represents a synthesis of a number of economic quantities whose development is characteristic of the trade cycle, among them industrial production, orders in the metal-working industry, electricity production, textiles production, imports and exports calculated at current prices, raw materials prices, employment vacancies, interest on the call money market and industrial production calculated at wholesale prices (1).

Comparison of the growth rates of the three headings of the price index shows that, virtually throughout the period, the rise in the prices of services was higher than that in the prices of food and non-food products. The continual rise in the prices of services is more structural than cyclical in character, since it frequently becomes sharper during periods of recession (in 1968, for instance) and less marked during periods of prosperity (in 1960-1961, for instance). In all probability, therefore, it is not caused by fluctuations in demand. It is more a result of the efforts of those who render services to increase their income in line with that of employees. We shall return to this theory of the influence of the middle class in the rise in the prices of services in Section 5 of this Chapter.

Let us take a close look at the development of the other two components of the consumer price index. Food prices have followed an irregular, sharply rising trend, which appears to have been influenced by the trade cycle, although no real parallelism can be established. This is accounted for by the fact that these prices are influenced by divergent factors, namely :

- a) the development of farm prices on international markets;
- b) the agricultural policies of the Belgian Government and the Council of Agriculture Ministers of the Common Market countries;
- c) the development of wages and profits in the food industry;
- d) the development of profit margins in food distribution.

Some of these factors (those mentioned under a) and c) in particular) are strongly influenced by the trade cycle. The development of others is not subject to this influence to the same extent (the factor mentioned under d)) (2), whereas the factor referred to under b) is almost completely independent.

Kredietbank, Service d'Etudes et de documentation : "Un indice de la conjoncture pour l'économie belge", Brussles, 18 September 1972, pp.1 & 2.

⁽²⁾ See Chapter IV, Section 4.

The growth of non-food product prices follows the development of the trade cycle, except during the period 1959-62.

Between 1959 and 1962, the rise in non-food product prices was virtually nil. This cannot be accounted for in terms of wages, since they rose regularly during the period (1). This virtual stability is probably attributable to the following two factors :

- 1) the strengthening of international competition in consequence of the reduction of customs tariffs within the Common Market;
- 2) the enlivenment of competition in the distributive sector under the influence of the emergence of the major retail multiples.

We shall return to the subject of 2) in Chapter V.

Between 1962 and 1966, the prices of non-food products were carried along by the decided upward movement of the trade cycle.

The downturn in 1967 brought about a decline in the growth rate of these prices, but it is difficult to measure the extent of this since the products included in the index for non-food product prices were changed from 1 January 1967.

The development of these prices after 1967 is studied in depth in the following Section, in which we shall be using annual data (December to December) at first, and then quarterly averages. The purpose of this is to establish the influence of the trade cycle on the various price indices more clearly.

3. Development of the various components of the consumer price index between 1967 and 1972.

In order to select the products and services whose increases in price had a major influence on the increase in the consumer price index, we calculated, on a year by year basis, the average growth of this index and eliminated all products whose prices did not rise at a rate exceeding any of these averages.

Revue de Documentation et d'Information de la Banque Nationale de Belgique, February 1956, p. 177, Graph VI.

Tables 14, 15 and 16 itemise all the products whose prices rose during the period 1967 to 1972 inclusive.

Annual growth rates in excess of the annual average have been underlined so that it is easy to determine which products have made the greatest contribution to the acceleration of inflation during the period 1967-72.

It becomes immediately apparent that the prices of services and some food products (meat, bread) were those which rose sharply, whereas most non-food products rose at rates below the average (1/77 of the overall increase).

Among food products, bread and meat in particular played a decisive role. The effect of the rise in the price of bread tailed off between 1967 and 1972. It accounted for 13.07% of the overall increase in the consumer price index in 1967, and only 3.25% in 1972.

The role of beef, on the other hand, grew in importance. The proportion for which it accounted was 6.33% in 1967 and 11.54% in 1972.

The increases in the prices of pork, veal and cooked meats were of less decisive importance, but nevertheless their absolute growth rates were above the average in many years.

Dairy produce played an important part in the increase in prices in 1967 and 1971, in which years they accounted for more than 5% of the overall increase of the consumer price index. The price of butter, on the other hand, rose only modestly and actually fell in 1968. This is no doubt attributable to the extremely high price of butter in 1967. The consumer price was approximately four times the wholesale price on international markets. Not surprisingly, in view of the growing resistance of consumers to this situation and the rising stocks of butter in the Common Market, it would have been difficult for the farmers' organizations to introduce further increases.

The price of potatoes fluctuates substantially from year to year.

In 1967 and 1970, it had a moderating influence on the upward movement of the consumer price index, but in 1969 it, together with the prices of beef and pork, was responsible for the acceleration of the rise in consumer prices. Indeed, the rate of increase rose between 1968 and 1969 by slightly more than 2 points (of which more than one point is attributable to the rise in meat and potato prices).

Under the non-food products heading, only the prices of textiles, coal and washing powder and toothpaste rose to an extent which caused them to have an influence of more than 5% on the consumer price index.

TABLE 14 : Increases in retail prices

FOOD PRODUCTS

Code	Headings	đ	1967	19	68	19	69	19	970	19	971	19	72
		<u>~~~~~~~~~~</u>	abs	<u>%</u>	abs	<u>%</u>	abs	<u>%</u>	aps	%	<u>abs</u>	<u> %</u>	abs
1-2-3	Bread	13.07	0,43	8,45	0,20	3,18	0,15	6,46	0,20	5,80	0,32	3,25	0,20
5-6-7- 8	Meat	6,34		10,57		11,72	•	2,69		6,56		11,54	
			0,21]	0,25		<u>0,54</u>		0,08		0,36		<u>0,70</u>
9-10- 11	Pork	0,38	0,01	8,45	0,20	8,09	<u>0,37</u>	-2,69	-0,08	1,83	0,10	2,64	0,15
12	Veal	1,14	0,04	1,59	0,08	1,73	0,08	1,08	0,03	2,21	0,12	2,78	0,17
14–15	Cooked meats	3,17	0,10	2,64	0,06	3,54	0,16	1,88	0,06	1,98	0,11	2,78	0,17
17–18– 19–20	Dairy products	5,97	0,20	6,34	0,15	-3 , 73	-0,17	0,81	0,02	10,08	0,55	2,67	0,16
21–22	Butter	0,38	0,01	-7,93	-0,19	0,27	0,01	0,13	0,00	2,74	0,15	1,21	0,07
24	Potatoes	-10,53	-0,34	3,17	<u>0,07</u>	10,27	0,47	-11,57	-0, 36	-1,38	-0,08	8,23	<u>0,50</u>
30	Chocolate	4,70	<u>0,15</u>	3,17	0,07	4,45	0,20	-2,69	-0,08	-0,08	-0,00	-0 , 05	-0,00
31-32	Beverages	2,03	0,07	-	-	0,09	0,00	2,02	0,06	2,98	0,16	3,62	<u>0,22</u>
Food pr	oducts	40,36	1,32	33,47	0,79	48,8	2,23	18,57	0,57	32,9	1,79	41,64	2,54
Index t	otal	100	3,27	100	2,36	100	4,57	100	3,07	100	5,44	100	6,10

TABLE 15

NON-FOOD PRODUCTS

Code	Headings	190	57		1968]	969	1	.970]	1971]]	.972
		%	a	с /`	a	¢jc	a		a	<i>%</i>	a	07 /J	a
33 - 34	Cigarettes and tobacco	8,48	0 , 28	-		2,35	0,11	0,84	0,03	2,38	0,13	3,09	0,19
35 - 36	Shoes	-2,38	-0,08	1,11	0,03	3,41	<u>0,16</u>	3,62	<u>0,11</u>	4,41	<u>0,24</u>	3,61	0,22
37	Bespoke tailoring	2,38	0,08	1,58	0,04	1,30	0,06	1,08	0,03	2,10	<u>0,11</u>	1,93	0,12
38–39–40 41–42–43 44–45	Textile products [.]	4,18	0,14	7,43	0,18	5,27	0,24	5,67	0,17	9,71	0,53	7,73	0,47
46–47–48 49	Coal	-0,34	-0,01	2,69	0,06	7,95	0,36	12,18	<u>0,37</u>	2,58	0,14	3,03	0,18
51 - 52	Towels and dishcloths	3,05	<u>0,10</u>	1,58	0,04	1,79	0,08	2,65	0,08	4,01	0,22	2,96	0,13
53	Furniturə	0,34	0,01	1,11	0,03	1,06	0,05	0,84	0,03	1,97	<u>0,11</u>	1,22	0,08
56 - 57	Washing powder and toothpaste	-0,34	-0,01	2,06	0,05	5,19	<u>0,24</u>	1,45	0,04	-2,85	-0, 16	-0, 26	-0,02
58	Petrol	0,79	0,03	0,47	0,01	-0 , 65	-0,03	0,72	0,02	1,49	0,08	2,00	0,12
61 a	Exercise books and dictionaries	1,58	0,05	3,16	<u>0,07</u>	2,19	<u>0,10</u>	-0, 36	-0,01	2,03	<u>0,11</u>	0,90	0,06
59 - 60	Gas and electricity		-	1,58	0,04	0,33	0,02	-	_	1,49	0,08	-0,84	-0,05
Non-food	products total	17,75 /	0,58	23,73	/ 0,56	30 , 41	/ 1,39	29,31	/ 0,90	31,99	/ 1,74	24,92 /	1,52
Index Tot	al	100	3,27	100	2,36	100	4,57	100	3,07	100	5,44	100	6,10

TABLE 16

SERVICES

Code	Headings	1	967	1	968	1	969	19	70	1	971	19	972
(61b (62	School fees and rail fares	11,65	0,38	-		0,09	0,00	8,58	0,26	2,56	<u>0,14</u>	1,87	C,11
64 - 65	Laun dry, mending & dry cleaning	3,01	0,10	3,44	0,08	2,78	0,13	4,47	0,14	5,40	0,29	3,60	0,22
66	Medical services	0,72	0,02	1,45	0,03	1,27	0,06	3,70	0,11	1,14	0,06	2,66	0,16
67	Maternity ward charges	1,89	0 , 06	7,78	0 , 18	2,54	0,12	4,88	0,15	2,52	<u>0,14</u>	3,79	0,23
68	Haircutting	6,02	0,20	1,99	0,05	1,04	0,05	4,04	0,12	3,79	0,21	1,12	0 , 07
69	Tram and bus fares	1,89	<u>0,06</u>	6,33	0 , 15	0,09	0,00	0,70	0,02	0,04	0,00	1,08	0,07
71	Postal and telephone charges	3,73	0,12	-		3,62	<u>0,17</u>	-	-	0,79	0,04	6,08	<u>0,37</u>
73 - 74- 77	Hotel,restaurant & café charges	4 , 98	<u>0,16</u>	6 , 24	0 , 15	3,95	0 , 18	7 , 75	0,24	2,56	0,14	4,49	0 , 27
75	Newspapers	3,41	0,11	3 , 39	0,09	0,09	0,00	5,72	0 , 18	6 , 59	0 , 36	-	-
76	Magazines	0 , 39	0,01	5 , 34	<u>0,13</u>	0,33	0,02	8,16	0,25	6,04	<u>0,33</u>	2,01	<u>0,13</u>
Services	total	41 , 89 /	′ <u>1,37</u>	42,80 /	/ <u>1,01</u>	20,79 /	/ 0,95	52 , 12 ,	/ <u>1,60</u>	35 , 11 ,	/ <u>1,91</u>	33,44 /	2 <u>,04</u>
Index To	tal	100	3,27	100	2,36	100	4,57	100	3,07	100	5,44	100	6,10

The prices of services influenced the general index particularly strongly in 1970, when price rises occurred in the transport, hotels, resturants and cafés sector, and also in the newspaper and magazine publishing sector. In that year, they almost completely cancelled out the deceleration of the rise in food and non-food product prices. They accounted for more than 40% of the rise in the index in 1967 and 1968, and almost a third in 1972.

In absolute figures, the 1970 rise in the price of services was greater than during all the preceding years, which proves that the prices of services were drawn along by the sharp upward movement in food prices (1).

The substantial rises in the prices of services were generally caused by a series of increases in rates by private firms or self-employed workers, often preceded by adjustments of the charges of the railways or public bus and tram services.

This suggests that many small traders and craftsmen use increases in public service charges as a pretext to increase their profit margins or rates themselves.

This trend is generally held in check by the commission for the regulation of prices, whose task it is to attempt to avoid spectacular increases which could lead to applications for price and rate increases in other sectors. Accordingly, this mechanism gives rise to periodic rashes of increases in the prices of several services which, together, cause the index of the prices of services to rise comparatively sharply, although, when considered in isolation, they are generally relatively modest (2). We shall return to this problem when analysing the work of the commission for the regulation of prices.

The prices of food products fluctuated to a less marked extent than those of services during the period 1967-1972 (2). The movements were determined largely by the wide fluctuations in the prices of potatoes and the almost continual rise in the price of bread, various kinds of meat and fish. The

⁽¹⁾ It is worth noting in this respect that there were relatively substantial rises in maternity ward, hotel, restaurant and café charges, that is the charges of concerns where food prices account for a significant proportion of cost prices.

⁽²⁾ See Graph 2.

most substantial advances occurred when there was a sharp increase in the price of potatoes in conjunction with a rise in the prices of certain other products.

This occurred in the second quarter of 1967 and in that of 1969, and also in the first quarter of 1970 and the third quarter of 1972.

In the second and third quarters of 1971, on the other hand, the rise in food prices was mainly attributable to a sharper increase in the prices of bread and various types of meat (1).

In the following Section, we shall try to analyse the causes of the rises in the prices of bread and meat.

The rise in non-food product prices was fairly irregular during the period 1967-72. It did not follow the trade cycle absolutely. This fact is largely attributable to the influence exerted by indirect taxation (V.A.T.) on the prices of various non-agricultural products and to the raising of the prices controlled by the authorities. In the third quarter of 1967, the excise duty on cigarettes was increased substantially, while the prices of various varieties of coal were also raised in order to lessen the burden of subsidies payable by the State to the coal industry (2).

This caused a reversal of the trend in the non-food price index which, during the second quarter of 1967, had probably been influenced by the downturn in the economic cycle.

During the period of economic recovery between the end of 1967 and the beginning of 1969, the non-food price index rose only very slowly, but the announcement of the introduction of V.A.T. on 1 January 1970 gave rise to a sharp rise in demand during the last quarter of 1969 which, in turn, caused the prices of many non-food products to rise.

The prices of textiles and clothing rose in particular, and those of various varieties of coal were also increased (3). The acceleration of purchases of consumer durables during the fourth quarter of 1969 was followed by a reaction which ended the rise in the prices of non-food products. During the first quarter of 1970, these prices were virtually static. They began to move again during the second quarter of that year, probably under

 [&]quot;Indices des prix à la consommation", Moniteur belge, 1 May 1971, p.5.700, 30 June 1971, p.8.303, 31 August 1971, p. 10.010 and 30 October 1971, p.13.083.

^{(2) &}quot;Indices de prix à la consommation d'après la nature des produits 1967", Annuaire statistique de la Belgique, Nr.88, year 1968, pp.495-496.

⁽³⁾ Idem, Annuaire statistique de la Belgique, 1970, op.cit., p.557.

the influence of a sharp rise in demand, since the prices of virtually all nonfood products began to climb slowly (1). This rise accelerated during the first quarter of 1971 as a result of the effect of the introduction of V.A.T. (2).

The measures taken by the government to prevent galloping inflation checked the movement and phased it over several months.

With the influence of the economic recession at the end of 1971, the upward movement lost some of its impetus. In the third quarter of 1972, the rise in the prices of non-food products became rapid once again and, by the fourth quarter of that year, reached a disturbing level of nearly 2%. This was brought about by the increase in the excise duty on petrol and the rise in the prices of cigarettes, most textiles, men's and women's shoes, various types of coal, furniture, heating installations, cookers and refrigerators (3).

We can conclude that, although the prosperity of the years 1969-70 contributed to the rise in non-food product prices, the fiscal policy pursued by the State is also responsible to a large extent for the almost continual rise in these prices.

For the present, it is not yet possible to apportion responsibility with accuracy, since the two factors are closely interlocked, particularly during the period when V.A.T. was introduced. Thus, the increase in the rates of indirect taxation occurred during a period of stagflation characterised by a fairly substantial rise in wage costs (4).

This brings us to the problem of the extent of the repercussions of the development of the prices of basic industrial products on that of non-food product consumer prices.

This is an extremely complex problem, since it is necessary to take into account all the possibilities of substituting raw materials with others. We cannot make an overall examination of this problem, since this is not the purpose of this study. We shall merely attempt, taking the development of the prices of certain typical products as our basis, to determine the mechanisms by which the movements of industrial raw materials prices find their way into food and nonfood product consumer prices.

 [&]quot;Indices des prix à la consommation d'après la nature des produits", Annuaire statistique de la Belgique, Volume 91, op.cit., pp. 525-526.

^{(2) &}quot;Indices des prix à la consommation", Moniteur belge, 2 February 1971, pp. 1264-1265 and 1 May 1971, pp. 5700-5701.

⁽³⁾ Idem, Moniteur belge, 31 October 1972, pp. 12,092-12,093 and 30 December 1972, pp. 14,597-14,598.

⁽⁴⁾ The gross wage index rose by 12.1% during 1971, "Evolution récente de la situation de l'économie belge", Revue de la Banque Nationale de Belgique, November 1972, p. XIII, Table III.

4. Comparison of the development of the retail prices of certain products between 1967 and 1971 and the development of the wholesale prices of the raw materials entering into their manufacture.

In Chapter III, we found that the wholesale prices of industrial goods are influenced by increases in the profits of companies, and vice versa. We were unable to reach any conclusion as to the relationship between the development of the wholesale prices of industrial goods and the movements of the consumer price index. Logically, we can assume that when the wholesale prices of basic industrial goods rise, two effects can occur :

a) a cumulative increase effect :

Not only are increases in the prices of raw materials used in the production of the various consumer goods incorporated into the selling prices of these goods, but profit margins are also adjusted to take such rises into account. The rise in the price of the raw material provides the seller with an argument justifying an increase in his selling price to the purchaser. It is normal for him to take advantage of it to adjust his profit margin to the general rise in prices, thereby causing a greater increase in his selling price than that in his buying price, in other words, creating a cumulative effect.

b) <u>a ratchet effect</u> :

The prices of consumer goods adjust to rises in the prices of the raw materials used in their production more readily than to falls in these prices.

Sellers take advantage of the ignorance of the majority of consumers about the development of wholesale prices in order to maintain the retail price at the higher level fixed after the rise in the price of the raw material. Nevertheless, if competition becomes too fierce, sellers will be obliged to reduce their prices or allow larger discounts.

We shall analyse the extent to which these two effects were in evidence at the time of substantial price increases during the period 1967-72. We have selected the products which, during this period, rose in price at an annual rate in excess of the average for all products and services. In the case of non-food products, these were : men's shoes and shoe repairs, various varieties of coal and newspapers and periodicals.

Cigarette prices have not been analysed, since it was an increase in the excise duty which caused them to rise.

The food product prices selected are those of bread, potatoes and meat.

A. Prices of non-food products, including newspapers and periodicals (1).

a. men's shoes and shoe repairs :

The price of leather rose by approximately 20% during the period of prosperity between the end of 1968 and the summer of 1969. It then stabilised, but fell substantially during the second and third quarters of 1970. At the beginning of 1971, it was back at its July 1968 level. The prices of men's shoes rose throughout 1969, but not to the same extent as the price of leather. Thus, the cumulative increase effect was relatively low, but the ratchet effect occurred in 1970. When in 1972 the price of leather rose substantially again, shoe repair prices adjusted with a lag of some three months, whereas the prices of shoes continued to climb slowly.

It may therefore be concluded that although the ratchet effect is easily identifiable, the cumulative increase effect is more difficult to prove. This is probably attributable to the importance of the wage factor in the cost price of shoes.

b. <u>coal</u> :

Coal prices to the consumer follow wholesale price trends fairly closely. In general, they do so with a certain time lag (approximately three months in 1970) and the rise in retail prices is less marked than that in wholesale prices, which proves that there is little or no cumulative increase effect.

