

# COMMISSION OF THE EUROPEAN COMMUNITIES

COM(77) 549 final.

Brussels, 10 November 1977.

THE PROTECTION OF SAVINGS IN TIMES OF INFLATION

AND THE QUESTION OF INDEXATION

(Communication from the Commission to the European Parliament)

COM(77) 549 final.

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**COMMISSION  
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...Brussels.....

**DIRECTORATE-GENERAL  
FOR ECONOMIC AND FINANCIAL AFFAIRS**

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THE PROTECTION OF SAVINGS IN TIMES OF INFLATION  
AND THE QUESTION OF INDEXATION

I. PARLIAMENT'S MANDATE TO THE COMMISSION OF THE EUROPEAN COMMUNITIES

At the end of 1974, the Parliament's Economic and Monetary Affairs Committee discussing a draft resolution tabled by Lord Reay, examined the problem of the protection of saving in times of inflation, and in particular the possibility of "indexing" or "index-linking" savers' assets.

As a result of work carried out by the Committee together with the Commission, Mr. Hougardy presented a report and a proposed resolution on the indexation of savings, on 10 July 1975. The resolution was adopted by Parliament on 11 July 1975\*.

The Parliament's resolution calls upon the Commission "to examine further the entire range of problems connected with index-linking and more particularly the protection of savings".

Both Mr. Hougardy's report and discussions within the Committee show clearly that the protection of saving must be analysed in the general context of social policy and not within the restricted context of financial policy : in other words that the emphasis must be on the safeguarding of the assets of the small saver.

This is the general background of the present report.

\* The texts of Parliament's resolution and of Mr. Hougardy's report are given in Annex I.

## II. SAVINGS AND INFLATION - GENERAL CONSIDERATIONS

1. It is hardly necessary to point out here that one of the most dangerous consequences of inflation is that it changes, sometimes rapidly but always insidiously, the distribution of wealth and of incomes. The decline in the value of money spares the owners of real assets and those whose incomes are adapted to the general upward movement in prices : it gradually impoverishes owners of fixed income-bearing assets and those with fixed incomes. It is true that - sometimes long - experience of inflation has taught those concerned how to preserve the real value of their assets and of their incomes. But in this respect some are much better armed than others. All depends on the means of pressure available to them.

Firms may have their profits cut by price freezes, but eventually they will succeed in passing the increase in costs on to consumers, if they did not do so, their losses would quickly force them out of the market.

Wage-earners, for their part, have learned to protect their purchasing power by speeding up the frequency of wage agreements, which sometimes have full indexation clauses or even stipulate pay increases sometimes running well ahead of price increases.

The Government itself enjoys automatic indexation of its revenues through progressive tax scales, and even makes net gains as a result of "fiscal drag", when graduated tax rates are not corrected to take account of inflation.

Other groups in society also succeed in preserving part of the real value of their incomes : pensioners whose pensions are generally increased in line with the cost of living or else with wages, farmers protected by guaranteed prices, property-owners whose rents are fixed freely and which are regularly reviewed or simply linked to an index.

Savers are in a much weaker position, however, firstly because their investment income is, nowadays, nearly always a supplementary and not their main source of income, and secondly, and mainly, because savers are not usually organized. They have no pressure groups, and consequently are fighting an uneven battle with their debtors - usually public authorities, savings institutions, banks, or industrial and commercial companies.

2. The extent to which persons investing their savings in fixed income-bearing assets can defend the value of their assets depends on the comparative trends in the interest rates they receive on their investments and on the rate of inflation. When the rate of interest exceeds the rate of inflation, the saver suffers a loss of income, since part of the income is in fact a compensation for a loss of capital. When inflation exceeds the interest rate, the saver not only receives no remuneration on his capital but the capital itself also loses value, since the interest will not be enough to cover the value of the capital lost. This is exactly what has been happening in recent years. Since 1972, the real yield on savings deposits in all Community countries has been "negative" i.e., savers have suffered a real loss in the value of their assets (Annex II Table I). For bonds, the situation has not been quite as bad and actually improved in the first quarter of 1976 in countries having high rates of inflation (Annex II Table II).

It should be noted that the losses suffered by the saver are in fact larger than the real yield (resulting from a comparison of the nominal interest rate and the rate of inflation) would, at first sight, suggest; for in addition to the losses due to inflation, income tax must also be paid as well, this varying, of course, in relation with the tax scale and the taxpayer's total income.

- 4.
3. The counterpart of the impoverishment of savers is the unjustified remission of the real debt borne by borrowers. In other words, an unplanned transfer of wealth from creditor to debtor takes place because of inflation.

Such situations are by no means new. Thus, even when inflation hardly existed bond-holders suffered losses on their assets because of upward price movements in "boom" periods. But these were short-term situations which were reversed in the following phase of the business cycle, whereas the impoverishment of savers has in recent years become a permanent feature of the social situation in certain countries, though the pattern from country to country is by no means even.

The "stealthy spoliation" of savers has far-reaching implications for flows of funds between credit institutions, in financial markets and the employment of savings, and is profoundly unfair in that it aggravates social inequalities.

In the first place, the prospect that their debts will grow smaller as money depreciates is an incentive to some people to borrow to finance investments of low or even zero profitability. In other words, "easy money" leads to wastefulness with regard to investment, i.e. the wrong allocation of saved resources.

Secondly, as and when the saver becomes aware of his losses, he makes an effort to protect himself by altering the pattern of his saving. He will tend to lose confidence in traditional financial channels and prefer to place his saving in real assets : land, buildings, gold, works of art and collector's items. If he goes to extremes, he will stop saving altogether and go into debt to finance the purchase of such assets.

Behaviour of this kind makes the financing of productive investment difficult and at the same time makes for disequilibrium in the market in "inflation hedges", the demand for which is artificially boosted.

Moreover, and this is where the inequalities are really severe, a choice of different types of saving is available only to a minority of savers, i.e. the wealthier ones, who are in a position to diversify judiciously their investments and manage their assets with all proper care, precisely because of the scale of their resources. But most households have no access to types of saving which would enable them to escape from monetary erosion, either because the funds of which they dispose are too small or because their knowledge of finance is much too rudimentary. The small saver is generally familiar only with his savings bank or ordinary bank, and he holds his reserves, often for relatively long periods, in liquid or semi-liquid form, the very form that is most vulnerable to inflation.

This is the general background against which both savers and political leaders in most Community countries have campaigned for the indexation of savings.

### III. INDEXATION, AN OLD AND HIGHLY CONTROVERSIAL TECHNIQUE

1. In its widest sense, indexation consists in tying the nominal value of a claim or income or both, to changes in an index recording changes in the value of money. Its principle, then, is the maintaining of the real value of claims and incomes. The technique is not new. It has been used for many years for farm leases.

A famous historical example often mentioned is the indexed bond loan ("depreciation notes") issued in 1742 by the State of Massachusetts. But it was only after the second world war that indexation was brought in on a larger scale in certain countries, for example Finland, and, to a lesser extent, in France. The technique was later introduced in other countries, one of the best known being Brazil.

2. On a theoretical level, the problem of a monetary unit having constant purchasing power was considered by economists many years ago. In 1886, Marshall was arguing in favour of a monetary safeguard clause in long-term contracts; subsequently, Jevons, Keynes, Irving Fisher and other eminent economists came out in favour of the same device.

But these proposals were concerned with objectives different from those aimed at by the present supporters of indexation. The underlying theory was that money must be "neutral" if equilibrium is to be achieved in the economy. More specifically, the system of relative prices expressed in real terms, and the Walras-type general equilibrium, achieving optimum utilisation of resources must not be jeopardized by price variations of purely monetary origin.

3. More recently, other economists, including Milton Friedman and Modigliani in the United States and Herbert Giersch in Germany, have lent their support to the notion of indexing financial assets, since they believe that this technique can restrain certain types of behaviour and particularly decisions anticipating inflation.

Among economists, these views are in fact held only by a minority, since most economists feel that indexation tends to speed up inflation and, above all, that it makes inflation easier to "live with". The great majority of monetary authorities and of experts working in the financial field, in most of the countries, agree with this view.

These differences of opinion show that despite its apparent, and attractive, simplicity, indexation raises complex problems when it comes to actual implementation. In the material below, we shall leave aside the general problem of indexation and confine our analysis to the problem of applying the technique in the financial field.

#### IV. INDEXATION TECHNIQUES IN THE FINANCIAL FIELD

Technically, indexation raises two problems :

- (i) what index should be chosen ?
- (ii) how can index changes be reflected in the value to be indexed ?

##### 1. The choice of index

The ideal index would be one enabling the saver to invest in constant monetary units, i.e. to maintain unchanged the purchasing power of his capital and of his income whatever the vicissitudes arising. It stands to reason that the choice of the index should be determined by the eventual use the saver wishes to make of his funds, but obviously this goal is unattainable. In fact, it is the debtor who selects the index, and he does this on the basis of the state of the market and of the foreseeable reactions of savers.

In practice, two types of index may be distinguished :

- (a) general indexes : cost of living, wholesale prices, consumer prices, prices derived from the GNP;
- (b) "specific" indexes : prices of individual goods and services, production or profits indexes, debtor's turnover indexes.

Among the general indexes, the cost-of-living index is the one most popular among those who believe in indexation, and it has in fact sometimes been used. The objection to this choice, however, is that the sums saved may very well not in fact be intended for future current consumption.

An index of prices derived from the GNP would probably be more representative, but, in practice, it is very difficult to use since it is normally only established once a year and then only published after a time-lag.

There are sometimes practical reasons for using a wholesale price index : this is done for example in Brazil.

Special indexes are often chosen by the debtor in view of his own operations : e.g. indexation on the basis of the turnover or selling price of the products manufactured by the borrowing firm. An example of this is indexation based on the prices of certain public services, which, being administered prices, cannot measure accurately variations in the purchasing power of money since they often lag behind market trends.