There was no evidence of the ratchet effect, since there was no substantial fall in coal prices at any time during the period under consideration.

⁽¹⁾ Newspapers and periodicals are incorporated in the index for the prices of services, although they are non-food products.

All the reductions in wholesale prices in 1967, 68, 69, 70 and 71 were of a seasonal nature and were reflected relatively faithfully in consumer prices. Consumers are aware that the price of coal is normally lower in summer than in winter, so that coal merchants are obliged to sell at lower prices during the summer months if they wish to keep their customers.

c. <u>furniture</u>:

Furniture prices were not influenced to any extent by wood prices. It has probably been possible to bring down raw materials costs by replacing wood by chipboard and plywood panels. The sharp rise in wood prices during 1969 caused furniture prices to rise to a limited extent only. Thus, there was virtually no evidence of the cumulative increase effect.

When wood prices fell substantially in the first quarter of 1971, no fall in furniture prices followed. On the contrary, the upward trend accelerated. This is probably attributable to the steady rise in production costs in the furniture industry, which caused manufacturers to increase their prices regularly (1). It is therefore not possible to establish whether there was any ratchet effect in 1970.

d. <u>newspapers and periodicals</u>:

Newspaper and periodical prices were affected by the rising costs of raw materials and regular wage increases (2).

The increase in paper prices during the first quarter of 1970 gave rise to a more than proportional rise in the prices of periodicals and newspapers. This was an example of the cumulative increase effect. Newspaper and periodical publishers took advantage of this increase to justify a substantial rise in the selling prices of their publications, thereby improving their profit margins. The fall in paper prices in 1972 was in no way reflected in the prices of newspapers and periodicals. This example provides a good illustration of the ratchet effect.

From October 1966 to October 1971, wages in the furniture industry rose by 50.8%, or almost 10% each year. (Revue de la Banque Nationale de Belgique, November 1972, p. 29, Table VI.2.)

 ^{(2) &}quot;Statistiques", Revue de la Banque Nationale de Belgique, April 1973, p.29, Table VI.2.

B. Food prices :

a. bread :

As we saw in the preceding section, bread prices rose steadily during the period 1967-1972 and, in so doing, contributed to the acceleration of inflation. There was little relationship between this phenomenon and the development of wheat prices, although the increases in wheat prices in 1970 and 1972 did contribute to a certain extent to the acceleration of the relatively regular rise in the prices of the various types of bread. The falls in wheat prices which occurred in 1968-69 and from 1971 to early 1972 had no influence on bread prices, so that these were prime examples of the ratchet effect.

b. meat :

The regular rise in the prices of the various varieties of beef made a major contribution, in common with bread prices, to the exacerbation of inflation. Up to the middle of 1971, the only explanation for the rising prices was an increase in distributors' margins. Wholesale meat prices fluctuated considerably, but they stood at roughly the same level on 1 July 1971 as on 1 July 1967. Thereafter, the general world shortage of meat caused fresh meat prices to rise. Retail meat prices followed the upward trend very closely. The percentage rises were as high for retail prices as for wholesale prices, which demonstrates that the cumulative increase effect took place.

c. potatoes :

The very sharp fluctuations in potato prices influenced the overall food prices index very strongly, both upwards and downwards. The rises and falls in retail prices are less marked than those of wholesale prices, but they follow a more or less parallel course, which proves that this is a sector in which competition between distributors is relatively fierce. This competition prevents excessive increases in profit margins, whether wholesale prices are rising or falling; in other words, the cumulative increase effect and the ratchet effect play a limited part only. On the other hand, the ratchet effect can be observed at later stages (for example, in the prices of chipped potatoes).

CONCLUSIONS.

- 1) Throughout the period between 1953 and 1972, the prices of services rose at a more rapid rate than the prices to the consumer of food and non-food products. Prior to the reform of the consumer price index in 1967, the weighting of the prices of the various groups of products was such that substantial rises in the prices of services could not have a major influence on the consumer price index. After the reform in 1967, the weighting was adjusted so that the prices of services have had a decisive effect on the course of the index for several years. In view of the marked parallelism (see Chapter III) between the trend in the prices of services and the incomes of self-employed persons, we can assume that increases in the latter have been an important cause of the rise in the consumer price index and have therefore made a major contribution to the activation of the whole wage-pull inflation mechanism by causing prices and wages to rise.
- 2) The rise in the consumer price index during the years 1967-1972 was accelerated by :
 - a) repeated increases in the prices of certain basic food such as bread and beef;
 - b) increases in indirect taxation through the introduction of V.A.T. and the raising of certain excise duties (on cigarettes and petrol) (1);
 - c) the raising of the rates of most of the public services (railways, trams and buses, postal services, etc.), the purpose of which was to reduce the weight of the subsidies paid by the State or by local authorities to the para-State bodies which organise these services;
 - d) the favourable economic climate during most of the period under consideration, which created an employment situation favourable to wage-pull inflation and increases in wholesale and retail prices.

We have seen that the raising of the rates of certain public services (railways, buses, postal services) and certain basic foods is often felt by a large section of the population to be a signal for a general rise in prices. It causes the various social groups to react by attempting to increase their own incomes, thereby generating further price increases.

 ⁽¹⁾ The raising of the price of petrol was only an important factor in 1971 and 1972 (Moniteur belge, 31 August 1971, p. 10.011, and 31 October 1972, p. 12.093).









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3) The mechanisms by which agricultural and industrial raw materials price rises come to be reflected in the prices of consumer goods vary from one product to another. We have been able to establish that the cumulative increase effect and the ratchet effect occur mainly where the consumer knows little about variations in raw materials prices, that is, in the case of products such as furniture, periodicals, newspapers and shoes. Where such variations are seasonal in character and fairly well known to the consumer and where, in addition, there is strong competition between distributors, the latter are obliged to gear their prices to the real level of wholesale prices.

In general, there is an easily demonstrable ratchet effect in the case of most industrial products, but it cannot be said that the tendency among certain producers and distributors to increase their profit margins in absolute terms each time raw materials prices rise is common practice.

In Chapter V, we shall attempt to determine whether the cumulative increase effect and the ratchet effect have given rise to an increase in small traders' profit margins on most products.

<u>CHAPTER V</u>: <u>Study of the development of certain categories of non-wage</u> <u>income</u>.

1. The income of small traders and craftsmen, and the development of profit margins.

In Chapter II, we reported that the income of traders and craftsmen rose by approximately 117.6% between 1953 and 1971; this percentage being very much lower than that for the income of most of the liberal professions.

We suggested that this phenomenon is probably due to the decline in the number of small businesses in the trades and crafts sector rather than to a lowering in the standard of living of traders and craftsmen. In this section, we shall be trying to determine the overall development of small traders' and craftsmen's average profit margins in order to establish whether the fall in the number of businesses in this field has had the effect of making the commcerical sector more efficient, thereby benefitting the consumer. Using the national accounts statistics, we began by calculating the overall turnover, at current prices, of all distributive businesses (small traders, craftsmen, co-operatives, large stores, chain stores, self-service shops, supermarkets).

From this total, we deducted the proportion accounted for by the large stores, chain stores, supermarkets, co-operatives and any other large-scale trading concerns.

There are published figures for the turnover of the organized retail trade between 1964 and 1971, so that we were able to determine the turnover of individual traders and craftsmen for this period. By dividing the small traders' and craftsmen's income by their turnover, we obtained a rough estimate of the average profit margin of this category of self-employed workers. For the period prior to 1964, it was necessary for us to use a more complicated method of determining the turnover of the organized retail trade as a whole. We calculated the proportion of the overall turnover of organized retail trade accounted for each year by the large stores and consumer co-operatives during the period between 1964 and 1971. The proportion fell from 67.5% in 1964 to 46.2% in 1971, according to the formula $y = at^b$, in which y is the proportion accounted for by the large stores and co-operatives and t is the number of years beginning from 1964. Using this formula, the relative proportion accounted for by the large stores and co-operatives can be extrapolated for the whole period between 1953 and 1963. The results of this

calculation are shown in Table 18. Since the I.N.S. published the turnover of the large stores and co-operatives from 1953 to 1964, the probable turnover of all organized trade can be calculated for each year in the period 1953 to 1963 inclusive, by applying a simple rule of three.

Having obtained this result, we adopted the same procedure for the period 1964-71 and calculated the entire series of average profit margins from 1953 to 1971. This series displays no clear-cut trend. Up to 1969, the profit margin fluctuated around 40%, but one has the impression that 1970 saw the beginning of a downward movement. Not having any statistics for 1972, we are unable to determine whether this is a structural movement which is taking place in response to the proliferation of supermarkets or a dip accounted for by the economic downturn which occurred in 1971.

At all events, it would not seem that the decline in the number of small traders and craftsmen led to a net fall in profit margins.

The large organizations increased their share of retail turnover from 10.9% in 1953 to 19.5% in 1971, but the modernization of distribution methods seems to have had only very limited success in curbing the rise in consumer prices. In absolute terms, retailers' profit margins have risen by almost as much as manufacturers' and wholesalers' selling prices.







Year	Large stores and cooperatives	Turnover of organi s ed trade (in millions)	Organi s ed trade	Individual traders
	organi s ed trade		private consumer market	private consumer market
19 53	80,-	18,932,340	10,9	89,1
1954	79,1	20.482,200	11,4	88,6
1955	78,2	22,142,244	11,9	88,1
1956	77,3	24.359,400	12,5	87,5
1957	76,3	25.350,528	12,2	87,8
1958	75,3	27.438,672	13,1	86,9
1959	74,2	28,602,276	13,3	86,7
1960	73,1	31.117,380	14,4	85,6
1961	71,8	32.803,656	13,9	86 , 1
1962	70,5	35.272,668	14,2	85 , 8
1963	69,1	38.108,376	14,4	85 , 6
1964	67 , 5	41.775,528	14 , 8	85 , 2
19 65	66 , 8	45•436,356	14 , 9	85 , 1
1966	64,7	49•553 , 268	15 , 3	84 , 7
1967	62,2	52.837,128	15,6	84,4
1968	58 , 2	59.016,384	16,3	83,7
1969	53 , 6	68 . 319 , 276	17 , 4	82,6
1970	50 , 7	78.253,308	18,4	81,6
1971	46,2	90.688,008	19,4	80 , 6

TABLE 18 : Share of the private consumer market taken by individual traders.

Source : Calculated on the basis of I.N.S. statistics on domestic trade.

	1953	1954	1955	1956	1957	1958	1959	1960	1961
- Private consumer market - Individual traders, %	174.205 89,1	179•997 88,6	185.452 88,1	195•197 87 , 5	207.719 87,8	208.847 86,9	215•567 86 , 7	216.008 85,6	235•439 86,1
- Individual retail traders (turnover)	159•477	163•383	170•797	182•377	181.488	186.488	186.897	185.903	202.713
- Retail trade income	64.100	67.300	69.500	71.600	71.100	71.200	73.640	76.000	79.300
- Profit margin %	41,3	42 , 2	42 , 5	41,9	39 ,-	39,2	39,4	41,1	39,1

TABLE 18 a : Calculation of the profit margins of individual traders.

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
- Private consumer market	247.693	263•987	282.330	305.762	323.240	338.713	361.495	392.953	425.825	466.443
- Individual traders, % - Individual retail	85,8	85,6	85,2	85,1	84,7	84,4	83,7	82,0	01,0	376.356
- Retail trade income	82.600	87.200	100.800	104.900	110.200	114.400	122.300	130.500	137.200	140.100
- Profit margin %	39 ,-	38,6	41,9	40,3	40,3	40,0	40,4	40,2	39,5	37,2

Source : Calculated on the basis of I.N.S. statistics and Table 18.

2. The income of the professions.

In Chapter II, we reported that the incomes of members of the professions rose much more substantially than the incomes of small traders and craftsmen. This is partly explained by the increase in the number of doctors, dentists, chemists, lawyers, etc.

By dividing the year-by-year overall income of certain of these categories by their membership, one obtains their per capita income and thus it is possible to assess the development of their standard of living.

a. doctors and dentists :

The development of the incomes of doctors and dentists is shown in Table 19. The statistics for the numbers of doctors and dentists were calculated on the basis of data provided by the Ministry for Public Health and Family Affairs.

With these statistics, it is possible to calculate the per capita income of the profession.

The result obtained is slightly lower than the actual figures, since an average of 5% of those holding medical qualifications do not practise. Accordingly, all the statistics for per capita income have to be increased by approximately 5%. This makes not material difference to the rates of growth, which can be compared from 1959 onwards with those for gross average salaries and from 1967 onwards with those for consulting fees charged by doctors as shown in the consumer price index.

From 1959 to 1971, the per capita incomes of doctors and dentists rose at an exponential rate of 7.8% (1), whereas gross wages rose by only 7.5% (2). Allowing for the fact that the incomes of doctors and dentists are higher, so that they pay direct tax at a higher rate, it may be concluded that the net incomes of doctors and dentists rose at virtually the same pace as those of manual workers.

⁽¹⁾ The coefficient of determination is much higher when one calculates the rate of exponential growth (0.928) than when one determines a coefficient of linear growth (0.887).

⁽²⁾ The coefficient of determination is 0.982 in the case of exponential growth and only 0.942 in the case of linear growth.

TABLE 19 :	Per	capita	income	of	doctors	and	dentists.
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Item	1953	1954	1955	1956	1957	1958	1959	1960	1961
Overall income in millions of francs Number of doctors Number of dentists on 1/1/19 Average for the year Total number of doctors and dentists Per capita income in thousands of francs	3.250 8.935	3.500 9,271 1.297 1.321 10.592 330,4	3.640 9.598 1.345 1.364 10.962 332,1	3.890 9.937 1.384 1.407 11.344 342,9	4.040 10.358 1.431 1.464 11.822 341,7	4.490 10.793 1.545 1.521 12.314 364,6	4.900 11.013 1.611 1.578 12.591 389,2	5.160 11. 38 0 1.693 1.652 13.032 395,9	5.270 11.703 1.757 1.725 13.428 392,5
Rate of growth (doctors' & (dentists' (incomes Gross wages Doctors' consult- ing fees			0,51	3,25	-0,03	6,70	6,75 1,65	1,72 3,70	0,09 3,32

Source : Ministry for Public Health and Family Affairs

Item	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Overall income in millions of francs Number of doctors Number of dentists on 1/1/19 Average for the year Total number of doctors and dentists Per capita income in thousands of francs	5.770 12.304 1.847 1.302 14.196 406,5	6.140 12.888 1.872 1.859 14.747 416,4	6.630 13.236 1.872 1.915 15.151 437,6	9.430 13.473 1.959 2.014 15.487 608,9	9.880 13.793 2.069 2.102 15.895 621,6	10.400 14.176 2.135 2.219 16.395 634,3	11.500 14.517 2.303 2.292 16.809 684,2	13.210 14.922 2.282 2.271 17.193 768,3	14.930 14.991 2.261 2.279 17.270 864,5	17.180 14.887 2.297 2.315 17.202 998,7
Rate of growth (dentists' & (doctors' (incomes Gross wages Doctors' consulting fees	3,57 8,02	2,44 8,06	5,09 11,08	39,15 8,31	2,09 9,91	2,04 5,66 1,87	7,87 5,22 2,78	12,25 9,03 4,65	12,52 12,82 9,20	15,52 12,53 4,91

TABLE 19 a : Per capita income of doctors and dentists.

Source : Ministry for Public Health and Family Affairs

TABLE 20 :	Per	capita	income	of	chemists.
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Item	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Overall income in millions of francs	1000	1040	1180	1170	1190	1610	1790	1960	2120	2420
Number of chemists on 1.1.19	4334	4552	4691	4804	4927	5116	5218	5266	5383	5622
Average for the year	4443	4621	4747	4865	5021	5167	5242	5324	5502	5668
Per capita income in thousands of francs	225 , 1	225,1	248,6	240,5	237 ,-	311,6	341,5	368,1	385 , 3	427 ,-
Rate of growth		0,0	10,44	-3,26	-1,46	31,48	9,60	7,79	4,67	10,82

	1963	1964	1965	1966	1967	1968	1969	1970	1971
Overall income in millions of francs	2420	2480	4040	3940	4400	4920	4730	5510	5440
Number of chemists on 1.1.19	5714	5844	5968	6078	6171	6249	6533	6735	7000
Average for the year	5779	5905	6023	6124	6210	6391	6634	7000	7200
Per capita income in thousands of francs	418,8	420 ,-	670 , 8	643,4	708,5	770 ,-	713 ,-	787 , 1	755 , 6
Rate of growth	-1,92	0,29	59 , 71	-4,08	10,12	8,68	-7,40	10,39	-4,-

Source : Ministry for Public Health and Family Affairs.

Since there is no moving scale system for the adjustment of doctors' and dentists' fees, the per capita incomes of these two categories adjusted to the general rise in incomes very irregularly. Following a long period during which they remained virtually static, doctors' and dentists' fees rose sharply in 1958-59, and then again in 1964-65 (1). During the years 1968-71, doctors' fees rose at a faster average rate than gross wages. In addition, this increase was much more marked than the increase in consulting charges. It may therefore be concluded that the substantial growth in the incomes of doctors and dentists during this period is probably to be accounted for, partly by the increase in charges and partly by an extension of the range of services offered by the medical profession.

However, it may be that improved tax controls on the incomes of doctors and dentists have obliged them to admit to higher earnings in their tax declarations, so that the statistical increase in their overall income is greater than the real increase.

We can assume that the tightening of tax controls has been one cause of the substantial rise in the gross income statistics.

Most doctors and dentists tried to increase their charges and their range of services in order to compensate for the effect of the heavier burden of taxation on their net incomes.

b. <u>chemists</u>:

The method used to calculate chemists' per capita income was the same as that used for doctors and dentists. The exponential rate of growth is approximately 7.9% per annum, virtually the same as that for doctors and dentists. The differences between actual and theoretical incomes calculated on the basis of the exponential formula ($Y = 289,7 e^{0.078689} t$) are very substantial. During the period between 1965 and 1968 inclusive, chemists' per capita income was regularly higher than the theoretical income calculated with the formula, whereas the opposite occurred during the years 1969-1971. This is attributable to two factors : firstly, the stricter controls on the prices of pharmaceutical products during the period 1969-1971 and, secondly, the less marked growth in the consumption of medicines during the later years.

⁽¹⁾ The rate of growth of 39.35% in 1965 is abnormally high. This is partly attributable to the introduction of a change in the method of calculating doctors' and dentists' incomes.
The number of chemists continued to grow at the rate of 4.2% per annum, so that a greater number of chemists had to share a more or less constant amount of gross profits on sales of pharmaceutical products.

The slower growth (there was even a slight fall in 1971) in chemists' per capita income does not, therefore, mean that there was any reduction in their profit margin. Their profit margin is, on average, 30%, but cooperatives and a number of chemists grant a 10% discount (1). It may be that the decline in chemists' per capita income in 1970-71 is partly due to the practice of granting discounts becoming more widespread in response to fiercer competition. Unfortunately, we have no data on the practice of granting discounts among chemists.

 [&]quot;Le financement de l'assurance-maladie" in "Leiding" - the bi-monthly journal of the league of Christian mutual societies, no. 5, September-October 1970, p. 232.

. 3. Rent for private accommodation

We have only very limited statistics on the development of rental charges. The Institut National de Statistique has published average gross rents on a year-by-year basis for the period 1949-1972 as part of its work on the calculation of national income. The method of determining these amounts was as follows :

Using data from the general censuses carried out at the end of 1947 and the end of 1961, the I.N.S. estimated an average gross rent for 1947 and 1961. For the other years, they multiplied the rent for a base year by two coefficients, one to take into account the rise in the cost of living and the other to allow for the effects on rental charges of improvement of the quality of accommodation (1).

It is clear that such a method of calculation can only give very approximate results, so that the amounts and indices given in Table 21 must be interpreted with a great deal of circumspection.

(1) For the years 1970 and 1971, it is possible to compare the average rent used by the I.N.S. for the purposes of its calculation of national income with the results obtained in various surveys. Two I.N.S. surveys, carried out in May 1970 and May 1971 on the basis of a sample of 50,000 rent-paying households, pointed to lower average rents than those used by the I.N.S. for the calculation of national income. According to the May 1970 survey, the average gross rent in 1970 was 18,672 francs as opposed to 21,600 francs, or 11.3% less. According to the May 1971 survey, the average gross rent in 1971 was 20,171 francs, or 9.7% less than the amount shown in the table.

However, these figures do not include the rents paid by self-employed persons and are therefore too low. Moreover, no allowance could be made in the survey for the fact that certain tenants enjoy preferential terms because their landlords are also their employers and (or) because they render them some service (J. DEMEULENAERE : Les loyers d'habitations en 1970 en 1971, Bulletin de statistique, Dutch version, September 1972, pp. 491 and 496).

The Institut National du Logement also carried out a survey in 1970-71 which was based on a sample of 15,737 dwellings. According to this survey, the gross average rent in 1970 was 2,028 francs per month, or 24,336 francs per annum, which is substantially above the amount estimated by the I.N.S. However, the findings of this survey related to rents at the end of 1970, which was seven months later than the date of the I.N.S. survey. In addition, the average amount of 24,336 francs included rents paid by self-employed persons for buildings not used exclusively as accommodation, but also for business purposes (Institut National du Logement : "Rapport sur la deuxième enquête concernant la qualité du logement en Belgique", Dutch version, Brussels, 14 February 1973, pp. 32-33).

Year	Gross annual rent (1)	Building costs index 1953 = 100 S.N.L. (2) I.N.S. (3)		Consumer price index
1953	11.127	100	100	100
1954	12.085	108,6	97 , 3	100,3
1955	12.533	112,6	99 , 8	100,8
1956	12.762	114,7	104,0	103,7
1957	13.136	118,1	109,3	107,0
1958	13.376	120,2	114,5	108,3
1959	13.620	122,4	108,0	109,6
1960	13.889	124,8	113,1	110,0
1961	14.196	127,6	111,9	111,1
1962	14.374	129,2	119,1	112,6
1963	14.738	132 , 5	132,9	115,0
1964	15.204	136,6	145,9	119,8
'1965	16.062	144,4	157 , 4	124,7
1966	17.090	153,6	167 , 2	129,9
1967	17.924	161 , 1	163,9	133,7
1968	18.792	168,9	172,9	137,3
1969	19.863	178,5	180,0	142,5
1970	21.060	189,3	197,2	148,0
1971	22.333	200,7	210 ,4	154,4
1972	23.69 8	213,0	221,0	162,8

<u>TABLE 21</u>: <u>Development</u> of gross average rents according to the national income statistics of the I.N.S. compared with the development of buildings costs and the cost of living.

Sources: (1) I.N.S.

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(2) Index of the buildings costs of companies approved by the S.N.L., recalculated on the basis 1953 = 100.

(3) Annuaire statistique de la Belgique, Year 1971, op.cit., pp. 523 and 524 (the indices for the years 1967-70 have been recalculated on the basis 1953 = 100) and Bulletin d'information et de Documentation de la B.N.B., January 1972, p. 31 and May 1973, pp. 33-34 (the 1971 and 1972 indices have also been recalculated on the basis 1953 = 100). It will be noted that the indices for average gross rent did not follow those for construction costs. Between 1953 and 1963, building costs rose less rapidly than rents, but thereafter, according to the statistics on gross rents at our disposal, the opposite occurred from 1963 onwards. This can be explained by a combination of three factors, namely :

1) legislation against rent increases:

Before the Second World War, there was already legislation in Belgium limiting the rent increases which landlords could impose on their tenants. This legislation was extended during the war and then renewed under the Law of 12 March 1945, supplemented by the Laws of 5 December 1946 and revised under those of 13 July 1947 and 31 March 1948 (1). According to these laws, any increase in rent by 100% or more above that obtaining on 1 August 1939 had to be sanctioned by the commercial courts. However, this measure was not applicable to dwellings with a rental value above a certain amount, those built or renovated after 1 January 1945, or whose habitable area had been extended by at least 30% after that date (2).

These legislative measures split the rented housing market in two. The rents for pre-1945 dwellings were kept at a level which was no longer in keeping with building costs, whereas the rents for new housing were very much higher. Average rents were still abnormally low in 1953. As new housing building developed and the restrictions on increases in the rents of old dwellings were lifted, average rent rose and, since the initial level was very low, it was normal for the index for rents to rise more rapidly than building costs.

In 1957, all the restrictions were removed, but the sharp upward movement probably continued for a number of years. Many landlords were obliged to wait for leases to run out before they were free to adjust rents to the open market level, so that there were again many substantial rent increases during the period 1958-63.

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Société Nationale du Logement, 1966 Report, Dutch version, Brussels 1967, p. 71.

⁽²⁾ Ibidem, p. 72.

Towards 1961-62, there were various signs that the property market was becoming saturated, this being the result of the sharp increase in housing building between 1953 and 1961 (1). The superabundance of houses had an unfavourable influence on the prices paid at public auctions (2) and the building industry experienced a serious recession in 1962 (3). It is probable that the rented property market was also influenced and that the upward trend in rents was curbed. The I.N.S. statistics on the development of rents are based on estimates which are too approximate to provide us with any information on this subject.

The sharp rise in building costs during the 1963-64 period of prosperity ended the pauses in the upward movement of rents. Rising family incomes created a strong demand for better and more comfortable housing at a time when increasing building costs were restricting supply (4). Fearing that rents would rise too rapidly, the government reintroduced, in the Law of 29 January, 1964, rent controls for modest housing (5).

This law is only applicable to a very limited category of dwellings and has had little influence on the rented housing market.

Other reasons must be found to account for the fact that the rise in rents during the period 1964-72 did not follow the trend in building costs. We shall be discussing these reasons in Sections 2 and 3.

- Between 1953 and 1961, investment in housing property increased comparatively regularly from year to year. It amounted to 15,600 million francs in 1953 and roughly 30,000 million francs in 1961, an increase of 92.3%. Even allowing for the fact that building costs rose by approximately 12% during the same period, the increase in real terms was some 72%, so that it may be said that there was a real boom in housing construction (for this calculation, reference was made to "L'economie belge en 1959", Ministry for Economic Affairs, Dutch edition, Brussels 1960, p.219; Ibidem in 1961, Brussels 1962, p.223).
- (2) The average price for a manual or clerical worker's house sold at public auction was 179,822 francs in 1960, 182,660 francs in 1961 and only 176,081 francs in 1962. There was a more marked fall in the case of middle class houses (517,928 francs in 1960, 502,968 francs in 1961 and only 475,654 francs in 1962). (For this calculation, reference was made to the property statistics in the Annuaire statistique de la Belgique, Volume 83, Year 1962, Brussels 1963, p. 424.)
- (3) "L'economie belge en 1962", Ministry for Economic Affairs and Energy, Brussels 1963, pp. XXXV and XXXVI.
- (4) In 1963, despite the favourable economic climate, the number of housing building permits was below the level of 1960-61 (Annuaire statistique de la Belgique, Year 1967, Volume 88, Brussles, p.613).
- (5) Société Nationale du Logement op.cit., p. 72.

The activity of the companies approved by the Société Nationale du Logement and the other organizations having as their object the encouragement of low-cost accommodation building.

Throughout the period between 1953 and 1972, the housing property built by the companies approved by the Société Nationale du Logement was placed at the disposal of low-income families at rents below those asked by private landlords. At the same time, the State, pursuant to the De Taye Law, was providing grants to persons with low incomes and large families to assist them to have houses built. Quasi-governmental financial institutions (Caisse Générale d'Epargne et de Retraite, Société Nationale Terrienne) were also granting loans to candidates for home ownership at lower rates than those available from private banks and mortgage companies. These measures reduced the demand for rented housing in the private sector and also held back the rise in rents.

Initially, the influence of the companies approved by the Société Nationale du Logement was relatively limited.

On 31 December 1947, the approved companies accounted for 66,016 dwellings, either completed or under construction, 21,649 of which had been sold, so that only 44,367 were rented by these companies (1).

On the same date, there were 2,816,000 occupied dwellings, of which 61.09%, or 1,720,294 units, were rented (2). Thus, the companies approved by the Société Nationale du Logement accounted for 2.6% of the overall supply of rented accommodation. By the end of 1961, the number of dwellings had risen to 3,016,000 units, of which only 50.25%, or 1,515,540 dwellings, were rented (3).

Between 1947 and 1961, the approved companies built 81,901 dwellings, selling 16,319 of them, so that the number of dwellings they were offering for rent rose from 44,367 to 109,949 (4).

Annuaire statistique de la Belgique et du Congo belge, Year 1957, Volume 78, Brussels, 1958, p. 371.

⁽²⁾ Société Nationale du Logement, 1966 Report, op.cit., pp. 73 and 74.

⁽³⁾ Ibidem.

 ⁽⁴⁾ Annuaire statistique de la Belgique, Year 1962, Volume 83, Brussels 1963, p. 415.

Thus, the proportion of all dwellings available for rent accounted for by the approved companies rose from 2.6% to 7.3%; it continued to rise during the sixties. By the end of 1970, there were some 3,220,000 dwellings (1). According to a survey carried out by the I.N.S., the proportion of owneroccupiers was 49.75% in 1961 and 65.6% in 1970 (2), so that there were only some 1,108,000 dwellings available for rent. Of this number, 156,187 dwellings belonged to companies approved by the Société Nationale du Logement (3); this was 14.1%, almost double the percentage in 1961.

The rents charged by approved companies are determined by very strict regulations under which capital supplied by the Société Nationale may not be used for profit-making investments. Because of the very low rates of interest (1.5% up to 1 January 1971 and 2.5 since) (4) at which the Société Nationale lends to the approved companies, they are able to charge very much lower rates than those in the private sector.

- Bulletin statistique, September 1972, p. 493.
 According to a survey carred out by the Institut National du Logement, the percentage is only 55%. This discrepancy is largely attributable to two factors, namely :
 - a) the I.N.S. included among home owners persons who do not have to pay rent, either because they are related to the owner or because they work for him (as caretakers, for instance);
 - b) the I.N.S. survey included more dwellings in the country and in small towns than did the Institut National du Logement survey. Since the number of owner occupiers is higher in the country and in small towns than in the large towns, the I.N.S. obtained a higher percentage of owner occupiers than the Institut National du Logement. We have preferred to take the I.N.S. figures as our basis, because the survey was carried out by professional researchers, whereas students were used in the Institut National du Logement survey. Moreover, for the purposes of determining the number of rented dwellings, we can exclude those made available free of charge to relations or servants (information provided by the Institut National du Logement).
- (3) Annuaire statistique de la Belgique, Volume 91, Year 1971, p.455.
- (4) Institut National du Logement : "Avis du Conseil supérior de l'Institut National du Logement concernant les loyers d'habitations appartenant à la Société Nationale du Logement et à des sociétés agréées, Dutch version, Brussels, 20 June 1973, p.2.

⁽¹⁾ The results of the general census of 31 December 1970 are as yet only partly known. The number of dwellings has not yet been established, but the number of households, (3,232,710) has already been calculated. Of these households, one must deduct about 10,000, since although Belgian, they have no place of residence in Belgium (information supplied by the $I \cdot N \cdot S \cdot$).

From Table 22, it is possible to compare the average gross rents estimated by the I.N.S. and the normal rents charged by the approved companies. It should be noted that these normal rents include those paid by households whose family circumstances are such that they do not qualify for reductions. However, there are very few such instances. In 1953, the average reduced rent for dwellings built before 1945 was 2.8% lower than the normal rent. In the case of dwellings built after 1945, the difference was 11.5%. By 1965, the percentages had

<u>Table 22</u>: Development of average gross rents according to the national income statistics of the I.N.S. and of the normal rents charged by the companies approved by the Société Nationale du Logement.

Year	Average gross annual rent	Approved companies' normal rents for dwellings		Ir 195	Indices 1953 = 100		
	(1)	(2) Built before 1945	(3) Built after 1945	(2)/(1)	(3)/(1)	(1)	(2) (3)
1953	11.127	5.402	9.042	48 , 6	81,3	100,0	100 100
1954	12.085	5•543	9.060	45,9	75,0	108,6	103 100
1955	12.533	6.159	9•343	49,1	74,5	112,6	114 103
1956	12.762	6.360	9.686	49,8	75,9	114,7	118 107
1957	13.136	6.769	10.033	51 , 5	76,4	118,1	125 111
1958	13.376	6.753	10•543	50 , 5	78,8	120,2	125 117
1959	13.620	6.895	11.355	50,6	83,4	122,4	128 126
1960	13.889	7.125	11.050	51,3	79,6	124,8	132 122
1961	14.196	7.251	11.718	51,1	82,5	127,6	134 130
1962	14•374	7•474	12.481	52,0	86,8	129,2	138 138
1963	14•738	7.603	12.668	51,6	86,0	132,5	141 140
1964	15.204	7•926	13.061	52,1	85,9	136,6	147 144
1965	16.062	8.066	13.447	50,2	83,7	144,4	149 149
1966	17.090	8.117	14 . 196 (1)	47,5	83,1	153 , 6	150 157
1967	17.924	8.928	14.738(1)	49,8	82,2	161,1	165 163
1968	18•792	9•298	15•552 (1)	49,5	82,8	168,9	172 174
1969	19.863	9•547	16.276(1)	48,1	81,9	178,5	177 180
1970	21.060	9.806	17.089(1)	46,6	81,1	189,3	182 189
1971	22.333	10.258	18 . 355 (1)	45,9	82,2	200,7	190 203
1972	23.698					213,0	

Sources : Société Nationale du Logement, 1966 Report, op.cit., pp. 92-93 and information provided by the research department of the Société Nationale du Logement.

(1) These amounts were calculated on the basis of indices and are therefore only approximate. become 1.3% and 7.4% respectively (1).

The table shows that, on average, the normal rents charged by the approved companies for pre-1945 dwellings are 50% lower than the average gross rent whereas, in the case of post-1945 dwellings, the difference is only between 15 and 25%. This is accounted for by the rules according to which rents have to be calculated (2). Since the vast majority of dwellings rented by the approved companies were built after the Second World War, the influence exerted by the low rents of the approved companies on the rented accommodation market is not as strong as may be imagined from the data in the table. Furthermore, account must be taken of the fact that the dwellings of the

approved companies can only be rented to persons with low incomes (3). Households living in these dwellings whose incomes rise above the specified level have to pay a surcharge of between 10 and 60% of the normal rent, depending on the amount of income. On 31 December 1971, 15.18% of the social housing tenants were paying surcharges, the average being 29.85% of the normal rent (4).

- (1) For this calculation, reference was made to the statistical data contained in : "Société nationale du logement", 1966 Report, op.cit., pp. 92-93.
- (2) To prevent any unfair advantage to the approved companies whose buildings are mostly pre-1945, the regulations provide that the rent is made up of two component parts. The first is calculated on the basis of the building cost price, and the second on the cost price revalued at current prices. In the case of a unit which cost 40,000 francs before the war, the rent is made up of a fixed component, which is 3% of the cost, and a variable component, which is 1.9% of the cost multiplied by 10. Thus, in the case of a unit which cost 40,000 francs in 1939, the rent is 3% of 40,000 F = 1,200 F

1.9% of 40,000 F x 10 = $\frac{7.600}{8,800}$ F per annum.

In the case of a virtually identical unit built in 1963 for 400,000 francs, the fixed component is 2.5% of the cost and the variable component is 1.9% of the cost multiplied by 2. Thus, the rent for this unit will be 2.5% of 400,000 F = 10,000 F

1.9% of 400,000 F x 2 = 15,200 F

 $\overline{25,200}$ F, or almost 3 times the rent for the unit built before 1945 (Institut National du Logement, op.cit., pp. 8-10).

- (3) According to the regulations introduced on 1 May 1973, applicants for social housing tenancies must not be earning more than 162,300 francs if they have no children, 171,900 francs if they have one child and 181,500 francs if they have two children (Institut National du Logement, op.cit., p. 3).
- (4) Société Nationale du Logement, 1972 Report, Dutch version, Brussels 1973, p. 53.

In other words, these people have little to gain by remaining in social housing, which generally offers fewer amenities than private houses and flats. Accordingly, the only rents which are subject to any strong influence from the approved companies are those for low-cost housing. As regards larger and (or) better quality housing, the State and para-governmental organizations have influenced the market by bringing down the number of young households seeking rented accommodation by encouraging them to build or buy.

The success of this policy is not entirely attributable to the benefits offered in the form of subsidies and preferential interest rates, but also to the effect of inflation on the level of activity in the building sector. We shall be discussing this latter aspect in Section 3.

3) The effect of inflation on the level of activity in the housing construction sector :

The relationship between levels of activity in the housing building sector and rates of inflation are shown in the table below.

<u>Table 23</u>: Levels of activity in the housing building sector and rates of inflation (based on permits issued).

Year	Number of buildings (1)	Volume (100m3)	Index for number of buildings 1953=100 (3)	Index for volume (100m3) 1953=100 (4)	Coefficient of increase (fall) in building costs (5)	Coefficient of increase in consumer prices (6)
	(-)	(-/	(3)			(-/
1953	35•536	227.635	100	100	• • • •	- 0,03
1954	38.600	252.202	108,6	110,8	- 2,70	+ 0,30
1955	36.615	235.640	103,0	103,5	+ 2,56	+ 0,50
1956	33•742	227.932	94,9	100,1	+ 4,21	+ 2,88
1957	34•904	240.626	98,2	105,7	+ 5,09	+ 3,18
1958	32.329	217.317	91,0	95,5	+ 4,76	+ 1,21
1959	38•989	266.830	109,7	117,2	- 4,51	+ 1,20
1960	41.102	288.814	115,7	125,9	+ 4,72	+ 0,36
1961	44•552	316.028	125,4	138,8	- 1,06	+ 1,00
1962	38 . 5 3 0	278.183	108,4	122,2	+ 6,43	+ 1,35
1963	38.686	280.204	108,9	123,1	+11,59	+ 2,13
1964	44•235	345•750	124,5	151,9	+ 9,78	+ 4,17
1965	39.254	310.006	110,5	136,2	+ 7,88	+ 4,09
1966	41.725	362.820	117,4	159,4	+ 6,35	+ 4,17
1967	37•335	332.812	105,1	146,2	- 2,09	+ 2,92
1968	37.677	311.411	106,0	136,8	+ 5,49	+ 2,69
1969	45.073	368.126	126,8	161,7	+ 4,11	+ 3,78
1970	34.728		97,7		+ 9,55	+ 3,86
1971	30.072		84,6		+ 6,69	+ 4,32
1972					+ 5,04	+ 5,44

Source: (1) and (2): Annuaire statistique de la Belgique, Year 1967, op.cit., p. 613, Year 1971, op.cit., p. 108 and Bulletin statistique, May 1973,p.425. (5) and (6): Indices calculated on the basis of those in Table 21. (a) The statistics for the total volume of buildings for which permits were issued have not been published since 1970. The I.N.S. published statistics of the total volume of buildings under construction which are not comparable to those under our heading. During the period 1953-1962 inclusive, the consumer price index seemed to have no influence on the number of building permits for this type of accommodation, or on the total surface area. The building costs index, on the other hand, generally falls each time the number of permits rises by more than 8% (for instance, in 1954, 1959 and 1961). When building costs rise substantially, the number of building permits falls (for instance, in 1956, 1958 and 1962). This shows that, up to 1962, the conventional supply and demand mechanism operated. When building costs rose, demand fell and contractors were obliged to moderate their demands. When building costs fell, demand increased and prices rose again.

From 1963, building costs rose virtually continually. Only the 1967 recession caused them to fall back slightly, but this did not give rise to any increase in activity in the housing building sector. Activity was very high throughout the period between 1961 and 1966. This is not shown very clearly by the indices for the numbers of buildings authorised for construction, because there was a major development in the area of the building of large houses and flats providing accommodation for several households. It can be seen more clearly from the volume indices. In 1964, the total volume to be built for which permits had been issued was almost 60% higher than in 1953, although the number of buildings was only 17.4% higher than in the base year.