Indexation may also be based on variations in the price of gold, of foreign currencies or variable-income securities (see below, in France). This type of indexation is, in fact, not very reliable for the creditor, especially whenever gold prices or foreign exchange rates fluctuate widely, or erratically.

Wherever the market offers a varied range of financial "products", it is not easy for the saver to choose between securities indexed against general indexes and securities indexed against specific indexes. The latter may at time yield gains exceeding the loss of value of money, but the opposite can also happen.

Securities indexed against general indexes are not affected by vicissitudes besetting a specific sector only, and by their very nature offer their holder more steady compensation over time.

In conclusion, if an index is to be a representative one for the purposes of indexation, it must be as comprehensive as possible and so designed as to escape the impact of exceptional fluctuations in the prices of certain goods or services. It must also be regularly and rapidly available.

## 2. Indexation methods

Once the index has been chosen, the way in which changes in the index are to be reflected in the value of the asset indexed must be determined.

A claim - bond or deposit - being generally interest-bearing, the first question arising is which of the two components - principal or interest - is to be indexed.

For clarity of discussion, two main choices may be distinguished :

- (i) the indexation of interest only : the nominal rate of interest of the claim is increased annually by the rate of inflation, the calculation of the interest being made on the unrevalued principal, this being repaid on maturity at nominal value.
- (ii) continued indexation of interest and principal : here, for the purposes of calculating interest, the nominal rate of interest of the claim is applied to the principal revalued at the same rate as the rate of depreciation of money. On final maturity, the principal is itself refunded plus an amount to cover inflation since the origin of the operation.

The results these two methods give are shown in the table below.

TABLE III

LOAN OF 1 000 UNITS INVESTED FOR FIVE YEARS, AT A NOMINAL INTEREST  
RATE OF 5 %. FULL REDEMPTION ON FINAL MATURITY. RATE OF INFLATION  
OF 10 % PER YEAR

Maturities	Non indexed loan			Interest-indexed loan			Interest- and capital-indexed loan		
	Interest	Princi- pal	Total	(1) Interest	Princi- pal	Total	(2) Interest	Princi- pal	Total
1	50		50	150		150	55		55
2	50		50	150		150	60,5		60,5
3	50		50	150		150	66,55		66,55
4	50		50	150		150	73,20		73,20
5	50	1000	1050	150	1000	1150	80,50	1610	1690,50
	<u>250</u>	<u>1000</u>	<u>1250</u>	<u>750</u>	<u>1000</u>	<u>1750</u>	<u>335,75</u>	<u>1610</u>	<u>1945,75</u>
	===	=====	=====	===	=====	=====	=====	=====	=====

(1) The interest is calculated by applying the nominal rate plus the rate of inflation to a constant nominal principal

(2) The interest is calculated on the principal revalued at the end of each year, i.e. 1 100 for the first year, 1 210 for the second year, 1 331 for the third year, 1 464 for the fourth year, 1 610 for the fifth year

It is clear that the saver is properly protected only if both principal and interest are indexed : when only interest is indexed, the extra remuneration which the saver receives each year is in fact compensation for the loss of value of the principal, and is therefore an early redemption of part of this principal. In fact, this type of indexation protects the principal only insofar as the lender re-invests this additional interest in other indexed contracts. The lender will suffer annually a diminution in the real value of any part of the income which he does not re-invest. The arrangement is also not favourable to the debtor, who must make, in the early years, higher payments than those he would have had to make had there been joint indexation of capital and interest.

In practice, indexation schemes are often more complicated, mainly because of redemption arrangements, but also because they

only use parts of the two standard devices described above, which they often combine. And this raises the question as to whether changes in the reference index are fully reflected in the asset indexed. This assumption has been made for ease of discussion in the two examples described above. Experience shows, however, that this is not always the case in actual fact. Indexation in contracts is often confined to only part of the capital or interest.

The impact of the index can also be curtailed by establishing an indexation which is proportional, but not equal, to variations in the index : e.g. for any increase of 10 % in the reference index, the component index is increased by only 5 %. In the early years of the experiments carried out in Finland, only half of the increase of cost of living was counted. Similar arrangements were also made in France for some bond issues.

The degree to which indexation is automatic can also vary : often, a minimum threshold of inflation must be reached before the mechanism comes into play at all. Thus, it is clear that implementing arrangements vary very widely and it is sometimes no easy matter for the saver to assess the real degree of protection which the various systems available to him do in fact provide.

#### V. THE POSSIBLE SCOPE OF INDEXATION OF SAVING

Apart from specifically technical aspects, the implementation of an indexation policy raises the problem of its scope. The scope may be defined either in respect of the asset, or in respect of beneficiaries, or in terms of both these factors. This amounts to asking two questions :

(i) which assets should be indexed ?

(ii) who should qualify for indexation ?

1. The answer to the first question generally takes into consideration the duration of the investment and the varying freedom of the saver to mobilize his investments at little or no cost.

For short-term assets, the depreciation in real value is small, except in times of hyper-inflation : the holder of liquidity can use it, or change the way it is invested, at any time.

This is the case for sight deposits in banks, and savings deposits when they are placed at short term and can be withdrawn without special restrictions. Thus, with regard to this kind of asset, the general rule is that only funds of a given amount immobilized for a minimum period can be indexed. This is what was done in Finland,

where bank deposits qualified only if they totalled at least about \$ 130 and were deposited for at least twelve months.

This problem of choice of maturity does not arise for bonds, which are not as easily mobilizable as deposits, in that they may be difficult to realize, and realization may even involve a loss for the bearer. In France, for example, financial indexation had been confined solely to this type of asset.

The situation is the same for life, endowment and retirement assurance contracts. These are long-term investment instruments. In practice, the creditor has very little scope for liquidating his investment or withdrawing from his contractual obligations if circumstances, whether monetary or other, lead him to have doubts as to the value of his transaction. The case for providing special protection against persistent inflation therefore seems sound in this case. Moreover, in practice, even in countries fundamentally opposed to indexation, many contracts of this kind provide for adaptation from time to time of the premium and of the capital subscribed. These are called "dynamic" endowment and retirement schemes, the euphemism concealing one form or another of indexation.

2. The second question - who should qualify ? - may seem surprising, for on the face of it all savers should enjoy equality of treatment. And, in fact, this has been so in most systems until recent years. The idea that only one type of saver should qualify for indexation is based on the point already made above that savers do not fight inflation on an equal footing, since their ability to overcome it is a function of their wealth.

It is therefore argued that in terms of social policy only the smallest savers should qualify for indexation. The definition of small savers can be established in terms of their income or their wealth, or some other criterion, as for example in the United Kingdom, where only retired persons qualify for one of the indexed savings schemes.

In practical terms, this policy means that indexed assets should be inaccessible if persons other than those specifically designated by the regulations are not to be able to acquire them.

## VI. THE CASE FOR AND AGAINST INDEXING SAVINGS

### THE MAIN ISSUES

The main issues in the argument about the indexation of saving are three in number :

- (a) the impact of indexation on the economy and more particularly the relationship between indexation and inflation;
- (b) at a more technical level, the impact of indexation on financial channels;
- (c) indexation as an instrument of a policy of social justice.

#### 1. Indexation and its impact on the development of the economy

##### Indexation and inflation

- (1) One of the main points in the controversy is, the relationship between indexation and inflation. Does indexation speed up or slow down inflation ?

Those in favour of indexation, with Milton Friedman in their van, emphasize the progressive adjustment which this technique permits when there is inflation. They say that indexation, of all contracts,

including financial operations, would reduce the economic and social costs, such as bankruptcies and unemployment, when a stabilization policy is first introduced.

This economic and social cost is in a certain sense the price to be paid to eliminate the distortions which have gradually built up in the price structure during a period of non-anticipated inflation.

If, on the other hand, indexation clauses were written into contracts on a permanent basis, people would behave as if the value of money was stable, thus eliminating the inflation factor in their transactions. All in all, indexation would thus curb the expansion of the inflationary process.

Two examples are often put forward to support this argument : the diverted flow of investment and the volume of public expenditure.

The flow of investment is diverted by inflation, and unless inflation is corrected, savers have an incentive to take refuge in investments which are economically not productive and investors also find that they can make a profit on investments which are in fact economically not profitable. By restoring the right real-value relationships, indexation would enable savings to be properly deployed and would induce the investor to study profitability criteria more carefully, so that the waste of investment would be eliminated by the need to finance such investment at real cost.

Those in favour of indexation argue that this factor is also important in respect of public expenditure : inflation is a sort of "invisible tax" charged without parliamentary approval and without special costs merely because tax scales are graduated, unless adjustments are made.

At the same time, central government, and the authorities in general, like all debtors in times of inflation, diminish the real value of their debts, the cost being borne by creditors. The result here is waste of public funds and it is also obvious that this situation is likely to seriously reduce governments' incentives to curtail inflation. Here again, by restoring real-value relationships, indexation would encourage a better allocation of public expenditure.

Lastly, it is often argued that indexation would lead to an overall increase in saving which would, of itself, tend to neutralize bouts of inflation. Some experts believe, in fact, that introducing indexation, particularly if on a general scale, would have exactly the opposite effect. This is because households would then have no worries at all about preserving the real value of their assets and the incomes accruing from them.

- (ii) The opponents of indexation concede that the first stages of inflation, when not anticipated and incorporated into the calculations made by transactors, lead to distortions in the allocation of resources. They don't however believe, that it is proved that the introduction of indexation entailing some degree of acceptance of the phenomenon of inflation itself, can constitute an effective corrective mechanism.