After the 1967-68 recession, activity in the housing building sector picked up again and, by 1969, the volume to be built, and for which permits had been issued, was 60% higher than in 1953, despite the sharp rise in building costs during 1968 and 1969.

It may therefore be concluded that, from 1963, activity in the housing building sector was largely determined by the general economic trend, and that the higher rate of inflation evidenced by the coefficients for the rise in consumer prices (from 1963 the annual rise was invariably above 2%) stimulated rather than curbed activity in this sector.

Many households probably realised that it was useless to hoard money in order to have a house built if the interest paid on their savings did not compensate for the loss of their capital's purchasing power caused by rising prices. They therefore decided to build or buy as soon as possible, borrowing the necessary capital from para-governmental institutions, mortgage banks, notaries, parents or friends.

As the amount they can afford to borrow is determined by their incomes and the rate of interest, the level of housing building was determined to a large extent by these two factors.

The rapid rise in the level of incomes during the periods of prosperity (1964-66 and 1969-70) (1) encouraged a large number of households to decide to accept heavy monthly repayment commitments in order to purchase a home, because they expected their incomes to rise so that capital and interest repayments would impinge to a steadily declining degree on their purchasing power. The rise in interest rates during the second half of 1969 and the whole of 1970 and the spectacular increase in building costs put an end to the expansion of activity in the housing building sector. Many households concluded that the sacrifices needed to purchase a home were becoming excessive. As for private individuals and undertakings wishing to invest in property as a hedge against inflation, they found the building of housing property less attractive because rents did not fully keep up with the rise in building costs. Accordingly, they preferred to invest their money in factories, offices, garages, shops and other buildings whose main purpose was not to provide housing. These investments withstood the increases in interest rates and building costs better than investments in housing property. Whereas the volume of building for housing was on average 41% higher than for other types of building in 1969 (2), the difference had fallen to 10.2%by 1970 and, by 1971, the volume of building other than primarily for housing was 21.2% higher than that for housing property (5). This reversal of the situation was brought about partly by the sharp fall in the building of housing property, but also by a spectacular increase in building for other purposes (4). It should also be remembered that the total volume of housing building includes the innumerable houses and

(3) For this calculation, reference was made to the statistics of the Bulletin statistique, May 1973, p. 425.

Between 1963 and 1965, income in the form of wages, salaries and emoluments rose by 23.8% in monetary terms and by 14.2% in real terms. From 1968 to 1970, the rise in current prices was 25.8% and, in constant prices, 16.7% (for this calculation, reference was made to the Annuaire statistique de la Belgique, Year 1967, op.cit., p. 650 and ibidem, 1971, op.cit., p. 639.

Buildings started not later than 31 December 1969 (Annuaire statistique de la Belgique, Year 1971, op.cit., p. 108).

⁽⁴⁾ From 1968 to 1971, the total volume of building for purposes other than housing under construction on 31 December of the year in question, increased by 62.4%, an annual average of 12.9% (Ibidem).

flats built by private individuals and companies, not to be let throughout the year, but, to be used as second homes for their owners or for letting to holidaymakers.

This strong demand from the well-off and property companies prevented the fall in demand for housing from households from bringing down building costs, and they continued to rise, although not to the same extent as in 1970.

The fall in interest rates and the improved economic situation in 1972 led to a recovery of housing building, but the volume remained slightly lower than that of building other than primarily for housing (1).

We may conclude that, although inflation brings about a rise in investment in the property sector, this does not necessarily lead to an increase in the supply of rented accommodation. Where those with capital find that the return from rents is insufficient, the modern society offers them opportunities to invest their money in more profitable property. It follows that inflation only brings down the real level of rents insofar as it encourages households who wish to become owner-occupiers to build their own homes. Their opportunities to build or buy are limited by building costs, the amount of their earnings and the various charges involved in long-term loans. Consequently, inflation only brings down the real level of rents if it is not accompanied by an excessive rise in building costs or a substantial rise in interest rates.

As to the activities of the companies approved by the Société Nationale du Logement, they played a limited role only in determining rents for high or medium quality housing, but quite an important role in the determination of rents for low-cost housing.

The fact that the average gross rent index probably remained lower than the building costs index is attributable partly to the activities of the approved companies, partly to the policy of subsiding low-cost housing building pursued by the State and the provinces and, finally, to the enormous

From November 1971 to the end of October 1972, the volume of building other than primarily for housing purposes was still 1.5% higher than that of housing property (Bulletin statistique, May 1973, p. 425).

stock of old houses with few amenities which are available for letting at rents below the normal rents (1).

4. Income in the form of interest

A distinction must be made between the lending and borrowing rates of the banks and other financial institutions and the rates paid on the securities issued by the State, urban and provincial authorities and para-governmental organizations. From the point of view of the influence of trends in interest rates on the development of inflation, lending rates are the more interesting, since they give an indication of the financial element of contractors' cost prices.

Trends in borrowing rates and interest paid on securities are only of interest insofar as they give an idea of the effects of inflation on the available resources of those living on fixed incomes.

These various rates generally follow the same trend, but the range of variation of lending rates is greater than that of borrowing rates and the rates of interest paid on securities. Moreover, since long-term investments hold very little attraction when the rate is below 5% - the risk of the rate rising afterwards causing the stock exchange quotation of the security to fall becomes too great if the nominal interest is minimal - this rate can be considered to be an absolute minimum for any loan repayable after five years or more.

We have taken the lending rate applied by the Société Nationale de Crédit à l'Industrie for loans maturing at five years or more to be representative. This rate gives a good indication of the cost to Belgian industry of interest payable on industrial loans.

⁽¹⁾ In Wallonia, where there are more old houses than in Flanders, the average gross rent was lower than in Flanders and Brabant, according to the survey carried out by the Institut National du Logement. At the end of 1970, it was only 1,806 francs in Wallonia, as against 1,921 francs in the Flemish provinces and 2,505 in Brabant. In the Flemish provinces, Eastern and Western Flanders had the lowest average rents and these were the two provinces with the highest proportion of housing built before 1947. (Institut National du Logement: "Rapport concernant la deuxième enquête" op. cit., pp. 7 and 33.)

Year and quarter	Average quarterly rate	Average annual rate	Year and quarter	Average quarterly rate	Average annual rate
1953 1 2	6,38 6,19		196 4 1 2	7,01 7,30	
3 4 1954 1	6,10 6,10 5,91	6,19	3 4 1965 1 2	7,30 7,30 7,30 7,30	7,23
3 4 1955 1	5,82 5,82 5,82 5,82	5,84	3 4 1966 1	7,30 7,30 7,30 7,30	7,30
2 3 4	5,82 5,82 5,82	5,82	2 3 4	7,45 7,93 7,93	7,65
2 2 3 4	5,82 5,82 5,82 5,82	5,82	2 3 4	7,93 7,93 7,89	7,92
1957 1 2 3	5,87 6,10 6,29	(1968 1 2 3	7,77 7,53 7,53	
4 1958 1 2 3	6,95 7,24 6,92 6,29	0,30	4 1969 1 2 3	7,53 7,59 8,20 8,76	7,59
4 1959 1 2	6,10 6,10 6,10	6,64	4 1970 1 2	9,74 9,89 9,89	8,57
3 4 1960 1 2	6,10 6,10 6,29 6,38	6,10	3 4 1971 1	9,89 9,89 9,62	9,89
3 4 1961 1	6,38 6,61 6,95	6,42	3 4 1972 1	9,41 9,41 9,08 8,64	9,38
2 3 4 1962 1	6,95 6,95 6,95	6 , 95	2 3 4	7,97 7,90 7,64	8 ,04
1902 1 2 3 4	6,33 6,27 5,82	6,30	1953–1957 1958–1962	5,99 6,48	
1963 1 2 3	5,82 5,90 6,16		1963–1967 1968–1972	7,2 4 8,69	
4	6 ,4 7	6,09			

<u>Table 24</u>: Lending rates for investment loans maturing at five years or more applied by the Société Nationale de Crédit à l'Industrie. 1953-72.

Source : Société Nationale de Crédit à l'Industrie

The S.N.C.I. lending rate for loans repayable at more than five years was influenced by the rate of inflation. Allowing for a time lag of about one year, the fairly marked rise in consumer prices from 1956 to the end of 1957 (1) was followed by an increased in the rate of interest. The same phenomenon occurred after the rise in prices between the end of 1958 and the end of 1959 (2), which was reflected in the rise in the interest rate in 1960 and 1961, that is towards the end of the period of prosperity and the beginning of the recession (3). After a lapse of one year, the recession brought about a sharper fall in the rate of interest than in consumer prices, which only weakened slightly during the third quarter of 1962 (4).

The 1963 recovery, followed by a period of prosperity during 1964-65, led to a sharp rise in the interest rate which remained at a high level until the next period of recession was fully under way, that is until the middle of 1967. Prices rose sharply throughout the period of prosperity, but their upward movement was held in check by the freezing of prices from 6 May 1966 to 2 September 1966 (5). In 1967, the consumer price index continued to rise despite the unfavourable economic situation and, from 1968, it accelerated (6), while the interest rate fell slightly. In 1969, the rate began to rise again and continued until the spring of 1971, when the recession caused it to fall.

Consumer prices were probably swept along by the forces of structural inflation, which seem to have gained the ascendancy over those of the trade cycle from 1960 onwards, since prices continued to rise during the recessions. As regards its effect on the interest rate, structural inflation restrained the downward movement in the rate during the periods of recession. It was unable to prevent a fairly substantial fall in 1972, because exceptional conditions prevailed at that time.

(2) Ibidem, January 1959, p. 58; January 1960, p. 46; January 1961, p. 74.

- (4) Banque nationale de Belgique : Bulletin d'information et de documentation, January 1963, p. 56 and January 1964, p. 52.
- (5) M. VAN MEERHAEGHE, op. cit., p. 258.
- (6) Annuaire statistique de la Belgique, Brussels 1971, Volume 91, p. 524.

Banque nationale de Belgique : Bulletin d'information et de documentation, January 1957, p.45 and July 1958, p. 62.

⁽³⁾ The industrial production index rose less strongly after the summer of 1960 ("Politique de conjoncture" - Rapports : L'état dans l'économie mixte", Association pour l'économie - Onzième congrès flamand de science économique - Louvain 4-5 May 1973, p. 494).

The influx of foreign capital had created a surfeit of money at a time when a rather bleak economic outlook was causing undertakings to hold down the level of their investment. This naturally led financial institutions like the S.N.C.I. to reduce their rates of interest to attract business. The rate of interest nevertheless remained above 7.5%, whereas it had fallen to 5.8% during the 1953-54 recession. Thus the influence of structural inflation on the interest rate applied by the S.N.C.I. is undeniable. It is difficult to formulate any rule as to the relationship in time between movements in the rate applied by the S.N.C.I. and the pattern of the trade cycle. The S.N.C.I. did not always increase the lending rate when it had the opportunity to do so, because it did not wish to hold back economic development. Accordingly, it did not increase its rate after the serious recession in 1953-54 until the beginning of 1957, or practically at the peak of the trade cycle (1). However, the influence of the general rise in prices and the strong demand for capital from undertakings frequently caused it to be slow to reduce its rate at times when downturns in the trade cycle called for such a measure. In 1966, for example, the S.N.C.I. did not react to the decline in economic activity which was becoming apparent (2), but, on the contrary, raised its rate further as part of the government's counter-inflation policy. It was not until 1968 when the recovery was already under way (3) that the S.N.C.I. reduced its rate for loans repayable after five years or more.

It will be appreciated that, under these conditions, there cannot be a strong correlation between movements in the interest rate in question and the other components of trade cycle trends. Nevertheless, if one calculates the annual averages of the interest rate and that of consumer prices, one obtains a coefficient of correlation of 0.8997 on condition that a one year remove in time between the consumer price index and the interest rate is applied. The coefficient of correlation is only very slightly lower if the remove in time is extended from one to two years (0.8959 as opposed to 0.8997) (4).

(4) Virtually identical results are obtained if, instead of using the linear regression functions $i_t = a + b P_{t-1}$ and $i_t = a + b P_{t-2}$ respectively, one uses the logarithmic functions $\ln i_t = \ln a + b \ln P_{t-1}$ and $\ln i_t = \ln_a + b \ln P_{t-2}$

In the latter case the coefficient of correlation is 0.9160 for the one year remove in time and 0.8997 for the two year remove in time.

^{(1) &}quot;Politique de conjoncture", op.cit., p. 493.

⁽²⁾ Ibidem.

⁽³⁾ Ibidem.

This proves that the rate of inflation definitely influences the level of interest, although the effect is not felt until after a remove in time of more than a year. The S.N.C.I. can put off raising its lending rate for a time, but it cannot continue to pursue such a policy for very long, since it also has to borrow money at market rates.

Among the financial institutions' borrowing rates, those for deposits payable on demand and at fifteen days are so low and vary so little that it may be stated immediately that they have very little influence on inflation, and vice versa. As for the rates of interest paid by the banks for deposits payable at one month or more, they only became significant during 1958 and 1959. Before 1958, the majority of deposits were payable on demand or at fifteen days. On 31 December 1953, deposits payable at more than one month accounted for only 9.6% of all bank deposits (1). By 31 December 1959, the proportion had risen to 32.4% (2) and by 31 December 1971, they accounted for 52.5% of all deposits held by the banks (3).

The raising of the interest rates for time deposits was the principal cause of this exceptional rise. Prior to the signing of the Association Belge des Banques protocol of 7 November 1957, the return offered by the banks for time deposits was scarcely better than that for deposits payable on demand or at fifteen days. There was therefore little incentive to depositors to forego the right to withdraw their deposits at the most convenient time for themselves. Under the terms of the protocol of 7 November 1957, the banks agreed to raise the rates for all their time deposits and undertook to adjust the various rates to fluctuations in the discount rate of the Banque Nationale de Belgique. On 12 November 1957, the rate for deposits payable at one month was raised from 1.1% to 2.3%, and that for deposits payable at three months from 1.4% to 2.5% (4). The recession between February 1957 and February 1959 led to a series of reductions of the Banque Nationale discount rate and this automatically brought about a series of falls in the interest rates paid by the banks on the various categories of time deposits. Thus the banks compensated for the loss of earnings caused by the fall in all lending

For this calculation, reference was made to the "Annuaire statistique de la Belgique", Year 1956, Vol. 77, p. 357.

⁽²⁾ For this calculation, reference was made to the "Annuaire statistique de la Belgique", Year 1963, Vol. 84, p. 419.

⁽³⁾ Bulletin statistique, September 1972, p. 584.

 ⁽⁴⁾ Revue de documentation et d'information de la Banque Nationale de Belgique, April 1958, p. 303, April 1959, p. 308 and April 1960, p. 191.

rates (1) on their time deposits which, by the end of 1959, were only earning 1.2% in the case of deposits payable at one month and 1.5% in that of those payable at three months (2). The raising of the discount rate from 3.25% to 4% on 24 December 1959 led to a rise in the rates paid by the private banks as from 1 January 1960. The less favourable economic climate in the second half of 1961 brought about a reduction in the Banque Nationale discount rate (3) which was automatically reflected in the rates paid for time deposits by the private banks. The private banks wished to have more freedom and entered into an agreement with the Banque Nationale de Belgique to the effect that, as from 1 January 1962, the automatic adjustment of time deposit interest rates to the B.N.B. discount rate would be abolished and that any change in such rates would be the subject of an agreement being taken of the money market situation, the balance of payments and the state of the economy (4).

With five or six exceptions, all the banks subscribed to an inter-bank agreement governing borrowing interest rates. The large banks apply the general scale of rates, which is decided upon in agreement with the Banque Nationale, the medium-size banks can apply rates which are 0.25% higher than those in the general scale and the smaller banks can exceed the larger institutions' rates by 0.65%. In the event, the vast majority of banks applied the general scale and the regional banks were alone in granting more generous rates of interest to their customers (6).

During the period from 1962 to 1972, rates were adjusted regularly to the economic position; they were reduced during the recessions in 1962 and 1967 and raised during the periods of prosperity in 1964-66 and 1969-70. In 1969, the rates paid by the banks on time deposits were raised to 5% for deposits payable at one month and 6% for deposits payable at three months, the purpose of this being to curb the speculation against the Belgian franc which had developed during the summer and autumn of that year. In the spring of 1972, however, the rate for deposits payable at three months was reduced

⁽¹⁾ See Table 25.

⁽²⁾ Revue de documentation et d'information de la Banque Nationale de Belgique, April 1960, p. 191.

⁽³⁾ The Banque Nationale discount rate was reduced to 5% on 24 August 1961, and to 4.5% on 28 December 1961 (Annuaire statistique de la Belgique, op.cit., Year 1963, p. 399).

⁽⁴⁾ Revue de documentation et d'information de la Banque Nationale de Belgique, August-September 1966, p. 291.

 ⁽⁵⁾ Banque Nationale de Belgique, Revue de la Presse, Belgium, 8 June 1973, p.1 (Review of an article by G. DEPAS in Le Soir of 8 June 1973).

⁽⁶⁾ Ibidem and Revue de documentation et d'information de la Banque Nationale de Belgique, September 1967, p. 358(1).

to 2.75%, not only because of the recession which began towards the end of 1970 and lasted until the spring of 1972, but also as a result of the abundance of liquidity brought about by the influx of foreign capital.

Consequently, we can conclude that if interest rates followed the **trend** in the economic situation at a remove of a few months during the period 1962 to 1972, movements in the balance of payments position also played a relatively important role in the fixing of interest rates on time deposits.

<u>Table 25</u>: Rates of interest on various types of savings available from the financial institutions

Year	Bank deposits		C.G.E.R. savings		
	one month	three months	book	(1)	
1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972	1,100 $1,100$ $1,100$ $1,264$ (2) $1,771$ (3) $1,203$ (4) $2,292$ (5) $2,776$ (6) $1,887$ (7) $1,767$ (8) $2,593$ (9) $3,000$ $3,100$ (10) $3,066$ (11) $2,334$ (12) $3,702$ (13) $4,927$ (14) $3,642$ (15) $1,938$ (16)	1,40 1,40 1,40 1,578 (17) 2,171 (18) 1,503 (19) 3,186 (20) 3,395 (21) 2,712 (22) 2,584 (23) 3,404 (24) 3,500 3,650 (25) 3,666 (26) 3,107 (27) 4,510 (28) 5,927 (29) 4,624 (30) 2,938 (31)	3,00 3,00 3,00 3,00 3,00 3,30 3,30 3,30 3,30 3,30 3,30 3,30 3,50	(32) (32) (32) (32) (33) (34) (35) (36) (37) (38)	

Sources : Revue de documentation d'information de la Banque Nationale de Belgique and annual reports of the Caisse Générale d'Epargne et de Retraite.

- Rates of interest available on deposits up to 75,000 francs. This ceiling was raised to 100,000 francs on 1 January 1955, 200,000 francs on 1 July 1957, 350,000 francs on 1 January 1965 and 500,000 francs on 1 January 1967.
- (2) The rate was 1.1 % until 11 November inclusive. It was raised to 2.3% on 12 November.
- (3) The rate was 2.3% from 1 January to 26 March inclusive, and reduced to 2.05% on 27 March, to 1.8% on 5 June, to 1.55% on 3 July and to 1.35% on 28 August.

- (4) The rate was 1.35% from 1 to 7 January inclusive, and was reduced to 1.2% on 8 January.
- (5) The rate was 1.9% from 1 January to 3 August inclusive, and was raised to 2.85% on 4 August.
- (6) The rate was 2.85% from 1 January to 23 August inclusive, and was raised to 2.65% on 24 August, and to 2.4% on 28 December.
- (7) The rate was 2.4% from 1 January to 17 January inclusive, and was reduced to 2.15% on 18 January, to 1.9% on 22 March and to 1.7% on 9 August.
- (8) From January to the end of October, the rate was 1.7%, and it was raised on 1 November to 2.1%.
- (9) From January to 22 March inclusive, the rate was 2.1%, from 23 March to 23 June inclusive it was 2.3%, from 24 June to 13 July it was 2.5% and from 13 July until the end of the year, it was 3%.
- (10) From January until 30 June inclusive, the rate was 3%, being raised to 3.2% on 1 July.
- (11) From January until 30 April inclusive, the rate was 3.2%, and was reduced to 3% from 1 May.
- (12) From 1 January to 7 April inclusive, the rate was 2.7%, and was reduced to 2.2% on 8 April.
- (13) From 1 January to 14 February inclusive, the rate was 2.2%; it was raised to 2.7% on 15 February, to 3.2% on 1 April, to 4% on 10 June, to 4.5% on 1 September and to 5% on 10 November.
- (14) From 1 January to 8 November inclusive, the rate was 5%; it was reduced to 4.5% on 9 November.
- (15) From 1 January to 31 January inclusive, the rate was 4.5%; it was reduced to 4.25% on 1 February, to 3.5% on 1 April and to 3% on 2 November.
- (16) From 1 to 14 January inclusive, the rate was 3%; it was reduced to 2.5% on 15 January and to 2.75% (sic) on 13 March. It was raised (sic) to 2% on 1 December.
- (17) The rate was 1.4% until 11 November inclusive; it was raised to 2.7% on 12 November.
- (18) The rate was 2.7% from 1 January to 26 March inclusive; it was reduced to 2.45% on 27 March, to 2.2% on 5 June, to 1.95% on 3 July and to 1.75% on 28 August.

- (19) The rate was 1.75% until 7 January inclusive; it was reduced to 1.6% on 7 January.
- (20) The rate was 3% from 1 January to 3 August inclusive; it was raised to 3.45% on 4 August.
- (21) The rate was 3.45% until 23 August inclusive; it was reduced to 3.3% on 24 August and to 3.15% on 28 December.
- (22) The rate was 3.15% until 17 January inclusive; it was reduced to 3% on 18 January, to 2.75% on 22 March and to 2.5% on 9 August.
- (23) The rate was 2.5% until 31 October inclusive; it was raised to 3% on 1 November.
- (24) From 1 January to 23 June inclusive, the rate was 3.3%; it was raised to 3.5% on 24 June.
- (25) From 1 January to 30 June inclusive, the rate was 3.5%; it was raised to 3.8% on 1 July.
- (26) From 1 January to 30 April inclusive, the rate was 3.9%; it was reduced to 3.6% on 1 May.
- (27) From 1 January to 7 April inclusive, the rate was 3.4%; it was reduced to 3% on 8 April.
- (28) From 1 January to 14 February inclusive, the rate was 3%; it was raised to 3.5% on 15 February, to 4% on 1 April, to 4.75% on 10 June, to 5.25% on 1 September and to 6% on 10 November.
- (29) From 1 January to 8 November inclusive, the rate was 6%; it was reduced to 5.5% on 9 November.
- (30) From 1 to 31 January inclusive, the rate was 5.5%; it was reduced to 5.25% on 1 February, to 4.5% on 1 April and to 4% on 2 November.
- (31) From 1 to 14 January inclusive, the rate was 4%; it was reduced to 3.5% on 15 January, to 2.7% on 13 March and then raised to 3% on 1 December.
- (32) Including the fidelity bonus of 0.3%, which was abolished during the year 1959, but reintroduced in 1960.
- (33) On 1 January 1963, the interest rate was reduced from 3 to 2.75%, and the fidelity bonus from 0.3 to 0.275%. On 1 May 1963, the rate was raised to 3% and the fidelity bonus back to 0.3%.
- (34) The fidelity bonus was raised from 0.3% to 0.4% on 1 July 1964; since it was paid at the end of the year on amounts deposited through the savings book from 15 January, this increase applied for the entire year.
- (35) The fidelity bonus was raised to 0.5% as from 1 January 1965.
- (36) The fidelity bonus was raised to 1% as from 1 January 1969.
- (37) The rate of interest was raised to 3.5% as from 1 January 1970, so that together with the 1% fidelity bonus, it made a total of 4.5%.

(38) The fidelity bonus was reduced to 0.75% as from 1 January 1972, and the basic interest rate was reduced to 3.25% as from 16 March 1972.

In general terms, rates were higher between 1962 and 1972 than between 1953 and 1961 inclusive. This is undoubtedly attributable to the acceleration of inflation. Private individuals and undertakings sought to raise the income from their capital by investing in time deposits rather than those payable on demand, hoping to recover part at least of the loss incurred as a result of the erosion of the value of money. The banks reacted by introducing slight increases in the rates for time deposits in order to attract customers. In so doing, they became dangerous competitors of the Caisse Générale d'Epargne et de Retraite and the private savings banks which, prior to 1962, had been offering much higher rates on their savings books than were available from the banks for one and three month deposits. The C.G.E.R. reacted by granting all manner of advantages (fidelity bonus, preferential rates for customers seeking mortgage loans, free tickets for tombolas, etc.) to faithful savers, and also by creating new investment opportunities (time deposit savings books on which the rate of interest was higher than that payable on ordinary books). It was only with reluctance that it raised its rate of interest on ordinary

At the end of 1969, when the private banks' rate on time deposits was 6%, the C.G.E.R. was still offering a rate of 3% on savings books, with a fidelity bonus of 1%, making a total of 4%. It did not, however, follow the banks in taking advantage of the abundance of capital and the recession in 1972 to reduce its rates of interest substantially. Even at the end of March 1972, which was the lowest point during the recession, its basic rate was still 3.25% and the fidelity bonus was 0.75%, making a total of 4%, whereas the banks were only paying 2.75% on deposits payable at three months.

savings books.

In general, the rates of interest paid on time deposits and savings books were frequently insufficient to compensate for the erosion of the value of money.

Even when one disregards the 20% tax retention, the rise in the cost of living absorbed almost all the income from interest on capital invested at one or three months in bank accounts or ordinary savings accounts in many of the years during the period 1962 to 1972. Table 26 outlines the development of net income in the form of interest after deduction of the erosion of capital caused by the rise in the cost of living.

Year	Bank deposits one month three months		C.G.E.R. savings book
1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972	1,13 0,80 0,60 -1,78 -1,92 0,56 - 1,93 1,78 0,54 -0,36 -1,58 -1,09 -1,07 0,15 -0,36 -0,08 1,07 -0,70 -3,50	1,43 $1,10$ $0,90$ $-1,48$ $-1,60$ $0,96$ $0,40$ $1,82$ $2,40$ $1,36$ $0,45$ $-0,77$ $-0,59$ $-0,52$ $0,75$ $0,42$ $0,73$ $2,07$ $0,30$ $-2,50$	3,03 $2,70$ $2,50$ $0,12$ $-0,18$ $2,09$ $1,80$ $2,94$ $2,30$ $1,95$ $1,06$ $-0,77$ $-0,59$ $-0,62$ $0,58$ $0,81$ $0,22$ $0,64$ $0,18$ $-1,39$

<u>Table 26</u>: Net income in the form of net interest (after deduction of the erosion of capital caused by the rise in the cost of living).

Source : For these calculations, reference was made to the interest rates shown in Table 25 and the rates of growth of consumer prices indicated in Table 23.

The table proves that the classical theory according to which those living on fixed incomes suffer during periods of prosperity but regain the advantage during economic crises and recessions does not conform entirely with the facts as they occurred in Belgium between 1953 and 1972. Since 1954, there has been no fall in the cost of living, so that even during recessions, those living on fixed incomes have seen the income from their interest eaten into by the erosion of the value of money.

As regards the periods of prosperity (1955-56, 1959-60, 1963-65 and 1969-70) the rise in prices has not always been sufficiently substantial for depositors to lose all the income from their capital as a result of the erosion of the value of money. During the periods of recession, the absence of any fall in prices made it impossible for depositors to regain the lost purchasing power on their income from capital during the periods of prosperity. The less pronounced rise in prices during the recessions is generally compensated for by a reduction of the banks' borrowing rates.

In fact, true to the prediction of G. SCHMOLLER, the rate of interest on capital placed on time deposit has fallen in the second half of the twentieth century to about 1.5% (1).

The situation is slightly better for those able to place their capital on deposit for more than one year or to invest in securities. Nevertheless, it must not be forgotten that the rise in interest rates on medium and long term investments brought about by the erosion of the value of money brings down the quotations of securities issued before the rise occurred at less favourable rates, so that it is not necessarily advantageous for all those whose capital is invested at fixed rates. From 1957 to 1972, the Banque Nationale de Belgique has calculated the average yield from loan stock issued by the State, the provinces, para-governmental organizations and municipal authorities for periods of between five and twenty years; separate figures have been produced for loans issued before and after 1 December 1962.

Income from loans issued after 1 December 1962 is subject to a 20% tax deduction at source. Because of this difference, the gross yield from loan stock issued after 1 December 1962 is lower than that from those issued before this date on identical terms. Were it only necessary to take into account the net income after deduction at source of 6% on notes and securities issued before 1 December and 20% on notes and securities issued after that date respectively, the difference in yield on a security bearing 6% interest should be approximately 1% (2). In fact, it is generally less than this, since it is also necessary to take into account the fact that the conditions on redemption are identical, there being no tax on this transaction. In fact, the difference in gross yield has varied between 0.75% and 1.3%.

Thus, the gross yield from the first security is 6% and that from the second is $\frac{60 \times 100}{851} = 7.06\%$, so that the difference is 1.05%.

Quoted by G. CASSEL: "Theoretische Socialökonomie, Lehrbuch der allgemeinen Volkswirtschaftslehre", L. POHLE (ed), Volume II, Leipzig, 1918, pp.214-215.

⁽²⁾ The net yield from a security bearing 6% interest issued before 1 December 1962 with a par value of 1,000 francs is : $6.00 - (6.00 \times 0.06) = 5.64\%$. The net yield from an identical security with a par value of 1,000 francs issued after 1 December 1962 is only : $6.00 - (6.00 \times 0.20) = 4.80\%$. If net income only is considered, a security issued after 1 December 1962 can only give the same net yield as a security issued before that date if its quoted price is : $1,000 F \times 4.80 = 851$ F.

Year	Average yield from loans issued (1)		Average net yield from loans issued (2)		
	before	after	before	after	
	1 December 1962	1 December 1962	1 December 1962	1 December 1962	
1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972	4.42 (3) 4.63 (3) 5.82 5.62 4.98 5.23 5.77 5.34 4.91 5.50 5.50 5.50 5.75 5.77 5.53 6.49 6.65 6.01	6.41 6.46 6.66 6.76 6.59 7.26 7.87 7.36 6.97	3.92 1.75 2.64 4.41 3.78 4.87 4.77 5.00 2.78 1.33 1.41 1.58 2.85 2.84 2.71 2.79 1.69 -	2.24 2.37 2.49 3.84 3.90 3.48 4.01 3.04 1.53	

<u>Table 27</u>: Average yield from fixed income securities quoted on the Brussels steck exchange.

Sources :

(1) Revue de Documentation et d'information de la Banque Nationale de Belgique.

(2) Net average yield = gross yield - rise in the consumer price index.

(3) Median value of the various yields from notes, securities, etc.

The average yield from loans issued before 1 December 1962 follows the trend in the economic position at a longer remove in time than the interest rates on time deposits. The prosperity of 1955-56 was not reflected in the yield from securities and notes until 1957, and the influence of the 1957-58 recession can clearly be seen in the 1959 yield.

A similar time lag of approximately one year also occurred during the sixties. This is probably attributable to the influence of the yield from the shares of publicly quoted companies on the yield from securities. When dividends rise, part of the capital invested in securities and notes is realised and placed in variable yield investments. This leads to a fall in the quotations of fixed interest securities, thereby increasing their average yield. As company profits are distributed about a year after they are made, it takes about a year for the rise in dividends to follow the upward trend in the trade cycle. Since the return from fixed interest securities is strongly influenced by that on variable return investments, it also has to follow the trend in the business cycle at a remove in time of about a year.

However, it is also necessary to take into account the volume of liquidity seeking investments. When the liquidity supply is low, as in 1969 following the speculation against the Belgian franc, the yield is higher than when there is excess liquidity, as in 1971 following the influx of speculative capital from abroad. Moreover, rates would have been lower in 1971 and 1972 if the State had not taken advantage of the abundance of capital to borrow large sums on the domestic money market. This enabled it to repay most of its foreign debt and, in addition, to finance a very substantial extraordinary budget (1).

 ⁽¹⁾ In 1970, the State borrowed 18,400 million francs from private banks, 12,600 million francs from savings banks and para-governmental companies and 6,100 million francs from other companies and institutions and private individuals, making a total of 37,100 million francs.
 In 1971, total borrowings by the State was 69,400 million francs, a record figure (Banque Nationale de Belgique : Rapports sur les

CONCLUSIONS.

Of the four categories of non-wage income, namely that earned by traders and craftsmen, that earned by members of the professions, that earned by the landlords of housing property and that earned by the holders of time deposits, savings accounts and fixed interest securities, the earnings of the second group have risen most rapidly and must be considered to be one of the causes of structural inflation. However, although it is growing, this group only constitutes a small sector of the population and the influence of the rise in their income on prices and wages should not be overestimated.

As regards self-employed workers, it would appear that the small traders have generally been able to maintain their relative profit margins, that is their profit margins expressed as a percentage of their selling prices.

The price increases introduced by producers were magnified by small traders and passed on to the consumer, so that the small trader has not only been the intermediary, but also the instigator, of price increases.

The opening of large numbers of chain stores of the supermarket type towards the end of the sixties seems to have led to a slight narrowing of the profit margins of small traders and craftsmen. However, this finding is based on too short a period (1970 and 1971) for it to be possible to draw definitive conclusions.

The income of housing property landlords did not adjust fully to the sharp rise in building costs, which was much higher than the rise in consumer prices during the period 1965-72. Thus, the trend in rents did more to curb than to accelerate inflation. Income in the form of interest rose substantially with the increase in the amount of capital invested in time deposits with the banks, in savings accounts with the C.G.E.R. and the private savings banks in one or other of these forms or in some other form with para-governmental financial institutions or in loan stock issued by the State, the provinces, the municipal authorities and the para-governmental companies.

The average yield from all these forms of investment followed the development of the economic situation after time lags of varying duration, but it was also influenced by other factors such as the influx of capital from abroad. The sustained rise in consumer prices from 1954 to 1972 inclusive meant that the holders of these various forms of investment were unable to take advantage of recessions to recuperate losses suffered as a result of the erosion of the value of money during the periods of prosperity.

Consequently, the rise in income in the form of interest is largely fictitious. In fact, during the years when prices rose rapidly (1966, 1972) most savers lost money.

The effect of the rise in interest rates on demand for goods and services may therefore be considered to have been minimal; in other words, it was not a source of demand-pull inflation. However, it can be a cause of costpush inflation when money is in short supply, as in 1969-70 when many firms had to borrow money at abnormally high rates.

We shall return to this problem in our discussion of economic policy in our final chapter.

<u>CHAPTER VI</u> : <u>Counter-inflationary policy and its effects on prices and</u> <u>incomes.</u>

1. Introduction.

Before drawing conclusions from this study as to the policy to be followed in combatting inflation, it is necessary to outline the counter-inflationary policy which has been pursued to date. This policy has been conducted at two levels: at national level and at European Community level.

At national level, the Belgian government has endeavoured to curb inflation by restricting the money supply and by means of price controls.

Unlike other countries (England, for instance), Belgium has not hitherto applied any wages policy. Nor has it pursued the systematic application of a fiscal policy designed to level out the disposable income of households, thereby cushioning against the effects of cyclical fluctuations. Whereas, when a recession was foreseeable at the beginning of 1972, the Minister for Economic Affairs, Professor Dr. H. SIMONET, budgeted for a deficit on current account in order to encourage investment by means of subsidies, the clear recovery during the second half of 1972 did not give rise to any limitation of public spending. On the contrary, in order to find a solution to the contradictory claims of the Community and ideology, the new coalition government made provision for new expenditure in its budget, so that there was still a slight deficit at a time when the economy was in the middle of a period of prosperity.

The effect of the graduated coding of direct personal income tax is accentuated as prices and incomes adjust to inflationary pressures and holds down the rise in demand from private individuals. However, the State spends its entire return from taxation, so that the increase in the demand from the State for goods and services compensates for the decline in demand from the private sector.

It may be concluded, therefore, that restrictions on increases in incomes have not been used in Belgium as a means by which to pursue a policy of limiting demand. However, such a policy has been initiated on the basis of two other means, namely controls of credit sales of consumer durables (1) and a restrictive monetary policy.

(1) Moniteur belge, 23 February 1973, pp. 2412-2414.

The monetary policy has been carried out by the Banque Nationale de Belgique in conjunction with the Ministry of Finance. The methods have been revised on numerous occasions, but they are designed to reduce the private banks' capacity for creating bank money through the imposition of coefficients of solvency, liquidity and (or) reserves and the limitation of scope to rediscount with the central bank (1).

A restrictive monetary policy became an absolute necessity from 1971 when, as a result of the influx of short term capital, the money supply was growing constantly at a rate in excess of the growth rate of the gross national product, thus creating the danger of serious demand-pull inflation (2).

Since analysis of monetary developments falls outside the scope of our study, which deals with the influence of the development of non-wage income on price movements, we are unable to discuss the consequences of the growth of the money supply in detail. Nevertheless, it should be pointed out that the fall in interest rates in 1972 (see Chapter V) was probably caused by the sharp growth in monetary and quasi-monetary liquidity during 1971 and 1972 and, in turn, contributed to the raising of the level of investment.

(2) According to the statistics of the Banque Nationale, the growth in monetary and quasi-monetary liquidity, the gross national product and prices progressed as follows:

1970		Growth as a percentage			
		1971	1972		
1. 2.	Monetary liquidity (from the end of the preceding year to the end of the current year) Monetary + quasi-monetary	+ 8,3	+ 10,1	+ 14,0	
	liquidity (ibidem)	+ 8,0	+ 13,2	+ 16,6	
3•	Gross national product (at constant prices)	+ 6,2	+ 3,7	+ 4,1 (a)	

(a) Provisional estimate

Source : Bulletin de la Banque Nationale de Belgique, April 1973, pp. III-XXIII.

From the end of 1969 to the end of May 1973, the rediscount ceiling imposed on the banks was reduced from 12% to 7.25% of their resources (own resources, loans issued in the form of debentures and notes, sight and time deposits, excluding bank accounts in credit) (Agefi, 14 June 1973).

As for price policy, it clearly has a direct effect on inflationary trends, and this will be studied in the next Section.

The policy of the European Community on inflation is still in its infancy. It is pursued on two fronts. On the one hand, the Council of Ministers of the Community has made recommendations for the curbing of inflation to the governments of the Member States (1), and on the other hand, the Commission has taken action under Articles 85 and 86 of the Treaty of Rome designed to guarantee a minimum degree of competition between producers in the Common Market.

In pursuing its competition policy, the E.E.C. has opposed the artificial raising of prices through monopolistic practices and, in so doing, has contributed towards the reduction of inflationary stresses. We shall return to the subject of this policy in Section 3.

2. The prices policy of the Belgian Government :

The prices policy originated after the war. The Legislative Decree of 22 January 1945 concerning measures to curb infringements of the regulations on the procurement of supplies empowered the Minister of Economic Affairs to fix maximum prices for goods and services and to instigate legal proceedings against firms not adhering to these prices. At the same time, the Minister received powers to fix the profit margin to be taken by any seller or intermediary.

This legislative decree also prohibited the selling of any product or service at prices above the normal prices in cases where the Minister had not fixed any maximum price (2). Interpretation of the meaning of "normal price" is a matter for the courts. In theory, they should determine the normal price on the basis of the cost price, profit margins and the state of the market; in general, the prices charged by firms have been regarded as the normal prices in case law (3).

 [&]quot;Les mesures de la politique anti-inflationniste dans la République Fédérale allemande et en France, aux Pays-bas et en Belgique", Bulletin de la Banque Nationale de Belgique, April 1973, Dutch version, p. 13 and European Coal and Steel Community, European Economic Community, European Atomic Energy Community - Commission; Sixth Report, 1972, Dutch version, Brussels, Luxembourg, February 1973, pp. 66-67.