In the first place, they point out that index-linking is tantamount to accepting the permanence of inflation and simply a method of tempering its most harmful effects. Being resigned to indexation amounts, in short, to abandoning any attempts to pursue an effective anti-inflationary policy. Since psychological factors have an undeniable role with regard to money, the public's confidence may be weakened for good. Even the announcement of indexation measures can sometimes aggravate inflation, although there is no way of checking or measuring this effect.

In the second place, accepting the principle of indexation of savings would mean accepting its application in all sectors of the economy and in particular to wages and social security contributions, rents and farm leases, and in general to all incomes. There is no argument economically and socially acceptable at the present time that can justify confining indexation to financial operations. In other words, virtually all transactions would be indexed. Now, in such a system, any inflationary pressure which could emerge in one or other sector would tend to spread and perpetuate itself : indexation cuts out the action of deflationary factors, which, in a non-indexed economic

system can counter and offset to some extent in certain sectors inflationary pressure emerging in others. Eventually, the price mechanism loses all its flexibility, price structures tending to become more and more rigid. This is an argument of some substance which was one of those accepted by the Finnish Government when it decided to drop the indexation clauses. Moreover, even if this risk could be accepted, other difficulties would arise, especially in financial markets.

## 2. The indexation of saving and its impact on financial markets

The repercussions of indexation of saving on financial markets are mainly a function of the behaviour of financial agencies when confronted with the solutions proposed to them.

With regard to the saver, the reply seems to be that he has every interest in obtaining indexation of his assets. Even here the situation is not completely simple. For the bond holder, the advantage is not obvious : the nominal interest on the indexed capital is generally low; practice shows that it seldom exceeds 3 - 4 %. On the other hand, non-indexed securities are issued at appreciably higher rates allowing, to varying degrees of accuracy, for inflationary expectations. It is likely that certain savers, who may in any case be put off by the complexity of indexation clauses, will be more impressed by the nominal rate than the real rate and will therefore prefer to subscribe to non-indexed securities. Nor, indeed, is their calculation necessarily wrong : they will make a capital gain if inflation slows down and if the cost of borrowing comes down below the terms obtaining when the securities were bought, provided, of course, that there is no early redemption clause.

For the owner of time and savings deposits, the situation is rather different. The savings are liquid or easily mobilizable. They are remunerated at rates lower than capital market rates and also generally lower than the rate of depreciation of money. The interest rates paid on these deposits are fairly often subject to a ceiling and, generally, may be changed unilaterally by the establishments taking the deposits. The only exceptions are for large deposits invested for fixed periods - these belong to a few companies and wealthy individuals.

The conclusion is that for the great majority of savings depositors, i.e. in fact the type of customer which is most numerous and least wealthy, indexation would definitely represent an improvement on present conditions.

The debtor's position generally consists in avoiding indexation. The medium- and long-term borrower may choose to get into debt at high nominal rates if he is speculating on an increase in inflationary pressure. In the opposite case, it would be in his interest to index his debts. Everything will depend on the use to which he intends to put the funds he is borrowing. If they are for the purpose of financing the acquisition of real assets, it is reasonable to take the view that the revaluing of the debts as a result of indexation is the counterpart of the revaluation of the real property which has been bought with the funds borrowed. Experience shows in fact that the medium- and long-term borrower will always endeavour to borrow at fixed rates, protecting himself against any decline in rates through the insertion of early redemption clauses in the contracts. In general, his position of strength on the market, vis-à-vis the creditor, enables him to achieve this objective. In time of great monetary instability debtors usually borrow "short" expecting to replace their debt with long-term borrowing later.

Borrowers accept indexation clauses only when they are legally obliged to do so or when the market forces them to do so. But in the latter case they will often attempt to curtail the mechanism of indexation through a range of devices, many of them very complex.

The reluctance of borrowers of liquid or semi-liquid savings to get involved in financial indexation is even greater than that of medium- and long-term borrowers. This is not surprising in view of the consequences of indexation, especially the changes it may lead to in the behaviour of savers vis-à-vis the financial markets and the credit institutions. It will suffice to analyse here the impact of indexation on the capital market, on the operations of financial institutions, and on the movement of funds abroad.

The appearance of indexed bonds on the fixed income securities market normally tends to create two compartments, that for indexed securities and that for traditional securities. Theoretically, the former should take the place of the latter, the market in conventional paper gradually freezing up. In fact, the actual movement is determined by the varying degree of pessimism in inflationary expectations. For example, recently, in Argentina, lack of confidence in money in a climate of strong inflation focused demand on indexed securities. On the other hand, a depreciation in money which savers believe to be purely ephemeral may dissuade them from abandoning non-indexed securities, which remain attractive because they have high nominal rates.

Another factor is the supply of indexed securities to the market. If their volume is limited, demand will bring the prices up to levels at which their yields are low, thus tending to reduce whatever advantage they may have over traditional securities. If there is a sufficient flow of indexed securities, they will tend to become the rule, and they will gradually oust non-indexed issues. This happened in Finland, and it is the rule in Brazil. Equilibrium situations between the two compartments do also occur, as happened in France in the 1950's.

Nevertheless, generally speaking, the existence of securities the issue and yield terms of which are necessarily different has, among other disadvantages, the disadvantage of making the market that much more difficult for savers to understand. The inability to establish accurate inflationary expectations and the diversity of indexation clauses aggravates this problem. Savers are thus no longer able to compare the advantages of the issues offered to them and may eventually decide to avoid this type of investment altogether.

For banks and financial institutions, a considerable proportion of whose resources are made up of time and savings deposits, the implications of the introduction of indexation are a good deal more complex. At first sight, it could be argued that the indexation of new liabilities should lead to a parallel indexation of new lending.

But this situation, which, here too, would lead to the creation of two different financial markets, would be difficult to maintain : a large part of indexed deposits would be the result of the mere conversion of existing assets into indexed deposits and not of new liquidity or new savings. This phenomenon would be particularly strong within the European Community, where the volume of accumulated saving is very large. In short, indexation would spread retroactively to all bank and financial institutions' liabilities. The problem would then arise of the review of loans outstanding. Now, very often, the banks are free neither to terminate nor to change the terms of their loans, which constitute the bulk of their assets.

even if they had this right, they could not use it without creating cash difficulties for their borrower customers which would in some cases be insoluble. Financial intermediaries would therefore in the last analysis have to bear the costs of the retroactive indexation. They could do so only with government aid - hence an additional cost for society - or through raising the terms for new loans more than in proportion with the cost of the new savings indexed, resulting in a very sharp increase in interest rates with all its implications for the economy. It is often argued that this would not happen since only part of existing savings would qualify for indexation, the scope of indexation being often restricted by conditions with regard to the amount or the duration of the deposits. The result would be that the average cost of funds borrowed by the banks and financial institutions would fall short of that of the liabilities indexed. This reasoning would be sound if the various banking and financial institutions had the same pattern of liabilities. But it is no secret that this is not the case and that indexation would involve uneven costs from one establishment to another, which, by the same token, would distort competition. At all events, the fear of disturbances which indexation of savings would engender in financial markets goes far to explain the limits which are generally set to the indexation mechanism. As we have seen, these limits can be implemented by partial indexation, by deferring the effect of indexation or by restricting the choice of indexable assets.

The first two methods are extensively used in indexation schemes, often in the transitional phase preceding either fuller indexation or the termination of indexation. They are partial compensation

decided on by the authorities or granted by the borrower. For this reason the saver regards them as being quite arbitrary; in the extreme case, he may well be concerned only with the loss which he will eventually have to suffer.

Confining indexation to certain classes of financial asset is also a common practice. In this case indexation is applied either, to government stock only, or to all securities except deposits, or to certain classes of deposit defined in terms of amount or duration. This technique can be effective, in that it tends to guide liquid saving towards long-term employment, thus helping to reduce inflationary pressure. It can also have disadvantages, for example the public sector could monopolize an excessive share of savings resources by reserving to itself the right to index its liabilities. In the last analysis, confining indexation's field of application inevitably results in difficult decisions.

Another question is that of assessing whether the decision taken in isolation by a country to authorize savings indexation influences this country's capital movements across frontiers. Past and present experience suggests that this is not the case. The reason is that a country embarking upon a process of indexation is generally suffering from a high inflation rate reflected in the deterioration of its exchange rate, which may exceed, by far, any benefit a foreign investor could hope to reap from the indexation of his assets.

None the less, in theory, the problem could arise between several countries whose currencies were depreciating at comparable rates whilst only some of them were introducing indexation schemes. Provided that these measures were not confined to residents only, the indexing countries could well attract large inflows of foreign capital, movements that might well be unwelcome to the other countries.

### 3. The indexation of saving as an aspect of social justice

The above arguments are concerned with general equilibria in the economy, but there are other arguments connected with the social aspects of indexation. Indexation, it is argued, could bring to an end the transfer of wealth from creditors to debtors which is the stealthy but inexorable result of inflation. In overall terms, this assertion cannot be challenged, but in respect of individual situations, it overlooks the fact that the transfers may in fact occur within the same portfolio of a single owner. A given saver may suffer losses on bonds and other claims, because of inflation, but these may be partly offset by the lightening in the debt burden contracted to purchase real estate.

On the other hand, the small saver who cannot go into debt cannot achieve this favourable situation. This consideration, given the thinking of our present time, helps to militate against generalized indexation. It has led certain governments to adopt the policy of limited indexation reserved to the lowest income groups. This choice can be defended in terms of social policy, but it does raise difficulties ; how is the small saver to be defined ?

To avoid all the disadvantages of applying indexation over too wide a field, governments adopting indexation schemes have usually been forced to set a very low ceiling on savings qualifying for indexation. The final result is that an unduly small fraction of saving is protected. British and Irish (see below) experience seems fairly significant in this respect.

A major point is that confining indexation to a certain class of savers, however, deserving, is a measure of discrimination. It introduces the idea of special treatment opening the door to further exceptions to the general rule, and this may have serious consequences not only domestically but also in financial relations abroad. We shall revert later to this point.