⁽²⁾ Legislative Decree of 22 January 1945, Moniteur belge, 24 January 1945.

⁽³⁾ M. VAN MEERHAEGHE : "The Belgian Prices Commission", Weltwirtschaftliches Archiv, 1967, Volume 2, pp. 259-260.

The maximum prices were gradually abolished during 1948 and 1949 as supplies of goods in most sectors became sufficient to meet demand.

The Korean War led to price rises on such a scale that it was considered desirable to reintroduce the controls system (1).

The Ministerial Order of 20 December 1950 stipulated that, from that date it was compulsory for firms to notify the Ministry of Economic Affairs of their intention to increase their prices for any of the goods and services referred to in the Order.

In February 1951, a Prices Commission was set up with a membership made up of representatives of the various sectors of economic life, the trade unions and civil servants from the various ministries concerned with economic problems (Ministries of Economic Affairs, Agriculture, Labour, the Ministry for the Middle Classes, etc.).

This commission commenced activities on 2 April 1951. It was an institution which gave opinions to the Minister of Economic Affairs on all problems affecting the cost of living. It was also part of its brief to study trends in prices and to submit suggestions on prices policy to the Minister of Economic Affairs. During the fifties and sixties, the list of goods and services whose prices could not be increased without authorization was enlarged, so that the government's influence on movements of prices was increased.

In addition, the three-day period was extended, first to eight days and subsequently (Ministerial Order of 8 October 1959) to twenty-one days (2).

The acceleration of the rise in consumer prices in late 1965 and early 1966 (3) obliged the government to take stricter measures to curb the inflationary trend. The Ministerial Order of 9 May 1966 introduced a total freeze on all prices and services. This measure enabled prices to be held down (the consumer price index in August 1966 stood at the same level as that of April of the same year) (4), but it could not be kept in force, since allowance had to be made for movements in raw material costs and wages, or undertakings would have been caused to go bankrupt.

CH. VAN HERBRUGGEN, "Les moyens de la politique des prix", Socialistische Standpunten, 1972, No. 6, p. 336.

⁽²⁾ Ibidem.

⁽³⁾ From April 1965 to April 1966, the consumer price index rose by almost 5% (Bulletin de documentation et d'information de la Banque Nationale de Belgique, August-September 1966, Table VII, 4). According to the Federation des Industries Belges, overheating of the economy leading to a stretched employment market and increases in wages was the main cause of the rise in prices (Federation des Industries Belges, Conseil d'administration, meeting of 22 June 1966, Brussels 1966, p. 2).

⁽⁴⁾ Bulletin de documentation et d'information de la Banque Nationale de Belgique, September 1967, Table VII, 4.

Under the Ministerial Order of 2 September 1966, the price freeze was removed but the system of declaring increases was extended to all goods and services, being applicable to producers and those classed with producers, and to importers.

In preparation for the introduction of V.A.T. to Belgium and in order to make it possible to pursue a more thorough-going policy of coordination, the Prices Commission was replaced by a Commission for the Regulation of Prices under the Royal Decree of 3 June 1969. The new commission is constituted on almost the same basis as its predecessor, but it has a secretariat comprising several civil servants to make preparations for its sessions. It has taken over the terms of reference of the Prices Commission, but in addition, it has been assigned the following tasks :

- a) preparation and negotiation of the execution of programme contracts between the private sector and the government and the submission of proposals regarding the content of such contracts to the Minister of Economic Affairs;
- b) supervision of the execution of these contracts and the submission of suggestions to the Minister of Economic Affairs for measures and possible sanctions to be applied in order to ensure compliance with the terms of these contracts (1).

The Decree stipulated that two sections be set up in the Commission for the Regulation of Prices. The first was to take over the functions of the Prices Commission and the preparation and negotiation of programme contracts. The other, under the terms of the Decree, was to be responsible for the supervision of the execution of these contracts.

It was provided that a standing committee would be set up in the first section to fulfil the following functions :

- 1) observing fluctuations in prices;
- 2) bringing to the attention of the Minister of Economic Affairs the problems which it considers suitable for study by the commission;
- assembling the necessary documentation (in this task, the committee is supported by the secretariat which, in turn, can call on the prices department of the Ministry of Economic Affairs);
- 4) giving its opinion in the name of the commission on files concerning an undertaking (2).

 [&]quot;Arrêté royal instituant une commission pour la régulation des prix", Ministère des affaires économiques, Moniteur belge, 30 July 1969, p. 7396.

⁽²⁾ Ibid., pp. 7297-7398.

It quickly became clear that it was preferable for the people supervising the execution of programme contracts to be those who negotiated the terms. Consequently, the commission was not divided into two sections, but the members of the standing committee from the first section were, for the most part, appointed as members of the committee for the supervision of the execution of programme contracts.

In view of the programme contracts formula, it became necessary to amend the Legislative Decree of 22 January 1945. This was done in the Law of 23 December 1969, which provides that the Minister of Economic Affairs can conclude programme contracts with individual undertakings or groups of undertakings in which the undertakings enter into obligations concerning, inter alia, the level of the prices which they will be applying (1).

In order to enable the Commission for the Regulation of Prices to examine the declarations of price increases submitted by one or more firms, the 21-day period was extended to 30 days under the Ministerial Order of 5 January 1970, which came into force on 7 February.

Four programme contracts were concluded during 1970, one covering imported wood (14 May 1970), one covering chocolate (27 November 1970), one covering the products, commodities and merchandise sold and the services rendered by FEBECOOP (the federal organisation of socialist cooperatives) (17 December 1970) and finally one covering Fort products (concluded on 31 December 1970).

Negotiations with the chemicals sector and the pharmaceutical and cement industries were inconclusive but, during the first half of 1971, further programme contracts were concluded with bakery retailers and producers (19 February 1971), the non-ferrous metals sector (12 May 1971) and the domestic appliances sector (12 May 1971) (2).

The government had hoped that the system of price controls developed during 1969 and 1970 would make it possible to prevent the introduction of V.A.T. on 1 January 1971 from unleashing a general rise in prices.

The Minister of Economic Affairs succeeded in limiting the rise in retail prices during the first four months of 1971 to 2.26% (3), but came to the conclusion

 [&]quot;Projet de loi modifiant l'arrêté-loi du 22 janvier 1945 concernant la régression des infractions à la réglementation relative à l'approvisionnement du pays", Documents parlementaires, Chambre des Représentants, Session 1970-71, 28 May 1971, doc. no. 966/7, Annex I, p. 38.

^{(2) &}quot;Projet de loi modifiant l'arrêté-loi" op.cit., pp. 16-17.

⁽³⁾ Ibidem, p. 10.
that, in view of the very great diversity of products and services, it was extremely difficult for him to make decisions on a constantly increasing number of applications for price increases within one month of their submission.

The decree of 5 April 1971 extended the period from one to two months as from 8 April 1971 (1). Although this made it possible to curb prive rises more efficiently, it led certain firms to increase their prices without having received the prior agreement of the Minister of Economic Affairs. From the beginning of January 1971 to the end of May that year, the general economic inspectorate for infringements of the regulations on prices forwarded 965 sets of papers to the King's prosecutors, five times as many as during the corresponding period in previous years (2). A high proportion of these cases were resolved in settlements which were generally not very costly to those in contravention of the regulations and, in those cases where there was a ruling against them by the courts, the fine was generally too low in comparison with the advantage gained by increasing selling prices illegally (3).

In order to remedy this situation, the Minister of Economic Affairs obtained the enactment on 30 July 1971 of a law empowering him to fix, for a maximum period of six months, a maximum individualised price on the occasion of the declaration of a price increase for a product or service by several undertakings representing a limited section only of their market.

However, before taking a decision fixing a maximum price, the Minister of Economic Affairs must consult the Commission for the Regulation of Prices. The law provides that, in the event of an infringement, after giving formal notice by registered letter to a firm refusing to reduce its price to the stipulated maximum, the Minister can order the temporary closure of the premises of the firm in contravention of the regulations for a period of up to five days. During the five days following notification of this measure, the firm may appeal to the court of first instance, which will then give a ruling within one week (4).

Thus this law made it possible to oblige a firm which increases one or more of its selling prices without authorization to reduce the price or prices in question

^{(1) &}quot;Projet de loi modifiant l'arrêté-loi...", op.cit. annexe III, p. 49

⁽²⁾ Ibidem, p. 13.

⁽³⁾ Ibidem, pp. 13-14.

 ^{(4) &}quot;Loi sur la réglementation économique et les prix - loi modifiant l'arrêtéloi du 22 janvier 1945 concernant la repression des infractions à la réglementation relative à l'approvisionnement du pays", Moniteur belge, 31 August 1971, pp. 9990-9991.

to the maxima laid down by the Minister and to cause such firms to suffer substantial losses if they refuse to comply with the Ministerial Order (1).

The "Cools Law" was followed by the Ministerial Order of 22 December 1971 which revised the system for the declaration of price increases as organized under the Ministerial Order of 8 October 1959.

In the new system, firms are obliged to supply the prices department of the Ministry of Economic Affairs with a minimum amount of information on the points stipulated in the Order and, in the event of their failure to do so, the prices department or the commission could take the view that their declarations are incomplete and request additional information, asking for the 60-day period to commence, not on the date of declaration, but on the date of receipt by the prices department of the additional information.

The "Cools Law" and the Ministerial Order of 22 December 1971 were heavily criticised in industrial and professional circles.

The opponents of this legislation also pointed out that the prices department could prolong the two month period by asking for additional information in respect of each price increase declaration, thereby holding back price increases at the expense of firms, preventing them from adjusting their selling prices to their costs.

The Minister generally fixes increases in percentage terms. Small firms, charging higher prices for individual articles than their more efficient competitors charge for similar products which are nevertheless different from theirs, experience no difficulties as a result of the application of such measures. They are able to increase their prices by the specified percentage, thus retaining their profit margins.

It is only in cases where a firm applies a price increase before receiving authorization and this increase is deemed to be excessive by the Minister or the Commission for the Regulation of Prices that the Minister imposes a maximum price.

However, it is considered that such a measure should be exceptional. The fact that firms are able to make price declarations through their trade associations reduces the number of declarations and relieves small undertakings of the costs involved in preparing them.

Article 2 of the Law provides that the closure of the undertaking can be avoided by payment of a sum of money so that national production does not necessarily have to suffer from the consequences of measures taken to enforce prices policy decisions. (La loi sur la réglementation op.cit. p. 9991.)

Furthermore, it was laid down in the Ministerial Order of 20 April 1972 that the obligation to declare all price increases is not applicable to undertakings whose turnover does not exceed 5 million francs excluding value added tax (1).

The Ministerial Order of 1 August 1973 amends the Ministerial Order of 22 December 1971, reimposing the price increase declaration on undertakings whose business is connected with a product or service which, in the sector under consideration, is homogeneous or is charged for at comparable rates. The following sectors are considered to be homogeneous : servicing, repair and washing of motor vehicles, car parks, maintenance and repair of heating and plumbing installations and equipment; cleaning and disinfection of buildings, chimney sweeping; shoe repairs; laundries, public wash-houses and dry cleaning; hairdressers' shops; hotels, boarding houses, resturants and camping sites.

In the vast majority of cases, the Minister has followed the recommendation of the Commission for the Regulation of Prices when it has proposed a lower increase than that applied for by producers or importers. Where the commission has been unable to reach an unanimous opinion, the Minister has either accepted the application for the increase or limited it to a lower percentage or amount. Undertakings are obliged to inform the prices department of all price reductions

They can apply for a "price rise credit" which, when granted, entitles the firm to increase its price up to the previous level without having to wait for the

on the actual date of their introduction.

two month period provided for in the Order of 22 December 1971 (2) to elapse.

In addition, the Commission for the Regulation of Prices has powers to propose price reductions on its own initiative. The commission has only taken advantage of this right on a few occasions, notably in the cases of meat and coffee prices. The Minister has on two occasions imposed slight reductions in meat prices but, in the case of roasted coffee, there was no price reduction because raw coffee prices rose again subsequently (3).

 ⁽¹⁾ Arrêté ministériel completant l'arrêté ministériel du 22 décembre 1971 prescrivant la déclaration de hausse de prix, Moniteur belge, 25 April 1972, p. 4,911.

⁽²⁾ Article 8 of the Ministerial Order providing for the declaration of price increases, op.cit., p. 15,246.

⁽³⁾ The prices for Santos (Brazil) raw coffee were very low at the beginning of 1972, but they rose by some 35% from the beginning of January 1972 to the beginning of January 1973. (Information on the prices of Santos raw coffee on the New York commodities exchange supplied by the Société Commerciale Anversoise.)

It must be acknowledged that little progress has been achieved over programme contracts since May 1971. The programme contracts covering the selling prices of bread and domestic appliances were renewed on 5 April 1972 (1) and 27 September 1972 (2) respectively.

A further programme contract covering non-ferrous metals was signed in June 1973. The programme contract for imported wood prices will probably be renewed. The programme contracts system has the merit of avoiding the disadvantages of the necessity to declare price reductions in sectors where raw materials prices play an important role. These contracts include provisions to the effect that prices can be increased (reduced) by a certain amount if raw materials prices rise (fall) by a specified percentage or amount. In other cases, they stipulate that the price may be reviewed if wages and social contributions rise above a certain level (3).

This system enables firms subscribing to the programme contract to adjust their selling prices to increases in their costs rapidly. Where there is no programme contract, they may have to wait two months or even more before having their applications for prices increases accepted. For the government, the system has the advantage of setting up machinery for the adjustment of prices to both upward and downward movements in costs.

From the point of view of the struggle against inflation, it has to be acknowledged that these programme contracts could present the disadvantage of acting as a medium for the transmission of increases in prices and incomes from one sectors to others. Thus, the conclusion of such contracts is only advantageous in the case of products whose raw materials are subject to major upward and downward price fluctuations (tropical vegetable products, minerals,metals). It should be further noted that programme contracts can be used to regulate the methods of fixing consumer prices as well as the actual level of prices.

 [&]quot;Contrat de programme relatif au prix de vente des appareils électroménager", Ministère des affaires économiques, administration du Commerce, Service des Prix, Brussels 1972, p. 4.

^{(2) &}quot;Contrat de programme relatif auxprix des pains", Ministère des affaires économiques, Service des prix, Brussels 1972, p. 4.

⁽³⁾ C.F., for example, "Contrat de Programme relatif aux prix des pains", op. cit. pp. 2-4.

This was the case with the programme agreement concluded by the Minister of Economic Affairs on 12 May 1971 with the producers and importers of domestic appliances. The producers and importers party to this agreement entered into undertakings as to their selling methods (prohibition of the marking of goods with "slashed" prices and of resale price maintenance) and an obligation to specify the services included in selling prices and the systems on which the calculation of their selling prices is based (limitation of increases in administrative and sales costs to 2% per annum) (1).

All these provisions were carried over into the new programme contract covering the selling prices of domestic appliances concluded on 29 September 1972 for a period of two years (2).

A Ministerial Order of the same date stipulated that firms not subscribing to the programme agreement will be prohibited from applying any price increases without the prior agreement of the Minister of Economic Affairs (3).

The programme agreement concerning the selling prices of domestic appliances has led to the disappearance of the practice of resale price maintenance in this sector. The producers and importers using this system had generally allowed their distributors very generous profit margins. Retailers had taken advantage of these profit margins to attract clients by granting discounts on the prices imposed by their suppliers. This practice caused the market to lack transparency and also involved both retailers and consumers in much time-wasting in haggling over prices. From the economic point of view, it may therefore be concluded that the return to more normal competition in the distribution of domestic appliances is a positive result of the application of a programme contract. However, this does not mean that the average prices paid by consumers for these products are lower today than prior to the introduction of this programme contract.

The counter-inflationary effect of the prices policy lies mainly in the powers to oblige undertakings to give notice before they are allowed to increase their prices.

⁽¹⁾ Bulletin de Fabrimétal, 5 July 1971, Dutch version, pp. 304-305.

⁽²⁾ Contrat de programme relatif au prix de vente des appareils electroménagers, op.cit., pp. 2-4.

^{(3) &}quot;Les mesures de la politique anti-inflationniste dans la République Fédérale allemande, aux Pays-bas et en Belgique", art. cit., p. 20.

It is typical that, at a time when stronger curbs on inflation are becoming necessary, the Minister of Economic Affairs extended the waiting period once again, in his Ministerial Order of 1 March 1973. The periods imposed were : four months for all price increases declared after 1 March 1973, three months for increases declared after 1 July 1973 and two months once again for price increases declared after 1 January 1974 (1).

 [&]quot;Arrêté ministériel instituant des mesures transitoires en matière de prix", (Moniteur belge, 6 March 1973, p. 2862), amended by the Ministerial Order of 20 July 1973 (Moniteur belge of 24 July 1973).

3. The competition policy of the Common Market Commission.

The rules on competition laid down in the Treaty of Rome are sufficiently well known for it to be unnecessary to discuss them in extenso.

Suffice it to recall that Article 85 is directed against concerted practices which may directly or indirectly prevent, restrict or distort competition within the Common Market, while Article 86 deals with undertakings which have a dominant position within the Common Market or within a substantial part of it and exploit this position in an improper manner.

However, the Commission is only empowered to act if such concerted practices or the presence of such undertakings in dominant positions are likely to affect trade between the Member States.

The application of Article 85 was organized by Regulation 17 issued by the Council of Ministers on 6 February 1962. Under the terms of this regulation, it is in principle for the heads of undertakings themselves to determine whether agreements between undertakings, decisions by associations or undertakings or concerted practices between them are in contravention of Article 85, paragraph 1. Where this is the case, they must either terminate their concerted practice or apply for an exem ion. Such an exemption is granted by the Commission pursuant to Article 85, paragraph 3, if the agreement or concerted practice contributes to improve the production or distribution of goods or to promote technical or economic progress and, in addition, meets certain other requirements (for instance, consumers must be allowed a fair share of the benefit resulting from these advantages) (1).

Where heads of undertakings are in doubt as to whether an agreement between them is prohibited under the terms of Article 85, paragraph 1, they can guard against the danger of being fined by the Commission or having proceedings instituted against them by third parties whose interests have been prejudiced by notifying the Commission of their agreement, decision to associate or concerted practice, requesting the Commission to issue a statement to the effect that it is not prohibited.

Regulation 27 of 3 May had provided that, in order to obtain such a negative clearance, firms had to submit a form (form A) in which they answered a number of questions regarding the nature and effects of the agreement and another form (form B), which contained a series of similar questions, was used for applications for authorisation. Since many firms, when submitting applications for negative clear-ances, submitted applications for exemption at the same time in case the negative clearance was withheld, a single form (form A/B) to be used for both types of application was introduced under Regulation 1133 (1968) (2).

L. CARTOU: "Précis des organisations européennes", Fourth Edition, Paris, 1973, p. 175.

⁽²⁾ European Coal and Steel Community, European Ecnomic Community, European Atomic Energy Community - Commission: Second General Report on the Activities of the Communities in 1968, Brussels, Luxembourg, February 1969, pp. 52-53.

Regulation 17 also made provision enabling third parties who consider that their interests have been prejudiced by action taken pursuant to an agreement to lodge a complaint with the Commission. Thus, the existence of agreements or practices referred to in Article 85, paragraph 1, of which the Commission has not received notification can be brought to its attention and, if appropriate, it can impose fines on firms infringing the provisions of this article.

The functioning of the system set up under Regulation 17 was hampered initially by the large number of notifications (on 31 March 1966, 38,045 sets of papers were in the course of being processed)(1), but when the Commission had ruled on a number of typical cases, undertakings were better placed to judge whether their application for a negative clearance or an exemption would be accepted or not. An end was put to a number of unacceptable agreements and others were changed or reformulated so that they were no longer in contravention of Article 85, paragraph 1, of the Treaty of Rome or could be considered for the granting of an exemption.