#### VII. Indexing saving : past and present experience

Describing the general considerations above has involved a number of references to actual experiments in this field. These have been numerous and varied in their application. A study published at the end of 1974<sup>(1)</sup> gives nine examples of the indexation of financial assets between 1742 and 1974 alone.

The present paper will attempt no more than a short description of the most representative and recent examples of indexation of financial assets, whether generalized - as in the case of Brazil and Finland - or confined to certain types of assets, as in France in the 1950's, or limited, with a social policy objective, to a certain category of beneficiaries, as has of late been the case in the United Kingdom and in Ireland, and in a rather special form in Luxembourg.

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(1) "An international survey of indexing and its effects" by Mrs. S.A.B. Page and Sandra Trollope in the National Institute Economic Review, November 1974.

## 1. INDEXATION OF SAVING IN BRAZIL

### (a) Background

For more than 30 years, Brazil has suffered from high inflation rates, and since 1974 the loss of purchasing power of the cruzeiro has never been less than 7 % per year. In the early '60s, the inflation rate, in terms of wholesale prices, the commonest index referred to in Brazil, forged ahead, rising from an average of 20 % in the 1950's to 30 % in 1961, 56 % in 1972, 73 % in 1963 and 91 % in 1964 (Table IV).

This led to serious distortions in the monetary and financial system. Capital seeped out of the domestic market, which ceased to function, and was drained abroad. At the same time, creditors awaiting maturities watched the real value of their assets melt in front of their eyes, and the losses were all the greater in that debtors deferred settlement of their debts - especially taxes - as long as they could.

The introduction in 1957 of a tax on excess profits at a time when inflation was running at the still fairly modest rate of about 25 % led most companies to revalue their assets for both fiscal and accounting purposes. The revaluation provided for in a law of 1951 designed to eliminate certain inconsistencies in the tax system had the effect of familiarizing Brazilians with indexation and inflation-offsetting techniques and concepts.

In April 1964, the Government adopted an economic plan designed to phase out inflation over a four- or five-year period and to reduce the distortion caused by inflation during the transitional period.

It should be made clear at once that the plan was a comprehensive stabilization programme including not only the introduction of indexation clauses but also a range of measures designed, in particular, to slow down the upward movement of wages and prices, to

control money supply creation and to reduce the budget deficit.

It should also be noted that the "monetary correction" mechanism (to use the Brazilian expression), applies in fact to all sectors of the economy and not only to the financial area. Indexation is the most generally used variant of this mechanism for offsetting losses due to inflation.

TABLE IVBRAZILCHANGES IN PRICE INDEXES

	<u>Wholesale prices</u>		<u>Consumer prices</u>	
	Index (annual average)	Change (%)	Index (Annual average)	Change (%)
1960	3.0	-	2.5	-
1961	4.1	37	3.8	52
1962	6.4	56	5.5	45
1963	11.1	73	9.2	67
1964	21.1	91	18.1	97
1965	32.1	51	30	66
1966	43.8	36	42	40
1967	55.0	26	55	31
1968	68.0	24	67	22
1969	82	21	82	22
1970	100	22	100	22
1971	120	20	120	20
1972	143	19	140	17
1973	166	16	158	13
1974	215	30	201	27
1975	274	27	260	29

SOURCE : IMF, "International Financial Statistics"

(b) Monetary correction : scope and methods

Table IV shows the main classes of income and assets subject to "monetary correction" and the methods used. It shows clearly that virtually all claims in Brazil are subject to "monetary correction" in one form or another, in relation with their maturity.

The "monetary correction" can take one of three forms :

- (i) indexation properly so called, the reference being generally the wholesale price index,
- (ii) special adjustment taking account of an expected rate of inflation,
- (iii) adjustment by Government decision taken on the basis of economic forecasts.

Indexation proper is applied to the main forms of saving such as Treasury Bills (ORTN), bank time deposits and savings deposits.

On the other hand, rents are normally linked to the minimum wage, which in its turn is fixed by the Government in terms of its forecasts and its economic policy objectives, and of the inflation rate.

## SCOPE OF INDEXATION IN 1974

NATURE OF ASSETS	METHOD OF MONETARY CORRECTION	REMARKS
<b>A. <u>Monetary and financial assets</u></b>		
Ordinary savings deposits	Indexation against wholesale price index Quarterly adjustment	1. The funds must be deposited for at least six months 2. The real rate of interest is 6 %
Time deposits and deposit certificates	Same method as for bills of exchange and bank acceptances (cf. following item)	Funds must be deposited for at least 12 months for deposit certificates, and at least 6 months for time deposits.
Bills of exchange/bank acceptances.	Special discount rate taking account of forecasted inflation rate, subject to a ceiling fixed by the Central Bank.	
Short-term Treasury Bills (maximum maturity of one year).	Special adjustment by issue below par.	This premium is deemed to represent the depreciation resulting from anticipated inflation plus a real rate of interest.
ORTN = Treasury Bills indexed at maturity of 2 to 5 years	Indexation Indexed against wholesale prices or, if the Bill-bearer wishes, against the US dollar exchange rate. Monthly adjustment for two year Bills and quarterly adjustment for five year Bills.	In fact indexation against the US dollar has seldom been used since indexation against wholesale prices has usually offered a better yield.
Private company loans	Special adjustment for maturities up to one year. For operations with maturities greater than one year the same method as for 2 year to 5 year Bills.	
Mortgage bonds	Same method as for 2 to 5 year Treasury Bills (except if the dollar exchange rate option is chosen).	Yearly yield: 6 %
Mortgage loans	Indexed on the minimum wage with exceptions of a social character.	
Tax arrears	Against the wholesale price index	Interest on tax arrears starts to accrue after a 6-month period of grace, with a ceiling of 30 % on the principal.
<b>B. <u>Other incomes</u> (p.m.)</b>		
Minimum wage	Government decision in the light of economic forecasts. Annual adjustment.	The fixing of the minimum wage is important, since it is a benchmark for the adjustments of rents and mortgage loans for private housing
Rents	Indexed against the minimum wage	

SOURCE : Inflation control and economic growth (Brazilian Embassy, London), June 1974.

TABLE VI

MAIN LIABILITIES OF THE TREASURY AND OF  
THE BANKING AND FINANCIAL ESTABLISHMENTS

(end of period)

Nature of liabilities	Cruzeiros '000 million			% of total		
	1973	1974	1975	1973	1974	1975
<u>NON INDEXED</u>						
Notes and coins	16.4	20.8	31.0	7.6	7.2	6.8
Sight deposits	77.4	104.4	148.3	36.0	36.0	32.5
Bank acceptancies	36.6	46.3	60.8	17.0	16.0	13.3
Treasury Bills	17.4	14.8	37.4	8.1	5.1	8.2
Total	<u>147.8</u>	<u>186.3</u>	<u>277.5</u>	<u>68.7</u>	<u>64.2</u>	<u>60.8</u>
<u>INDEXED</u>						
Savings deposits	14.1	28.9	55.2	6.6	9.9	12.1
Time deposits	25.8	33.5	54.6	12.0	11.6	12.0
Treasury Bills	20.9	33.0	60.1	9.7	11.4	13.2
Mortgage bonds	6.5	8.3	8.9	3.0	2.9	2.0
Total	<u>67.3</u>	<u>103.7</u>	<u>178.8</u>	<u>31.3</u>	<u>35.8</u>	<u>39.2</u>
<b>GRAND TOTAL</b>	215.2 =====	290.0 =====	456.4 =====	100 ===	100 =====	100 =====

SOURCE : Annual Report of the Central Bank of Brazil, 1975, Volume 13, Nº 3  
March 1976.

The special method of adjustment consists in raising interest rates. Thus the discount rate for bills of exchange takes account both of the real rate of interest and of the expected decline in the purchasing power of the cruzeiro. This is thus an "a priori" system of monetary correction.

The third method of monetary offsetting, i.e. the adjustment by Government decisions based on economic needs, is applied more to incomes and to exchange rates than to savings instruments. The economic needs derive from the government's general strategy : steady growth, competitive export prices, and also from the expected rate of inflation and its real rates in the recent period.

As Table V shows, incomes qualifying for this treatment are mainly the minimum wage and certain other categories of pay : since the level of this category of income is fixed only once a year, the real value of earnings has declined considerably by the end of the year. In 1974, however, annual inflation having reached 30 %, a supplementary correction was made in the course of the year. Rents are directly linked to the minimum wage, except where otherwise agreed between the owner and the tenant, and interest paid for mortgage loans financing the purchase of private dwellings is also linked to the minimum wage.

In addition, the taxation system also distinguishes between the two components of the nominal interest rate : the component corresponding to the depreciation of money is not taxed; the only part taxed is the component representing real interest.

#### Notes

It is not easy to make any exact assessment of the consequences of the introduction of indexation into the Brazilian economy.

Initially, the rate of inflation, while remaining high, declined appreciably. But as indexation was only one of the aspects of a very vigorous stabilization programme, which included, an initial reduction in real wages, it is difficult to assess how far indexation accounted for the reduction in inflationary pressure.

The rate of inflation was 16 % in 1973; but in 1974 and 1975, years in which world inflation was high, the cruzeiro lost 30 % and 27 % respectively of its purchasing power, and in 1976 the depreciation of money was about 45 %. On the other hand, indexation was accompanied by brisk progress in time deposits and savings deposits (Table VII), thus helping to slow down the endemic outflow of capital and to curb consumption demand. In this last respect, there has been a definite anti-inflationary impact.

All in all, it is doubtful whether the indexation model in Brazil could be easily transposed elsewhere. There are two reasons for this : one of them is technical, in that there were virtually no financial assets when indexation was introduced, so that the delicate problem of the switch from non-indexed assets to indexed assets did not arise; and the other much more general problem is that indexation, together with the recovery measures accompanying it, were introduced in a political, social and economic context which is entirely different from that obtaining in the European countries.