The Commission has also used the formula of "exemptions by categories" (2), for which provision is made in Article 85. By the terms of Order 19 of 2 March 1965, the Council of Ministers empowered the Commission to grant a generic ememption to all exclusive represention contracts and licensing contracts to which there are only two parties and which meet the conditions stipulated in Article 85, paragraph 3. On 26 August 1966, a generic exemption was granted by the Commission for all exclusive representation agreements concluded between two parties only which met a series of conditions guaranteeing that the exlusive representative cannot take improper advantage of his privileged position to obtain an excessive profit margin (3). This measure enabled some 13,000 exemption applications for exclusive representation agreements to be approved at a stroke.

European Economic Community: Ninth General Report on the Activities of the Community from 1 April 1965 to 31 March 1966, Brussels June 1966, p. 69.

⁽²⁾ P. REUTER : "Organisations européennes", Paris, 2nd edition 1970, p. 317.

 ⁽³⁾ Official Journal of the European Communities, Dutch version, 26 August 1966, p. 2865.

In this way, the Commission made known its intention not to attach too much importance to the great mass of small agreements and to devote all its attention to large-scale concerted practices which can lead to the elimination of all competition over all products in a sector of industry in Europe (1). This increased the effectiveness of the Commission's action, which has taken three forms, as follows :

 The Commission has taken action to prevent the formation of cartels. The risk of incurring heavy fines and having legal proceedings instituted against them by firms which have suffered projudice as a result of agreements or concerted practices and claim damages has encourages the members of cartels to disband.

For instance, the Commission, acting on its own initiative, instituted a series of investigations in the flat glass sector. In this very important sector of Belgian industry, a number of firms had entered into agreements under which they apportioned the national market among themselves, thereby causing a substantial reduction in trade between the Member States. With economic development and, more particularly, the expansion of the market, it was no longer in the interests of some of these firms to comply with the terms of the agreement. The fact that the parties to the agreement were aware that the Commission was looking into the situation and was going to oblige them to terminate or change their agreement led them to stop pressing their defaulting members to adhere to the agreement. The agreement was terminated and the secretariat set up to operate it was disbanded (2).

2) The Commission has taken corrective action by encouraging heads of undertakings who have given notice of their agreements or concerted practices to change them to make them acceptable for a negative clearance or an exemption. In this way, agreements which prevented all competition were replaced by others which, although organising the market, made it possible for a minimum degree of competition between the firms party to the agreement to be maintained. We can quote several examples of action by the Commission affecting the Belgian economy. Firstly, there is the case of Cobelaz (Comptoir belge de l'azote). Before the intervention by the Commission, Cobelaz monopolised the exports of

⁽¹⁾ P. REUTER, op.cit., p. 367.

⁽²⁾ Bulletin of the European Communities, August 1970, No. 8, pp. 62-63.

all Belgian producers in the nitrogen industry, thus preventing these producers from competing with each other on the markets of the other Member States of the Common Market. After the Commission had informed the firms concerned that the activities of Cobelaz were incompatible with Article 85, paragraph 1, of the Treaty and that an exemption could not be granted, they decided that Cobelaz would no longer be involved in their exports to Common Market countries (1).

Of course, this in no way guarantees that there will be competition between Belgian producers on their own market. The Commission is not empowered to concern itself with the manner in which Belgian producers behave on the Belgian market, but it can strengthen competition there by taking action against agreements limiting deliveries by producers from other Member States (2).

By its action, it succeeded in having the constitution of the Comptoir français de l'Azote (C.F.A.) changed in a way which ensured that the members of this organisation will be able to compete with each other freely on the Belgian market (2).

A second typical case is that of the Belgian perfumery and toiletry trade association. This organization was applying a system of resale price maintenance and had set up a distribution organisation which represented an obstacle to free competition. Following pressure from the Common Market Commission, this association abolished its resale price maintenance system and its market organisation arrangements and then, in 1972, obtained negative clearance from the Commission for its other activities (3).

Finally, we would mention the case of the "ceramics convention" subscribed to by ten building materials manufacturers in Belgium, the Netherlands and Germany and two Belgian dealers' and fitters' trade associations. This agreement, which had been notified to the Commission, established arrangements for reciprocal and collective exclusive purchasing and selling rights on the Belgian market between purchasers approved by a trade body and manufacturers. The Commission sent a recommendation to the parties to the agreement asking them to terminate the agreement, since it placed severe restrictions on the opportunities of other manufacturers to sell in the Belgian market and was therefore contmary to the provisions of the E.E.C. Treaty on competition. The parties to the agreement sent a revised text of the agreement which provided for

⁽¹⁾ European Coal and Steel Community, European Economic Community, European Atomic Energy Community, Second General Report, op.cit., p. 47.

⁽²⁾ Ibidem.

⁽³⁾ European Coal, Fourth General Report on the Activities of the Communities during 1970, Dutch edition, Brussels, Luxembourg, February 1971, p.25.

some relaxation of the conditions of admission and removed the obligation on purchasers to obtain supplies from the manufacturers in the cartel exclusively. Since the agreement still represented an obstacle to the freedom of access to the market of manufacturers not party to the agreement, the Commission once again refused an exemption and the agreement was finally cancelled.

We could quote many other cases in which the Commission has had a corrective influence, either by obtaining changes in agreements which restrict competition, or by obliging the firms concerned to abandon their restrictive practices.

3) The Commission has taken repressive action in the cases of groups of undertakings which had not notified it of their agreements or concerted practices, or had continued them after the Commission had refused to grant an exemption or negative clearance.

As long ago as June 1966, the Commission pointed out in its general report that horizontal restrictions of competition between undertakings operating at the same stage of business activity were being brought to its attention less often than exclusive contracts and licensing contracts, for which a negative clearance or exemption were easier to obtain. The Commission concluded from this that it would be necessary for it to seek out such horizontal restrictions of competition itself (2).

In 1969, the Commission imposed its first fines on firms maintaining agreements which were incompatible with the Common Market policy on competition. These firms were members of an international quinine cartel and a group of dye manufacturers (3). During the course of 1971, the Commission took action against cement cartels in Germany, France and the Netherlands (4).

(4) Idem, Fifth General Report on the Activities of the Communities, Dutch version, Brussels, Luxembourg, February 1972, p. 104.

⁽¹⁾ Bulletin of the European Communities, Secretariat-General of the Commission, 1971, no. 12, p. 44.

⁽²⁾ European Economic Community: "Ninth General Report on the Activities of the Community from 1 April 1965 to 31 March 1966", pp. 68-69.

⁽³⁾ European Coal and Steel Community, European Economic Community, European Atomic Energy Community: "Third General Report on the Activities of the Communities during 1969", Dutch version, Brussels, Luxembourg, February 1970, p. 69.

During the following year, it continued to work towards the establishment of normal conditions of competition on the Belgian and Dutch cement markets and fined firms which attempted by artificial means to maintain differences between selling prices on the markets of the various Member States of the Community (1).

In the same year, it exercised its powers in taking action against the sugar cartel, whose membership includes the principal producers and distributors of sugar in the Community.

On 2 January 1973, the Commission decided to impose heavy fines on these firms in order to oblige them to put an end to the compartmentalisation of sugar markets which they had achieved by means of a series of agreements under which the majority of deliveries from one country to another were controlled by the members of the cartel (2).

The firms affected by this decision appealed to the Court of Justice of the European Communities, so that it is not yet possible to predict whether the Commission will be successful in obliging the major sugar manufacturers in the Community to abandon their restrictive practices.

It is interesting to note that the Raffinerie Tirlemontoise was found guilty of infringing Article 86 of the Treaty of Rome as well as Article 85. According to the Commission, it had taken advantage of a dominant position on the Belgian market and exerted economic pressure on Belgian producers to oblige them to limit their exports (3).

This brings us to the question of the relationship between Articles 85 and 86, which we have not yet discussed.

For a long time, the Community avoided invoking Article 86 because it can be rather difficult to determine the point at which it may be stated that a firm has a dominant position on a market (4). The trend towards increasing concentration in various sectors of European industry has obliged the Commission to pay the closest attention to developments in the positions of large firms on national markets and the Community market.

⁽¹⁾ Ibidem, Sixth General Report on the Activities of the Communities, Dutch version, Brussels, Luxembourg, February 1973, p. 68.

⁽²⁾ Commission of the European Communities, "Decision of the Commission of 2 January 1973 concerning a procedure for the application of Articles 85 and 86 of the E.E.C. Treaty (IV/26.918 - European Sugar Industry), Brussels, 2 January 1973, pp. 76-82.

⁽³⁾ Ibidem, p. 77.

⁽⁴⁾ In attempting to define a market, it is necessary to take differences between prices and transport cost into account as well as political frontiers and customs costs.

In 1971, Article 86 was applied for the first time to a German copyright firm ("Gesellschaft für musikalische Aufführungs - und mechanische Vervielfältigungsrechte" (GEMA)) which had a monopoly of the German market and was using it improperly to restrict the financial freedom of composers, authors and publishers of music (1).

In the same year, the Commission also took action against an American company which had bought the largest packaging manufacturing plants in Germany and the Netherlands and was limiting freedom to obtain packaging materials to an excessive extent (2).

On 14 December 1972, the Commission sent an order to deliver to the subsidiary (Instituto chemioterapico Italiano - I.C.I.) of an American company and the parent company (Commercial Solvants Corporation - C.S.C.) which together had a dominant position on the Italian market in aminobutanol and nitropropane. These firms were taking improper advantage of this situation to refuse deliveries of aminobutanol and nitropropane to the Italian firm Laboratorio Chimico Farmaceutico Giorgio Zoja S.p.A., which needed them for the manufacture of dextro-ethambutol, a medicinal preparation used in the treatment of tuberculosis of the lungs.

To prevent I.C.I. and C.S.C. from continuing their boycott against Zoja, the Commission imposed on them a daily charge of 1,000 units of account payable from the thirty-first day following that on which I.C.I. and C.S.C. were informed of the obligation imposed upon them in respect of each subsequent day on which they continued to fail to comply with the Commission's order. In addition, they will have to pay the Commission a fine of 200,000 units of account for abuse of a dominant position (3).

The sugar cartel decision proves that the notion of abuse of a dominant position can be invoked in conjunction with that of the prevention, restriction or distortion of competition.

European Coal and Steel Community,, "Fifth General Report" op.cit., p. 107.

⁽²⁾ Ibidem, pp. 107-108.

⁽³⁾ Bulletin of the European Communities, Dutch version, 31 December 1972, pp. 299/51 to 299/58.

However, it must be admitted that, hitherto, the Commission has only invoked Article 86 in exceptional cases; this is probably attributable to the need to allow European undertakings to concentrate into larger units in order to be better equipped to withstand competition from the subsidiaries of American companies.

Before concluding this outline of the Commission's action in the field of competition policy, it should be mentioned that, since the fusion of the Communities, the Commission has also been responsible for the application of Articles 65 and 66 of the Treaty of Paris setting up the European Coal and Steel Community.

Article 65 of the Treaty of Paris, like Article 85 of the Treaty of Rome, is directed against agreements, decisions by associations of undertakings and concerted practices which may directly or indirectly prevent, restrict or distort the normal effects of competition within the Common Market, whereas Article 66 covers concentrations, stipulating the prior agreement of the Commission for all mergers of undertakings in the coal and steel sectors (1). In general, the Commission has not opposed mergers because, in view of the virtually permanent state of crisis in the coal sector and the periodic crises in the steel sector, rationalisation was desirable. In 1969, for instance, it sanctioned the merger of two major Belgian iron and steel undertakings, Cockerill-Ougrée-Providence and S.A. Métallurgique d'Espérance-Longdoz, because it was of the opinion that, together, they did not hold a dominant position in the Common Market considered as a geographic entity (2).

This does not mean that the Commission has not taken action against mono-polistic tendencies in the coal and steel sectors.

In 1970, for example, it imposed fines on 25 German undertakings which had operated quota and price agreements in their purchases of scrap metal for a number of years (3).

(3) Idem, Fourth Report, op.cit., p. 30.

⁽¹⁾ L. CARTOU, op.cit., p. 180.

⁽²⁾ European Coal and Steel Community, Third Report ..., (1969), op.cit., p. 63.

CONCLUSIONS.

- 1) Currently, the Belgian Government's prices policy machinery falls into the following four categories of systems :
 - a) The normal prices system, as introduced into Belgian legislation by the Legislative Decree of 1945. In the absence of a contract programme or maximum price, the charging of prices higher than normal prices is prohibited. Furthermore, irrespective of the prices system, undertakings are never allowed to make abnornal profits.
 - b) The price increase declaration system which, since the Ministerial Order of 1 September 1966, has in principle been applied to all prices, even those fixed by order, in cases where the prices charge pior to a decision to make an increase are within the prescribed maximum.
 - c) The programme contracts system.
 - d) The maximum prices system, under which maximum prices are laid down for sectors or individual products (1).

In practice, the price increase declaration system has been the main mechanism by which price rises have been held back. The main feature of the policy of the Belgian Ministry of Economic Affairs and the Commission for the Regulation of Prices is the holding back of inflation by imposing a waiting period on undertakings wishing to increase their prices. This system for holding back prices is quite efficient and, to some extent (although other factors, such as the high level of savings and trade unions' moderation of their demands, must also be borne in mind), explains why the rate of inflation has generally been lower in Belgium than in neighbouring countries.

M. VAN HECKE, "Politique des prix - quelques cas nationaux caractéristiques, Bénélux", OECD, to be published in 1973.

However, it has the weakness of placing undertakings which are confronted regularly with increases in the prices of their raw materials or wage demands which cause substantial rises in their cost prices, in a position of disadvantage.

If the curbing of price increases is taken too far, it creates distortions. Investment will be channelled towards sectors in which a sharp rise in productivity combined with constant prices can enable profits to be increased, rather than towards sectors which are only able to meet wage demands from the trade unions by increasing their selling prices. To avoid such distortions, the Minister of Economic Affairs should oblige sectors where there are sharp rises in productivity or reductions in the prices of raw materials or auxiliary materials to reduce their prices.

As was pointed out in Section 2, the Commission for the Regulation of Prices has, as yet, only proposed price reductions to the Minister in exceptional cases. Even the recent devaluations of the dollar did not prompt any attempt on the part of the commission to bring about reductions in the prices of goods imported from the dollar area.

A further criticism can be levelled at the Commission for the Regulation of Prices, namely that its policy is influenced unduly by considerations of full employment. The trade union members of this commission sometimes allow themselves to be convinced of the need to increase the selling prices of certain products when the employers' representatives are able to prove that, if prices are not increased, certain large undertakings will be obliged to close down and(or) lay off large numbers of workers. This provides artificial sustenance for old undertakings which, although they provide work for many people, are badly managed and have out-of-date methods, so that they act as a brake on the progress of average productivity and therefore have an inflationary influence on the Belgian economy.

2) The efforts of the Common Market Commission to eliminate agreements and concerted practices whose object is to prevent, restrict or distort competition and abuses of dominant positions, have increased considerably in scale over recent years. It is very difficult to assess the results of such a policy. During a period of inflation, the enlivening of competition in a given sector

will not generally cause prices in this sector to fall but, at best, it may slow down the rate of increase. Since the movements of prices are influenced by other factors (rise or fall in raw materials prices, movements of wages and social contributions), it will be necessary to carry out a sector-by-sector and product-by-product analysis to draw any valid conclusion. We have not been able to devote the necessary attention to such an analysis, since this would fall outside the scope of our study, and cannot therefore draw any valid conclusions.

Nevertheless, on the basis of the brief outline of the Commission's action in the sphere of competition policy, we can make the following observations :

- a) Among the firms which have notified agreements or concerted practices and (or) which have been fined by the Commission, there is a large number of Belgian firms, which suggests that restrictive practices are often employed by Belgian commercial and industrial firms. This is probably attributable to the shortcomings of Belgian law on competition. Indeed, the Belgian Law of 27 May 1960 on "protection against abuse of economic power" confers very limited powers on the Minister to combat restrictive practices and, moreover, has only been applied to a limited extent (1).
- b) During recent years, the Commission has devoted most of its attention to action against the large cartels. To be able to do so, it has adopted a very tolerant attitude towards exclusive representation agreements and licensing agreements, about which it has received large numbers of notifications (2).

The Commission only refuses to issue exemptions in cases where the exclusive representation enjoys total territorial protection.

⁽¹⁾ Although the Law authorises the commissioner responsible for enquiries to carry out investigations on his own initiative in order to obtain information about any abuses of economic power in a given sector, nearly all enquiries are instigated by the lodging of a complaint. The commissioner then attempts to obtain a settlement between the complainant and the defendant.

⁽²⁾ As a result of the adoption of this policy, it was possible to reduce the number of files to be processed from 36,401 on 31 March 1965 to 2,873 on 31 December 1972 (European Economic Community, Hautière Committee, report on the activities of the Community (1 April 1964-31 March 1965), op.cit., p. 70 and European Coal and Steel Community ..., Sixth Report, Dutch version, op. cit., p. 67).

The Belgian courts have also adopted this distinction and apply it when they have to judge on the validity of an exclusive sales agreement not notified to the Commission. The commercial court of Brussels ruled on 6 September 1966 that an exclusive sales contract conferring absolute territorial protection was void if not notified in good time to the Common Market Commission (1).

The Liège court of appeal, for its part, ruled on 6 June 1966 that such a contract which did not confer absolute territorial protection was valid, and that the fact that it had not been notified to the Common Market Commission entitled the Belgian judge to rule himself as to whether or not such a contract constituted an infringement of Article 85, paragraph 1, of the Treaty of Rome (2).

Since most judges restrict themselves to upholding the principle of adherence to contractual obligations, it follows that most of the exclusive sales contracts notified to the Commission will be declared valid as long as there is no proof of absolute territorial protection.

The desirability of such a development is open to question, since it may be argued that it will contribute to the maintenance of large numbers of representation agreements under which the profit margins to the exclusive representative are higher than those normally obtaining in wholesale trade. Although tax differences must also be taken into account, the wide differences between the prices of identical products in various countries of the Community are largely attributable to the activities of exclusive representatives, who contribute to the development of inflation through the maintenance of their excessive profit margins.

A similar problem arises in the case of contracts which impose prices. Article 85, paragraph 1, of the Treaty of Rome mentions such contracts among the practices which are infringements "per se", but Order 17 classifies them among the minor infringements on condition that only one supplier is involved (3).

In its sixth report (1962-63), the Commission acknowledged that it is difficult to determine the role played by contracts in which prices are imposed in trade between the Member States (4) and, in a reply to a question put by the Dutch member of parliament, Mr. Nederhorst, it stated that Article 85 is not applicable to a system of imposed prices unless it influences trade between Member States (5).

- (3) G. VANDEWALLE : "Droits d'exclusivité et prix imposés dans le Marché Commun", Tijdschrift voor Sociale Wetenschappen, 1965, No. 2, p. 304.
- (4) Ididem.

Anwendung der Art. 85, Abs. 1 auf einen Alleinvertriebsvertrag mit Gebietsschutz, Wirtschaft und Wettbewerb, 1967, No. 5, pp. 362-363.

⁽²⁾ Anwendung der Art. 85, Abs. 1, auf Alleinvertriebsvertrag ohne absolute Gebeitsschutz", Wirtschaft und Wettbewerb, 1967, No. 5, pp. 358-359.

⁽⁵⁾ H. VAN DER GROEBER : "Le rôle de la concurrence dans le Marché Commun", Voorlichtingsdienst van de Europese Gemeenschappen, Brussels, 1966, p. 13.

Since most of these contracts are only "national" in character, it is not for the Commission to intervene, so that it is for national judges to decide. The Belgian courst have always upheld such contracts (1). It follows that the situation regarding contracts in which prices are imposed is unlikely to evolve in the same way in Belgium as in Germany, where such contracts are only valid if the product is not sold anywhere at a lower price than the imposed price. Now the opposition of Community law to contracts prohibiting exports or re-exports has made it impossible for German producers to maintain a system of imposed prices intact (2). The German Government has changed the law to make the imposition of selling prices on retailers prohibited as from 1 January 1974, although the recommendation of selling prices by a supplier to his retailer client will still be permitted (3). At its meeting of 5 December 1972 on the subject of counter-inflationary measures to be taken, the Council of Ministers called upon Member States to be strict in the application of legal sanctions against contracts which impose prices (3). The effect of such a policy is to make this practice disappear completely in Germany, whereas the recommendation is without significance in Belgium, where there are no laws against this practice (4).