Table VII

## BRAZIL

## INCREASE IN SAVINGS DEPOSITS AND TIME DEPOSITS

(CR \$ million)

Savings deposits/Amounts at end of period						
	Federal Economic Bank	States' Savings banks	Mortgage Credit Corpora- tions	Savings and Loan Associations	TOTAL	
1966	... (1)	... (1)			... (1)	
1967	... (1)	... (1)	9		... (1)	
1968	... (1)	... (1)	50	19	... (1)	
1969	... (1)	... (1)	80	60	... (1)	
1970	1.189	599	160	134	2.082	
1971	2.029	1.232	306	217	3.784	
1972	4.137	2.253	823	500	7.713	
1973	7.102	3.363	2.710	947	14.122	
1974	14.863	6.255	6.038	1.769	28.925	
1975	28.473	11.285	12.234	3.242	55.234	
Time deposits/Amounts at end of period						
	Bank of Brazil	Commercial Banks	Federal Economic Bank	Investment Banks	Regional Development Banks	Total
1966	29	270	10	2		311
1967	66	502	43	85		696
1968	77	894	51	409		1.431
1969	88	839	47	1.099		2.073
1970	124	1.432	74	2.808		4.438
1971	406	3.253	76	5.755		9.490
1972	535	6.031	76	10.352	23	17.017
1973	845	6.934	70	17.950	12	25.811
1974	2.637	7.769	54	22.809	202	33.471
1975	4.703	11.143	34	33.235	402	54.567
Increase percentages						
	Total savings deposits	%	Total time deposits	%	Grand total	%
1966	... (1)		311		... (1)	
1967	... (1)		696	123,8	... (1)	
1968	... (1)		1.431	105,6	... (1)	
1969	... (1)		2.073	44,9	... (1)	
1970	2.082		4.438	114,1	6.520	
1971	3.784	81,7	9.490	113,8	13.274	103,6
1972	7.713	103,8	17.017	79,3	24.730	80,3
1973	14.122	83,1	25.811	51,7	39.933	61,5
1974	28.925	104,8	33.471	29,7	62.396	56,3
1975	55.234	91,0	54.567	63,0	109.801	76,0

## 2. INDEXATION OF FINANCIAL ASSETS IN FINLAND

### (a) Background

The introduction of indexation in Finland is both a special case, and also an example of a measure originally devised to assist a limited class of individuals but which then gradually gained general use throughout the economy.

Just after the end of the second world war in a climate of sharp inflation (the consumer price index increased by 60 % in 1946 and by more than 30 % on average in the two following years), the Finnish Government decided to index war-damage claims on the Treasury. Subsequently, indexation gradually extended to all incomes and financial assets.

### (b) Spread of indexation

- (i) 1945 : indexation of Government bonds (nominal value FM 18 400 million) issued for displaced persons.  
Reference index : wholesale prices.
- (ii) 1946 : indexation of 50 % of pensions against wholesale prices.
- (iii) 1948 : life assurance companies begin indexing their policies and liabilities. The index used is usually the cost-of-living index, half of the increases in the index being counted.
- (iv) 1952 : indexation of wages against the cost-of-living index. Bond issues indexed on price indexes. Indexation of rents, farm leases and bank loans.

(v) 1955 : Introduction of indexation for bank deposits :  
the conditions were as follows :

- . Minimum amount : FM 300, or about \$ 130,
- . Minimum duration : 12 months
- . Interest rate : 1 % to 1.5 % below that on ordinary deposits,
- . Indexation against the cost-of-living index.

In 1955 and in 1956 this type of deposit developed only slowly.

(vi) 1957-1963 : expansion and diversification of indexation in bank deposits. In 1957 banks accepted two categories of account, on the same terms as regards amount and duration but one being indexed at 100 % (A accounts) and the others at 50 % (B accounts). The latter were remunerated at a rate one point below that paid on ordinary accounts.

B accounts were originally created for tax reasons; unlike A accounts, they were tax-free.

From 1964 onwards, the tax status of A accounts was aligned on that of B accounts and in 1966 the B accounts were discontinued.

(c) End of indexation

In 1967 the Finnish Government devalued the mark by 25 % and endeavoured to limit the "mechanical" effect which the increase in the cost of imported items was bound to have, through indexation, on the level of domestic prices. A stabilization agreement was then negotiated between the social partners, and this led to the virtually complete elimination of indexation clauses in 1968. The abandonment of this technique in the financial sector was the price that had to be paid to stop indexation of wages and other incomes. This was the position adopted by the Finnish unions. On their side, borrowers, and particularly companies, had been finding the weight of indexation too heavy particularly in the later stages.

(d) Results and final observations

Indexation was welcomed by savers. The percentage of indexed compared to non-indexed securities in circulation was tiny in the early years, but steadily grew until in 1967 indexed securities accounted for 74 % of all securities in circulation.

Indexed deposits developed only slowly in 1955 and 1956. In 1957, with the acceleration of inflation, they increased until they accounted for a quarter of all deposits. When inflation lost momentum in 1959 - 1963, their scale contracted, but rose again in 1964, a year in which inflation exceeded 10 % and in which - this was a favourable factor - tax exemption of interest was extended to all indexed deposits. Before the 25 % devaluation of 1967, indexed deposits accounted for a little more than a third of all deposits (see Table VIII). Thus, ultimately, only a fraction of deposits were indexed.

For savers, indexation subsequently combined with tax exemption, meant, during periods of high inflation, a yield on indexed deposits consistently better than that on ordinary deposits. On the other hand, when inflation was low, as it was in several years within the period during which indexation was applied (see Table VIII), the saver would have been better advised to deposit his savings in non-indexed accounts.

A study carried out in Finland itself <sup>(1)</sup> shows that the inflation threshold had to reach 4 % before indexed deposited deposits had an advantage over ordinary deposits.

The same study also shows the high correlation between the inflation rate trend and that in the volume of indexed deposits. On the other hand, it suggests that the choice of the cost-of-living index was perhaps not the best one for the saver, the price of certain financial assets having varied much more than this index.

In contrast with the situation in Brazil, there is no way of showing convincingly whether indexation stimulated saving or not.

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(1) The study entitled "Aspects of the Finnish deposit Indexing experience", by Kari Puumanen, member of the Bank of Finland economic research institute, published in the monthly bulletin of the Bank of Finland, n° 1, 1967. This study has been published in full in "Indexation of Financial Assets", new contributions relating to the problems and to experience gained (OECD, Paris 1975, pp; 20 to 26).

TABLE VIII

FINLAND

	Percentage increase in cost of living	Indexed deposits as percentage of total bank deposits	Indexed securities as percentage of total securities in circulation
1945	-		
1946	59.2		
1947	29.29		
1948	34.6		
1949	1.4		
1950	14.0		
1951	17.3		
1952	1.0		
1953	2.0		
1954	-		
1955	- 2.9	0.1	
1956	11.0	7.0	30.77
1957	11.7	24.3	37.63
1958	6.5	21.6	43.33
1959	1.5	6.2	41.47
1960	3.0	2.8	49.88
1961	2.2	0.6	53.74
1962	4.3	1.0	62.13
1963	4.8	3.9	52.33
1964	10.4	15.8	50.98
1965	4.7	18.2	56.08
1966	3.9	21.2	66.10
1967	5.4	34.6	74.29
1968	8.7		
1969	2.4		
1970	2.8		
1971	6.3		
1972	7.2		
1973	11.8		
1974	17.3		
1975	17.7		
1976	14.4*		

\* estimate

SOURCES : Institute for Economic Research Bank of Finland  
 Series D : 2 Mimeographed Studies - January 1969  
 Statistical Yearbook Finland

The charges arising from indexation were passed on to borrowers by the banking and financial intermediaries, but in a non-proportional manner, since they depended not only on the increase in the index used, but also on the proportion of total commitments accounted for by indexed deposits. Nevertheless, these charges increased appreciably between October 1967 and April 1968, i.e. between devaluation and the Stabilization Agreement of April 1968 which put an end to indexation. This fact helped to bring about the abolition of the system.

Despite the high rates of inflation in 1974 and 1975 (see Table VIII), no attempt has been made to reintroduce indexation in Finland.

### 3. INDEXATION OF BONDS IN FRANCE

French experience of the indexing of savings has been limited, both as regards time and assets indexed : indexation lasted for only six years (between 1952 and 1958) and concerned only fixed-interest securities.

#### (a) Origins of indexation

Inflation was occasionally fairly high in France in the years following the second world war. The first experiment in financial indexation was conducted in 1952, when the Government headed by Mr Pinay introduced a stabilization programme, one of the aims of which was to prevent the hoarding of gold and to encourage the repatriation of illegally exported capital.

A Government loan was issued which was totally exempt from income tax and estate duty. The principal was index-linked to the price quoted on the Paris stock exchange of a French 20 franc gold coin. This loan was very successful and a second "tranche" was issued as part of the 1958 stabilization programme.

Between 1952 and 1958, there was a variety of indexed bond issues.

(b) Indexation details

The two tranches of the Pinay loan were based on the price of gold coin; a further Government loan was issued in 1956, the principal of which was index-linked to share and bond prices. The following formulae were also used :

(i) indexation based on prices :

- price per kilometer of second class rail travel for the 5 1/2 % SNCF <sup>(1)</sup> indexed bonds issued in 1956;
- kilowatt/hour selling price for the variable-interest loan issued by Electricité de France in 1958;
- wholesale price of coal for bonds issued by Charbonnages de France (several issues);
- housebuilding price index for the 6 % loan issued in 1958 by the Caisse Foncière de Crédit pour l'Amélioration du Logement.

(ii) Indexation based on the turnover :

- of the electricity-producing undertakings for the 3 % loan issued by the Caisse Nationale de L'Energie in 1952;
- of the iron and steel industry for the 6 % loan issued by the Groupement de L'Industrie Sidérurgique en 1958.

(iii) Indexation based on net profits :

- of the motor-manufacturing industry for the 5 1/2 % loan issued by Simca in 1956;

(1) French State Railways

- of the distribution sector for the 5 3/4 % "Au Printemps" loan in 1966;

- of the metal-manufacturing industry for the 6 % Vallourec in 1958.

(iv) Indexation based on growth in reserves and dividends distributed :

for the Sidelor loan in 1954.

(v) Indexation based on the level of production :

industrial production index for the industrial and agricultural equipment bonds issued in 1956 (indexation of interest payments).

(vi) Indexation based on the productivity of the issuing enterprise :

for the 5 1/2 % loan issued by the Société Métallurgique de Normandie in 1959.

There were also combined indexation formulae (e.g. the 1955 Michelin loan which was based on sales and the price of rubber).

Besides the great variety of reference indices, the indexed French bonds issued during this period (or at least a number of them) were characterized by rules of application - thresholds, ceilings, partial application of variations in the indices chosen - which were sometimes rather complex and frequently misunderstood by investors.

(c) Regulations and restrictions relating to indexation

The second tranche of the Pinay loan in 1958 was one of the last French indexed bond issues of any size. The introduction of a recovery programme that same year was accompanied by a return to the tradition of monetary "nominalism". Two Orders (on 30 December 1958 and 4 February 1959 - see Annex II) prohibited but for a few exceptions of a social nature, any indexation based on the minimum wage or the general level of prices.

However, legislation did not outlaw indexation based on price indices for products, goods or services, directly related to the activities of one of the parties. This definition would have allowed the issue of bonds of the type launched between 1952 and 1958. From 1959, in fact, no indexed loans were issued in France for a number of years. However, a Government loan was issued at the beginning of 1973 : both principal and interest are subject to a conditional indexation clause linked to the price of a gold bar and based on the gold definition of the franc and of the European unit of account - a clause which has not yet been invoked.

(d) Results and final comments

During the period from 1952 to 1957, indexed issues accounted for between 30 % and 55 % of all bonds. The popularity of indexed securities amongst private investors enabled borrowers to offer nominal rates of interest which were substantially lower than those ruling on the market in non-indexed securities. In some cases, the difference was as much as 4 %. Despite this difference in yield, the capital appreciation resulting from indexation secured for holders of indexed bonds higher total profits, on average, than if they had invested in conventional securities or even in shares (see Table IX).

This is an overall assessment based on trends in the different indices. A comparison between one loan and another is difficult owing to the variety of clauses used. For example, holders of certain types of indexed bonds - particularly those which were index-linked to the activities of the debtor and which therefore involved an element of commercial risk - may have fared less well than holders of traditional bonds.

TABLE IX

TRENDS IN INDEXES FOR FRENCH VARIABLE-YIELD, FIXED-YIELD  
AND INDEXED SECURITIES

YEAR	Variable-yield securities	Fixed-yield industrial securities	Indexed-yield industrial securities
1953	22.9	84.3	48.4
1954	30.8	87.0	52.1
1955	43.5	93.5	64.1
1956	44.4	92.5	77.5
1957	56.2	83.6	82.2
1958	50.4	83.9	82.1
1959	67.2	93.6	87.4
1960	81.1	97.3	90.7
1961	95.0	98.6	96.1
1962	104.0	99.8	101.0
1963	94.9	101.3	110.8
1964	81.8	101.3	110.7
1965	75.6	101.5	112.3
1966	72.5	100.5	108.0
1967	66.0	100.0	110.7
1968	71.1	100.0	115.7
1969	88.0	95.6	123.9
1970	91.2	94.0	119.3
1971	89.1	95.7	129.9
1972	99.2	98.2	149.6

SOURCE : This table was taken from a study made by Mr Thierry CHAUVEAU entitled "La demande d'obligations émanant des ménages (1953-1972)" ("Households' demand for bonds") which appeared in "Revue Economique" (N° 5/1975).

On the other hand, investors in some loan issues (particularly those index-linked to the price of gold) fared much better (1).

The introduction of indexed securities did not lead to disturbances on the capital market. By practically abolishing issues of securities of this type, the French Government in power at the time was more concerned with increasing public confidence in the stabilization measures it had taken than with putting an end to any imbalance on the fixed-yield securities market.

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All the indexation formulae so far described, whether wide-ranging or limited in extent, were open to all investors and made no restrictions on amounts invested. The same does not apply to the measures recently taken in the United Kingdom and Ireland - and very recently in Luxembourg - which are designed to help small investors only.

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(1) FF 1 000 invested in a "Pinay" loan issue in 1952 are now equivalent - taking into account coupons cashed but not capitalized - to some FF 7000 (i.e. an increase of 600 %). Over the same period, the cost of living index has increased by 244 %.

#### 4. INDEXATION OF SMALL SAVINGS IN THE UNITED KINGDOM

The introduction of indexed bonds and savings plans in the United Kingdom is a direct result of the very high rates of inflation which have affected that country's economy in recent years. The national accounts show that consumer prices rose by 16.8 % in 1974 and by 23.1 % in 1975. Although the rate of increase has since slackened, it was still 15.5 % in 1976 and is expected to reach 14 % this year.

##### (a) Indexation details

The measures provide for two categories of assets, both linked to the retail price index :

- (i) five-year indexed bonds (national savings certificates) are issued to persons who have reached retirement age (i.e. sixty-five for men and sixty for women) in £ 10 blocks up to a maximum of £ 500 per person. These certificates are not transferable. Their base point is the index for the month preceding purchase and each certificate has an official life of five years, at the end of which the buyer receives interest amounting to 4 % of the nominal value plus the nominal value increased in proportion to the increase in the index used. The amount repaid may not be less than the nominal value of the certificate. Different rules apply if the buyer requests premature repayment. No increase is allowed on certificates retained for less than one year. Certificates cashed after one year but before the end of the full five-year term are indexed but the 4 % interest is not payable.
- (ii) A "Save as You Earn" (SAYE) indexed savings plan has been introduced for persons aged sixteen or above. The plan provides for fixed monthly payments of between £ 4 and £ 20 and lasts for five years. Each monthly payment is adjusted in accordance with variations in the index and, after five years, total contributions plus the monthly revaluations, mature for redemption.

If the contract is extended by two years (without further monthly payments), the sum finally repaid is equal to the contributions made during the five years revalued according to the index at the end of the seventh year plus a bonus of two monthly contributions. Once again, the amount repaid may not be less than the total amount contributed. Where a contract is terminated after one year and therefore before the full five-year term, the indexation clause does not apply and the saver receives only 6 % annual interest. No interest is payable on contributions reclaimed before the end of the first year.

In both cases, bonuses and interest are exempt from income tax and capital gains tax.

These two indexed savings schemes (which came into force on 2 June 1975 and 1 July 1975 respectively) are administered by the Department for National Savings. It should be noted that this formula has not been adopted by other banking and financial institutions.

#### (b) Results

Table X shows the trend in the volume of indexed certificates and deposits.

After the heavy purchases in the first months, the volume of certificates in circulation has increased slowly. By the end of November 1976, it had reached a total of £ 390 million, £ 174 million between January and November 1976 - an appreciable figure when compared with the total of £ 978 million collected over the same period as National Savings.

Some 800 000 persons have invested in the certificates. It should also be noted that a fairly substantial volume of certificates has been presented for early redemption.

The amount of indexed deposits is much less than that obtained from the sale of certificates. However, such deposits are tending to increase steadily and withdrawals are proportionally less substantial than in the case of certificates. The number of contracts is about 400 000.

Table X

## UNITED KINGDOM

Trends of indexed savings

	National Savings Certificates		Save as you earn	
	Subscriptions (1) (in £ million)	Repayments (in £ million)	Deposits (1) (in £ million)	Withdrawals (in £ million)
<u>1975</u>				
June	83,0			
July	41,2		0,8	
August	21,3		1,2	
September	17,5	(0,2)	2,1	
October	17,8	(0,2)	2,6	
November	14,7	(0,2)	3,3	
December	<u>11,8</u>	<u>(0,2)</u>	<u>3,4</u>	
TOTAL	212,3	0,8	13,4	
<u>1976</u>				
January	14,5	(0,2)	3,8	
February	12,6	(0,3)	4,0	
March	8,6	(0,3)	4,2	0,1
April	13,0	(0,4)	4,3	
May	10,3	(0,5)	4,8	
June	15,5	(4,9)	4,6	
July	24,4	(6,5)	5,3	(0,2)
August	16,8	(3,7)	4,8	(0,1)
September	16,0*	(2,5)*	4,9	(0,1)
October	19,1*	(2,2)*	5,2	(0,1)
November	<u>17,4*</u>	<u>(2,2)*</u>	<u>5,4</u>	<u>(0,2)</u>
TOTAL	174,2	23,7	51,3	(0,3)

Source: Central Statistical Office, Financial Statistics, December 1976

(1) Net amounts at end of period

\* Provisional

This slow increase in deposits is clearly due to the fact that only small sums may be indexed and to the monthly ceiling system, whereby - to all intents and purposes - old deposits cannot be turned into indexed ones. It would also seem that some savers are reluctant to tie up their funds for what they judge to be too long a period.

Indexation has so far had no effect on the activities of investment funds or on the functioning of the capital market generally.

#### 5. INDEXATION OF SMALL SAVINGS IN IRELAND

Experiencing inflationary pressures very similar to those in the United Kingdom, Ireland introduced a scheme for index-linking small savings on 20 October 1975 which was similar, in principle, to the United Kingdom measures, but somewhat different in detail.