- (2) European Coal and Steel Community ..., Third Report, 1969, op.cit., p. 64.
- (3) W. SCHULTER : "Wohin geht es mit der Preisempfehlung", Der Verbraucher, July 1973, pp. 8-9.
- (4) E.W.G. : "Wettbewerbspolitische Massnahmen zur Inflationsbekämpfung, Wirtschaft und Wettbewerb 1973, No. 3, pp. 182-183.

⁽¹⁾ On 13 May 1958, the fourth chamber of the commercial court of Brussels clearly set out the principle which forms the basis of the position taken up by the Belgian courts: "The legitimacy of imposed prices is beyond question insofar as they do not impinge on public order (by the infringement of a regulation currently in force) or the public interest, in the proper sense of the term." Moreover, the same court ruled that : "Independently of the contractual relationship between the parties, the existence of the agreement represents a value which is part of their assets and, whether it confers absolute or relative rights, the agreement, by the terms of Article 1382 of the Civil Code, must be honoured by all parties. A third party is at fault accord-ing to the terms of the said Article if, without being motivated by any malevolent intention towards the injured party but solely by the desire to further his own interests, if he causes detriment to the assets of the said injured party despite his knowledge of the existence of the contract, and this by virtue of the damage which he causes to these assets by his action". (Revue de la Jurisprudence belge, 1958, pp. 436-437.) This ruling makes any person who sells below the price generally imposed on retailers liable to damages, even if he has not entered into a contract with the supplier under the terms of which he is obliged to adhere to the imposed price.

In conclusion, therefore, it may be stated that, although action by the Commission against the large cartels can exert a moderating influence on the rise in prices, this should not lead to neglect of the need to stimulate competition in the distributive sector also.

The shortcomings of Belgian legislation and the conservatism of Belgian courst, compounded by the great caution of the Common Market Commission in this area, have so far proved obstacles to the establishment of a satisfactory policy on competition in the distributive sector.

Chapter VII : Conclusions and considerations of economic policy.

In Chapter I, we stated that the purpose of this study was to determine the extent to which the movements of certain non-wage incomes have contributed to the initiation, exacerbation or curbing of inflationary trends.

Analysis of the movements of the various forms of non-wage income, the components of the consumer price index, profit margins in the retail trade and crafts, the per capita incomes of members of the professions, average rents and interest rates, has enabled us to register a series of facts and relationships which, taken overall, give an idea of the probable mechanisms by which movements of the various forms of non-wage income influence trends in the cost of living.

Since there were only a few short pauses in the rise in consumer prices during the period under consideration, it cannot be claimed that any increase in non-wage income was responsible for initiating an inflationary trend. However, in the light of the development of the "services" component of the consumer price index, we can assume that, at various stages, the rise in prices for the services rendered by self-employed workers prevented an economic recession from causing the cost of living to fall. Before 1967, the consumer price index only included the prices of two services rendered by self-employed workers, namely hairdressing and laundering, so that it was extremely difficult to assess the effect of increases in certain forms of non-wage income on the cost of living.

Since 1967, the prices of more services (for instance, shoe repairs, car servicing, resturant meals, hotel rooms, medical services) have been included in the calculation of the consumer price index. As a result, it is possible to observe that the standstill in prices which could have been expected during the last quarter of 1967 did not materialise because of a sharp rise in the prices of services rendered by self-employed workers (1). The same phenomenon occurred again during the second quarter of 1970. Following an economic downturn in March 1970, food and non-food product prices rose more slowly, but at that time the prices of services rose by 3.5% in a single quarter, thereby reactivating the inflationary wage-price spiral (2).

A question arises as to the main cause for the increases in the charges of self-employed workers and members of the professions which frequently occur

⁽¹⁾ Cf. above : Chapter IV, Section 3.

⁽²⁾ Ibidem.

at times when the economy is running down. A possible answer is the need of the middle classes to safeguard their incomes against the effects of the erosion of the value of money. Since there is no moving scale system for self-employed workers and members of the professions, it is normal that they too should wish to adjust their nominal incomes after a period during which the cost of living has risen in order to maintain the same standard of living. Analysis of the amounts by which they adjust their incomes shows that they generally exceed the rise in the cost of living. In other words, self-employed workers and members of the professions have not merely maintained their standard of living, they have improved it. Since the growth in productivity of the work os craftsmen and members of the professions is virtually nil or very limited, the professional associations of these middle class categories have needed to apply substantial rises in charges in order to achieve an increase in their members' real income. These categories have not been content to maintain their traditional level of real income, because they have felt a psychological need to ensure that a differential subsists between their standard of living and that of the social classes (manual workers, clerical workers, farmers) whose station they consider to be inferior to their own.

While manual and clerical workers and farmers have become able to afford categories of goods (cars, television sets) and services (holidays abroad) which had previously been the exclusive preserve of the well-off, the latter have found new consumer durables (motor boats and sailing boats, villas and flats by the sea or in the country) and services (cruises, luxury sports like golf and riding) which those with modest incomes are unable to afford.

As has been pointed out by the English economist, M. SHANKS, it is mainly the lower strata of the middle classes, that is small traders, craftsmen and middle managers, who tend to be obsessed by the need to assert themselves by forms of consumer spending which distringuish them from the working class (1). It is for this reason that any substantial improvement in the standard of living of manual and clerical workers increases the financial aspirations of the middle classes, and a sharp rise in wages towards the end of a peak in the trade cycle is often followed by no less substantial a rise in the incomes of craftsmen and members of the professions during the next phase of the cycle, which is a recession.

M. SHANKS : "The Stagnant Society - A Warning", Harmondsworth 1964, 21st edition, pp. 169-170.

Since the volume of demand for most of the services offered by craftsmen and members of the professions is only influenced by economic conditions to a very limited extent, they have no call to fear that they will bring a sharp fall in turnover upon themselves by increasing their charges during a period of recession.

We would point out that the theory of increases in the incomes of craftsmen and members of the professionals is entirely consistent with the theory of "Productivity Inflation" as developed by P. STREETEN (1). Sharp rises in productivity in monopolistic sectors lead to substantial increases in wages in these sectors. Such increases inevitably lead to adjustments of the wages of manual and clerical workers in less prosperous sectors. The rise in prices resulting from these adjustments and the improvement in the standard of living of the entire working class triggers off middle class claims, and this causes inflation to accelerate or prevents it from decelerating in response to the influence of the deflationary forces set up by the improvement in productivity and the absorption of purchasing power by rising prices.

The position of small traders is not entirely parallel to that of craftsmen and members of the professions, since they as a group do not enjoy a monopoly, but have to cope with competition from the large stores, chain stores, cooperatives and hypermarkets and discount stores in particular. Moreover, their turnover is generally more sensitive to cyclical movements than those of craftsmen and members of the professions. It follows that they generally avoid increasing their prices unless they are able to give their customers solid reasons justifying their decision to do so. An increase in the wholesale prices of the goods sold in their shops gives them the opportunity to increase their profits; in other words, they apply the "mark-up" system, adding their contribution to the upward trend.

If the wholesale prices of certain products fall again following a fall in raw materials prices, the intermediaries avoid passing on the benefit of this to the consumer, thus taking advantage a second time of movements in wholesale prices to increase their profit margins.

In Chapter V, we calculated the progress of the overall gross margin of traders and craftsmen on products sold to the consumer.

According to the results of these calculations, profit margins, taken overall,

⁽¹⁾ Cf. above: Chapter I, Section 5.

varied little from 1953 to 1970, but probably tended to fall from 1971 on as a result of the increasingly strong competition from the multiple chain stores.

In Chapter IV, we proved that neither the "mark-up" system (cumulative increase effect) nor the device of increasing profit margins when wholesale prices fall (ratchet effect) can be applied to all products. For example, if wholesale price fluctuations are seasonal in character (potatoes, coal) and are therefore fairly well known to the consumer, it is not possible for intermediaries to keep their prices up when there is a seasonal fall without running the risk of losing business.

Movements in income from rents had a moderating effect on the rise in land prices and building costs on housing costs. This is partly attributable to the moderating influence on rents exerted by the enormous stock of old housing and partly to government policy, which influenced rents for modest housing in particular by providing low-rent accommodation for large numbers of families through the intermediary of the companies approved by the Société Nationale du Logement, and also by helping many families to build or buy homes. As for interest, the net yield from capital invested in time deposits, savings accounts, securities or bills was virtually nil or at least very mediocre.

Moreover, the "rentier" as such has almost completely disappeared and a high proportion of investments today are not intended to provide an income to be spent, but to compensate for the loss of value of capital with the income from movable property.

The overall amount of capital investment at notice with the banks, in savings accounts, securities or notes increased to such an extent between 1953 and 1972 that the annual total of gross interest rose sharply. Since a high proportion of this interest was incorporated into the capital so that the capital would retain its purchasing power, this enormous income in the form of interest did not give rise to demand-pull inflation.

In view of the movement in prices, it must be acknowledged that the lending rates of the S.N.C.I. remained fairly moderate throughout the period. Even during the rapid inflation in 1971-72, the net interest rate (after deduction of the price increase coefficient) did not rise above 6% (1).

(1) Cf. above : Chapter V, Section 3 (Table 23) and Section 4 (Table 26).

Thanks to their policy of low borrowing rates, the banks were also able without difficulty to apply fairly moderate lending rates. They nevertheless achieved large profits. This policy encouraged investment, thereby contributing to the maintenance of economic activity at a high level virtually throughout the period from 1960 to 1972. Indeed, the recessions were only short-lived and caused no major falls in production. On the other hand, this policy helped to push prices up by making bank loans easy to obtain.

Since it did not fall within the scope of our study to analyse the monetary aspect of inflation, we have not paid very much attention to the effects of movements of interest rates on the trade cycle. We would merely mention that the trends in the financial institutions' borrowing and lending rates alike follow the trends in the trade cycle at a remove in time of one or even more years; in other words, from this viewpoint, the classical theory of the trade cycle remains completely valid.

The complex nature of inflation calls for prudence in the selection of economic policy measures to curb it. Since structural inflation as we know it today is primarily the consequence of clashes between the excessive material aspirations of the various social classes, any policy whose objective is to combat the rise in the cost of living must run counter to many economic interests. In order to pursue a rational counter-inflationary policy, therefore, the government must first determine the extent to which it is willing and able, bearing in mind possible resistance from the various interest groups, to tone down their demands to make them consistent with greater price stability. This is primarily a political problem rather than an economic problem.

The government must make a choice between two political options. If it wishes to maintain the existing structures, it must oppose all wage increases which are in excess of the average growth of productivity in the economy as a whole. If, on the other hand, it wishes to make progress towards a more egalitarian society, it can show greater latitude towards the working class and concede wage increases whose volume is greater in percentage terms than that of the average productivity of the whole economy, but which are justified by the rise in average productivity in the industrial sector.

If it does this, however, it will have to resist the attempts of the middle and upper classes to increase their incomes in parallel with those of the working class. In most of the countries of Western Europe in general, and in Belgium more specifically, gradual progress towards material equality has the better chance of being accepted by the majority of the population, so that a policy designed to achieve this objective could also call for the active cooperation of this majority.

In the context of such a policy, it is possible to bring home to the various social classes the limits which they should place on their material aspirations if they wish to avoid the development of a trend towards galloping inflation which would be damaging to the interests of all.

As regards small traders, craftsmen and members of the professions, the growth in their incomes must be kept within reasonable limits, partly by means of a price controls policy and partly by competition policy.

Price controls, as applied in Belgium, have been fairly effective, at least from the point of view of holding down the rise in prices.

The effectiveness of the policy on prices could be improved further, notably by the following measures :

- a) Closer coordination between the bodies responsible for policy on prices : the minister, the prices department, the Commission for the Regulation of Prices and more specifically the economic inspectorate. The results of the minister's recommendations to the various sectors are largely dependent on the checks carried out and the information fed back to the decision-making bodies.
- b) The setting up of economic tribunals whose jurisdiction would include matters relating to prices. Indeed, the civil courts are rather conservative in their attitude and look upon the concept of a direct policy on prices with little favour. As a result, the sanctions imposed for infringements of the regulations on prices are often neither very stringent nor exemplary.
- c) Extension of the competence of the commission to cover all prices and charges without exception. It is desirable to avoid the setting up of ad hoc committees with competence for prices in one or other field, such as electricity or oil. A special problem arises in relation to prices over which the national authorities have no competence, such as prices for ECSC products and farm prices. No decision should be taken in connection with such prices until there has been consultation with the national bodies responsible for the general level of prices.

- d) Greater caution regarding the fixing of the charges for public services and the modification of rates of indirect taxes and excise duty directly affecting the level of prices. All decisions in this area should take account of the state of the economy, the nature of the service and the timing of the implementation of such measures in order to avoid adding impetus to the rise in prices.
- e) Strengthening of the representation of consumers on the commission, which could check the temptation to resolve certain industrial policy problems by means of price increases to provide resources for self-financing.
- f) Abolition of all gearing of the prices of goods and services (for instance, electricity charges, insurance rates, rent, water, etc.) to the consumer price index. Where prices are geared to the index in this way, they can be increased without any need for justification on the basis of trading results. Furthermore, this constitutes a form of discrimination against undertakings which are obliged to declare price increases. The widespread introduction of the gearing of prices to the consumer price index would lead rapidly to a situation in which prices rise automatically by a ripple effect.
- g) The laws on the declaration of price increases should be extended to cover the distributive sector also. The minister should have powers to intervene over excessive profit margins in the distributive trades.
- h) The commission should pay more attention to opportunities to bring down certain prices in order to counteract the tendency among producers and intermediaries to take advantage of lower cost prices to increase their profit margins.

In the case of products incorporating raw materials whose prices fluctuate sharply, the programme contract system is the most suitable method by which selling prices can be adjusted to variations in cost prices. However, as we saw in Chapter VI, the trade associations are displaying little eagerness to enter into such agreements, since they know that if they do, their members will be obliged to reduce their prices whenever their raw materials prices fall substantially whereas, in the absence of such an agreement, they will not be obliged to do so. It is necessary for a committee to be set up in the commission to follow trends in the wholesale prices of the various raw materials on a continuing basis and to submit suggestions to the minister concerning prices which should be reduced.

As regards the monopolistic sectors where productivity is generally rising relatively quickly, it would be desirable for the selling prices of the products of these sectors to be subject to strict controls to prevent them from being kept at levels far in excess of real costs.

In order to determine the sectors in which the structure of the market is monopolistic or oligopolistic in character and the prices for which stricter control measures are necessary, it would be desirable to set up a commission of specialists along the lines of the "Monopolies Commission" in England, to study the markets in various products and report regularly to the Minister of Economic Affairs and the Commission for the Regulation of Prices.

It is also regrettable that the Belgian Law of 27 May 1960 on "protection against abuse of economic power" does not give more scope to the Minister of Economic Affairs to take action against firms which increase distributors' margins on their products artificially by the imposition of prices or by exclusive representation arrangements.

As is proved by the example of domestic appliances, it is sometimes possible to eliminate systems of imposed prices by the conclusion of a programme contract. However, the number of such contracts remains too low for this policy to have had any clear influence on the level of prices.

A law against the imposition of prices on distributors would cause the Belgian courts to cease to uphold contracts stipulating such obligations even when they are shown to be against the public interest or when the defendant is not party to such a contract but, by selling the products in question at a lower price than the price imposed by the producing or distributing firm, has prejudiced the interests of that firm (1).

As regards exclusive representation agreements, the Commission for the Regulation of Prices should pay closer attention to movements in prices determined by intermediaries enjoying such advantages. Where an exclusive representative is seen to be charging prices which are substantially higher than those obtaining in the other countries of the Community, the commission should recommend the imposition of a maximum price to the minister.

All these measures are consistent with the maintenance of competition, since they are only designed to take effect in cases where competition has been excluded from the market. In addition, it would be desirable for the Belgian Government to follow the example of the governments of neighbouring countries in establishing a policy designed to promote competition at the level of distribution as well as that of production. Such a policy should be a national extension of the policy pursued by the Common Market Commission. Since this Commission devotes most

(1) Cf. above : Chapter VI, Section 4.

of its energies to taking action against the large cartels, thereby seeking to revive competition between major producers, the action of the Belgian Government would be best directed against contracts and restrictive practices likely to restrict competition at the distribution stage.

This calls, not only for a complete review of the Law of 27 May 1960, but also for great vigilance in order to detect measures likely to restrict freedom of establishment.

In particular, it is necessary to prevent organisations invested with disciplinary powers over their members, such as the chemists' association, from abusing such powers with a view to limiting access to their profession. Although some restriction on the right to open new dispensaries is desirable, it would be dangerous to allow decision in this matter to lie exclusively with the chemists' association. The chemists are of course entitled to oppose the opening of an excessive number of new dispensaries, but they should not abuse this right in order, for example, to eliminate competition from cooperative dispensaries whose practice of allowing discounts brings down the real cost of medicines to a significant degree for a substantial sector of the population.

Similarly, although some restrictions on the opening of large new stores appear justified, it would be dangerous to make this a generalised principle and take advantage of the town planning laws to prohibit the opening of all new stores of the supermarket type. In fact, as we pointed out in Chapter V, Section 1, stronger competition from the large stores probably prevented small traders and craftsmen from "marking-up" price increases, thereby keeping their relative profit margins at a constant level. It would be a shame to suffocate this revival of competition by measures designed to strengthen the effective monopoly enjoyed by small traders and craftsmen in certain areas of the country while at the same time creating a privileged position in other areas of the country for the large stores already established.

We consider it desirable for various forms of distribution (small traders, multiple chain stores, department stores, supermarkets, cooperatives) to continue to co-exist, so that it will be impossible for any group to establish a dominant position.

It may be concluded from the analysis of movements in rents that new legislation restricting increases in rents is undesirable and that all the government's efforts should be concentrated on means of bringing down building land prices and building costs. The companies approved by the Société Nationale du Logement should be reduced in number by means of mergers. This would enable them to organize the building of houses and flats on an industrial scale and to standardize a large number of components, so that significant reductions in cost prices can be achieved through mass production. Such standardization has been carried out in the United States.

Land prices could be brought down by the introduction of a special tax on unused building land located in urban areas. Such a measure would encourage the owners of such sites to sell and would therefore bring down prices.

At the same time, the merging of the approved companies into larger units with greater financial resources at their disposal should enable them to purchase large areas of land at a time, which would enable them to buy more cheaply.

In order to curb the effect on building costs and building land prices of demand for flats and villas from wealthy persons wishing to have a second home, it would be desirable to limit the investment of enormous volumes of capital in such luxury purchases by introducing a tax on second homes like that in France.

Finally, in connection with economic policy regarding interest, it does not seem that the mediocre real interest paid on time deposits and savings accounts has caused any decline in investment; on the contrary, money was in abundant supply throughout the sixties, except in 1969, and this was caused by special factors explained above.

However, it may be that, if the upward trend in prices accelerates, many savers will realise that they are the victims of the erosion of the value of money and seek to invest their money in luxury articles as a hedge against monetary depreciation. Such a development would add the forces of demand-pull inflation to those of structural inflation.

In order to curb such a development, it would be necessary to increase borrowing rates above the rate of inflation, but such a measure would cause the banks to increase their lending rates, which are already above 12% for cash loans currently.

Although it is difficult to claim that hitherto, except in 1969, net interest costs (after deduction of the effect of the general rise in prices) have represented a serious obstacle to a significant number of industrial investments, it is clear that there are limits to rises in prices and interest rates which it would be better not to exceed. When rates are too high, available capital is channelled increasingly towards speculative investments (in commodities, for instance) and the uncertainty of the market prevents genuinely productive investment.

Above 10%, in fact, it is risky for a firm to contract a long term loan since it cannot be sure that prices will continue to rise so that the real rate of interest will remain well below the nominal rate in the future.

Consequently, what is required is an economic policy designed to attack the sources of structural inflation themselves, namely excessive claims from the various social strata, rather than certain of the consequences of structural inflation, such as the rise in nominal interest rates or the decline in the propensity to save.

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