##### (a) Indexation details

There are two types of indexed saving :

(i) three-year indexed savings bonds issued in £ 10 blocks up to a maximum of £ 500 per person. Purchase is limited to persons who are at least sixty-five years old. The bonds are not transferable and are repayable :

- after one year, at the nominal value increased in line with the reference index;

- after 3 years, on the same terms plus a bonus of 5 % calculated on the purchase price.

The investor may opt to forgo indexation in favour of a fixed-rate interest payment of 8 %.

(ii) A one-year indexed savings plan which provides for twelve monthly payments of between £ 1 and £ 40. This plan is open to any person aged sixteen or above.

Two years after the last contribution, repayment may be made on the basis of the nominal value plus a percentage equal to the variations in the reference index between the date of the last contribution and the date of repayment.

If the deposit is left for five years following the date of the last payment, it is revalued as described above and the saver receives, in addition, a bonus of 5 % of the nominal value of the payments made.

Persons saving under this scheme may also decide to forgo indexation and opt for a bonus, based on the nominal value of the sums deposited, of between 30 % and 70 %.

The index used in both plans is the consumer price index. Bonuses and interest are exempt from income tax and capital gains tax.

#### (b) Results

By the end of 1976, indexed savings bonds in circulation amounted to only £ 1.4 million (purchased by some 3 700 persons).

By the same date, indexed deposits totalled only £ 6.4 million <sup>(1)</sup>.

It would seem that this experiment has so far met with only moderate success and that it has not led to any appreciable increase in savings in Ireland despite terms which are attractive when compared with the system in force in the United Kingdom.

#### 6. PARTIAL INDEXATION OF SMALL DEPOSITS IN LUXEMBOURG

The indexation of small deposits in Luxembourg, which was introduced as recently as the beginning of January 1977, is substantially different from the systems adopted in the United Kingdom and Ireland.

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(1) According to the Department of Posts and Telegraphs.

a) Indexation details

The savings plans in question are open to any person aged at least twelve or eighteen according to the savings institution in question. The saver undertakes to pay in each month for five years a sum ranging from a minimum of Lfrs 1 000 to a maximum of Lfrs 6 000<sup>(1)</sup>. The interest rate paid on sums deposited is variable. It is equal to the average rate of inflation recorded at the end of the year plus a further 1/2 % or 1 % according to whether the contract has been concluded with the Caisse d'Epargne de l'Etat (State Saving Bank) or with one of the ordinary banks. However, this variable rate is subject to a lower limit of 7 % and to an upper limit of 9 %. Beyond a certain rate of inflation, therefore, indexation is not complete.

If payments are stopped for more than two months or if funds are withdrawn, the contract is terminated and the interest rate is reduced retrospectively to the rate paid on ordinary savings accounts.

b) Saver's entitlement to a loan

At the conclusion of his contract, a saver is entitled to priority treatment for a period of two years on an application for a loan equal to 150 % of the sums saved (including interest).

c) Comments

This last provision gives the new scheme the character of a house savings plan.

In view of the duration of the plan and the relatively large amounts which may be saved each month, the sums received by the saver together with any loan he may have obtained give him enough starting capital to purchase a property. It should be noted, however, that the Luxembourg savings and loan plan is more open than a house savings plan, since it may be used to finance the acquisition of any type of asset and not

(1) Roughly equivalent to US \$ 27 and US \$ 162 respectively.

simply to purchase a principal dwelling. As such, it is more closely akin to a policy of promoting and protecting small-scale wealth and assets.

However, in view of limitations with regard to interest rates and the length of time during which funds are tied up, there would seem to be little chance of attracting those savers who traditionally invest in fixed-interest securities.

#### 7. FINAL REMARKS ON INDEXATION EXPERIMENTS

It is scarcely possible to make an overall judgement of all the indexation experiments described in this report owing to the wide differences, not only in their scope and duration, but also in the circumstances in which these systems have been implemented. But all in all they do not provide a convincing case in favour of indexation.

The example of Finland, shows that, if and when it becomes fairly generalized, indexation tends in the end to sustain inflationary pressures rather than to reduce them. Doubtless taking account of the reservations expressed earlier, the Brazilian experience favoured the creation and protection of savings, but Brazil's rate of inflation was never reduced to a level which would be acceptable in a developed economy.

It is clearly too early to draw any definite conclusions about the measures taken to help small-scale saving. It would seem that the protection given to the small saver in the United Kingdom and Ireland is complete. However, such plans have the disadvantage of tying up funds for a period which may appear too long, with the result that some small savers are put off by them. Furthermore, the upper limit imposed on monthly payments is low, especially in the United Kingdom. There is therefore no likelihood of indexation disturbing financial markets, for the very reason that it affects too small a proportion of savings. The Luxembourg plan is generous in this respect, but, in its present form, would lose almost all its effectiveness for the saver in times of high inflation.

This raises a dilemma common to any attempt to index small-scale savings : whether to index completely and to limit very strictly the concept of small-scale savings or to apply a wider definition and to restrict the scope of indexation. In either case, the bulk of the sums saved (including a proportion of small-scale savings) remains unprotected against depreciation of the value of money.

In the final analysis, the study of the best-known examples of savings indexation is not encouraging. This partly explains the official attitudes taken on this matter in the Community - attitudes which must now be examined in detail.

#### VIII. BASIC ATTITUDES TOWARDS THE INDEXATION OF FINANCIAL ASSETS IN THE COMMUNITY

##### 1. Attitudes in the Member States

Generally speaking, attitudes towards the indexation of financial assets in Member States have always been governed - despite exceptions intended to the temporary - by the principle of monetary "nominalism".

In some countries there are specific provisions relating to indexation, while in others legislation is silent on this point.

The present situation is as follows :

Legislation has been introduced in two countries to prohibit or limit indexation clauses :

- a) In the Federal Republic of Germany, prohibition is based on paragraph 3 of the Monetary Law of 20 June 1948, supplemented by paragraph 49 of the Foreign Trade and Payments Law (Aussenwirtschaftsgesetz) of 28 April 1962 (see texts in Annex III). Under these provisions, the indexation of a monetary debt is subject to the prior authorization of the Central Bank. Such authorization has never been given in the financial field (see, in Annex IV, the study made by the German Federal Bank on this subject).

- b) In France, as we have seen, the government practically put an end to indexation in the financial field following the experiment in the 1950's (see "Indexation of bonds in France" above and the legal texts in Annex II).

It should be pointed out, however, that this country will probably follow the example of the United Kingdom, Ireland and Luxembourg. In the chapter entitled "Patrimoine et Liberté" of his recent book<sup>(1)</sup>, President Giscard d'Estaing wrote that we must "recognize the right of everyone to the acquisition of personal assets and that "this right must also lead to the introduction of an effective system of preserving the value of savings".

This idea re-appeared in more concrete form in a letter to the French Prime Minister dated 16 November 1976, in which the Government was asked to provide for "these small savers, whose main concern is the protection of their capital", a simple and specialized savings instrument, which "in return for a limited interest rate and a real stability of deposits, guarantees them lasting security for their assets"\*

This document has generally been interpreted as a recommendation for the establishment of indexed savings deposits. However, we must await the outcome of the studies and work in progress (on which a decision must be taken before 1 January 1978) to know exactly what the French Government intends.

It should be stressed that the French President also specifically rules out any general indexation of savings, which "could only weaken our economy's ability to free itself from inflation"\*.

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(1) V. Giscard d'Estaing - "Démocratie française" (pp 107 to 109)

\* an unofficial translation of the full text of the letter is attached as Annex V.

In other Community member countries, indexation is not the subject of specific legislation. While all governments are opposed to general indexation, some accept that special provision must be made for small-scale saving.

As shown above, this is the case in the United Kingdom, Ireland and Luxembourg.

On the other hand, in Belgium (despite the fact that indexation exists in large sectors of the economy) and in Denmark and the Netherlands, the authorities are still unwilling to accept any form of indexation of financial assets.

Italy occupies an intermediate position. There is no official government position on the matter. A draft law on the indexation of savings for building purposes was drafted by the last administration, but was not discussed by Parliament and has not been laid before the new Parliament. The bank of Italy was responsible for this plan, thereby showing that it was not, a priori, completely hostile to limited indexation systems. In a recent reply to three Senators, Mr. Baffi, Governor of the Bank, again stressed the social merits of this plan to index savings for building purposes. He also pointed out the possibility - of which ENEL had taken advantage in 1974 and 1976 - of issuing variable-rate bonds based on the average yield of a sample of bonds quoted on the stock exchange <sup>(1)</sup>.

It is interesting to note, in the last part of Mr. Baffi's statement, the comment that the tendency for the indexation of savings to limit gradually the economy's ability to absorb inflationary pressures should be balanced by reducing the role played by indexation in other areas, and particularly in wages (see Annex VI for the full text of Mr. Baffi's statement).

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(1) A loan was issued in France in December 1974 by the Groupement de l'Industrie Sidérurgique along similar lines. Furthermore, many variable-rate loans based on Eurodollar rates in London are placed on the international market. In all of these cases, it is inappropriate to talk of indexation, since the connection between the yield on invested capital and money depreciation is too tenuous.

## 2. The position of the Community

The Community as such has not expressed an opinion on the question of the indexation of savings. But it did have occasion recently to take up a position against the principle of indexation, in the context of the Conference on International Economic Cooperation. This statement by the Community representative was made in connection with the indexation of raw material prices demanded by the producer countries. Nevertheless; the argument is of a general nature and stresses the freezing of the prices mechanism, and therefore of the functioning of the market itself, which would be entailed in indexation wherever it was introduced (see text of this statement, Annex VII).

Secondly, still within the framework of the Conference on International Economic Cooperation, the Community did not accept the idea put forward by certain oil producing countries, that their financial assets denominated in foreign currencies, should be indexed. The Community point of view is that it would be a measure of discrimination to accept a technique externally when the Community was opposed to the use of this technique internally.

## 3. The position of the Commission of the European Communities

The Commission's attitude to widespread indexation has always been very reticent. As an example of this point one may re-read Mr Gundelach's answers made on the Commission's behalf to an oral question by Mr Cousté and Mr Terrenoire on indexing earnings<sup>(1)</sup> and in particular the following passage :

"It would be a great mistake to try to make the general public believe that the evils of inflation could be solved once and for all by the broad introduction of indexation of all aspects of the economy, be it social policy, be it wages, be it savings, be it contracts for imports of raw materials, etc.

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(1) see Debates of the European Parliament - sitting of 12 December 1974

At the end of the road you will be in a situation where everything is indexed and you have only one means of steering economic policy and that is through the level of economic activity, the level of employment. And that is quite obviously not what we want to achieve".

TABLE XIPRIVATE CONSUMER PRICES IN THE COMMUNITY (1)

	% change on average for the preceding year				
	May 69-73	1974	1975	1976	1977
DENMARK	5.6	15.0	8.8	8.5	8.5
FR OF GERMANY	4.8	7.3	6.1	4.5	4.0
FRANCE	6.3	13.9	11.4	9.3	8.5
IRELAND	8.9	15.7	21.3	18.0	15.0
ITALY	6.4	20.2	17.4	17.5	20.0
NETHERLANDS	7.2	9.9	10.5	9.4	7.5
BELGIUM	4.2	12.9	12.1	8.3	8.0
LUXEMBOURG	4.5	9.5	10.7	9.8	8.0
UNITED KINGDOM	7.0	16.8	23.1	15.5	14.0
COMMUNITY	6.1	13.1	12.6	10.1	9.5

(1) in national accounts terms

SOURCES : SOEC national accounts and Commission department estimates.

What is more the Commission believes that an extension

of indexation would conflict with the position adopted by the Community in international bodies, such as described above. There would be a great danger of having to grant non-member countries indexation clauses, which would then tend to become more widespread, by being introduced into the Community's external trade and financial relations.

This argument is probably not totally applicable to the indexation of small savings, and the Commission both understands and approves the concern for social justice which prompts the supporters of such a technique. But for the reasons already given there are still doubts about the implications of measures of this kind. It is true that methods of indexing small savings do protect them, but only for small amounts and then on condition that savers immobilize their assets for relatively long periods. Basically what many small savers would like is to be able to keep a reserve of cash, which will more or less keep its value over a period, and on which they can draw at any time. This cannot be guaranteed by the indexed and frozen savings schemes which are most often envisaged; it can only be the result of a stable, or at any rate - given present conditions - a relatively stable currency.

For this among other reasons, the Commission feels that the main protection for savers lies in a relentless fight against inflation which is the only comprehensive means of reducing, if not eliminating, the social injustices created by the depreciation of currency. The example of the "strong currency" countries is significant in this respect.

If the question of the protection of small savings is set in this more general context, it is evident that what is needed is a comprehensive policy to assist saving.

The ultimate aim of this policy which would be a key weapon in the anti-inflation armoury, would be the guidance of these savings to the productive sector by offering investments having a basic minimum security and yield.

This does not rule out specific measures to assist small savers as a first stage. But these measures should only be temporary and in any case should be part of a much greater whole.

## IX. ELEMENTS IN A POLICY TO ASSIST SAVINGS

The Commission feels that a great deal still needs to be done to put in hand, in the Community as a whole, a coherent set of measures to encourage and protect the saver wishing to make economic investments in the productive sector. In particular it is suggested that such a policy would have two main aspects :

- the protection and encouragement of savings generally
- specific provisions for the protection and formation of savings among the last well-to-do classes in society.

### 1. Measures which might be taken to protect and encourage saving generally

In the main they would consist in allowing market mechanisms the maximum play possible and in reducing the taxation of savings.

- a) As far as the first point is concerned, certain markets should first of all be made more transparent. It should be noted that the losses suffered by the saver in periods of inflation are very often due to the latter's failure to recognize the best investment opportunities.

This failure may result from a mere lack of information, and it is apparent that further work needs to be done to provide savers with unbiased information on investment.

Secondly, transactions should be allowed the greatest possible freedom in laying down the conditions governing investment and the return on savings. This is the case on the international capital market, where the freedom which contractors are allowed generally ensures that funds invested there produce a better yield than on national financial markets. In the case of the bond market, specific suggestions have been made,

in a report drawn up by a working party of the Monetary Committee and adopted by the Committee <sup>(1)</sup>.

This document proposes, inter alia, that the technique of variable interest rates should be developed - for example based on the average yield for bonds quoted on the stock market - and that maturities should be shortened, or at least intermediate maturity dates for reimbursement should be introduced, so that, during periods of sharply increasing interest rates, the bearer could get out of his investment more quickly and switch more rapidly to better yielding investments.

Another solution would be to allow rates to move more freely. No doubt this attitude may sometimes be incompatible with the requirements of monetary policy or economic policy generally. Experience shows, however, that it is sometimes possible to allow market forces free play: in periods of inflation they mostly operate in the saver's favour. In this connection one may quote the case of the bond markets in Denmark and the Federal Republic of Germany (see above Table II in point II of this report).

As regards liquid or semi-liquid savings, it is the return which is the main protection. This return is of course often abnormally low, bearing in mind the cost of the loans which these savings are used to finance. Naturally the cost of bank resources depends on many factors which vary from country to country, and among these factors official constraints such as mandatory reserves should be taken into account. It is worth asking, however, if this excessively high price for "transformation" by the financial banking intermediaries is not partly due to the nature of competition in this sector, competition which quite often now takes the form of the growth of new costly activities, rather than of variations in rates, which are more or less controlled by the monetary authorities or the banking organizations.

An insufficient return on savings may also be due to the fact that they are used to finance, on preferential terms, certain types of investments

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(1) Report by the Working Party on Securities Markets on the protection of the holder of bonds, the complete text of which will be found in Annex VIII.

or activities, of a social nature, for example. In this case it is clear that the cost of these operations should be assumed by society as a whole and not by savers alone.

Lastly a greater flexibility of the savings market would also lie in facilitating the mobilization and circulation of invested savings, particularly in the form of transferable securities. The problems arising here are connected with the organization of markets and the cost of transactions.

- b) Taxation policy plays a decisive role in the protection and stimulation of savings. To go into details on this complex matter, in the present context, is out of the question, only emphasizing a number of important points.

In the first place, money's loss of value must be recognised and an end must be put to the anomaly of taxing unreal incomes, i.e. incomes which have been absorbed by inflation. In all fairness, only the share of interest corresponding to a real return should be taxed. The same applies to the taxation of capital gains, which, were it exists, should not be imposed on a purely nominal gain and should in general take losses into account.

It would also be desirable to abolish or at least attenuate the discrimination which often exists in the taxation of savings, for example the sometimes unequal tax treatment of income from shares and income from bonds to the detriment of the former.

One might also contemplate gearing the basis for assessing income tax to savings, thus indirectly increasing the yield on these sums.

Another possibility would be to exempt income from savings from income tax - this is in fact done in certain countries - and to set the amount of savings income exempted at a sufficiently high level.

It goes without saying that the above proposals on both the functioning of the markets and taxation are not exhaustive. Basically, by protecting savings from inflation and ensuring that it produces a real income, they aim at encouraging saving as part of a general anti-inflation policy. Numerous examples, taken from recent financial history, prove that they are effective. Their only fault is that, because of their comprehensive nature, they are of unequal benefit to the saver, especially in the case of tax exemptions, depending on the saver's ability to save and his wealth. This is why they should be accompanied by provisions which relate particularly to the poorest classes in society.

2. Provisions designed to encourage the preservation and formation of savings among the least well-to-do classes in society

The fundamental idea here is a social one. It has two aims : to protect the sums already saved and to permit a minimum amount of wealth to be accumulated. This might be the place for the indexed savings schemes of the type recently introduced in some Community countries. The small saver should be offered a good means of protecting his wealth and the best method of doing this should be studied. However, for reasons already stated, such provisions would probably not be sufficient and should, if anything, be used to supplement the prime instrument in this area : a policy for the formation and preservation of wealth. Apart from its contribution to the fight against inflation, this policy should enable each person, and in the first place the poorest, to form and preserve the minimum amount of capital without which one has neither freedom nor responsibility. The policy should therefore have a wide impact. Within broad limits, a saver should be able to accumulate the funds needed to buy any asset of his choice. If necessary this should include both help from his employer or state-aid (for example in the form of premiums varying with inflation) and the ability to obtain any additional credit facilities needed. The aspect of asset choice is important because existing systems of this type are generally slanted towards the acquisition of a principal dwelling under conditions which

usually make it impossible for people on the most modest incomes to achieve this. They should therefore be able to invest their savings in other immovable property or in movable assets of a financial nature.

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Certain measures which might be taken within the very general framework outlined above - remission of tax, payments of premiums - should ultimately be financed by society as a whole, and this in itself entails the transfer and therefore the redistribution of income. We know that this philosophy, which is already of long standing, is applied to many other sectors of economic and social activity. We do not see why it should not be extended to the savings sector. The final cost would probably be very reasonable if set against the benefits - upon which it is admittedly hard to put a figure - or a better equilibrium in society.

ANNEX I

RESOLUTION OF THE EUROPEAN PARLIAMENT

AND

REPORT OF MR. NORBERT HOUGARDY

ON INDEX-LINKING OF SAVINGS

(11 JULY 1975)

RESOLUTION ON INDEX-LINKING OF SAVINGS

approved by Parliament during  
its session of 11th July 1975

*The European Parliament,*

- having regard to the motion for a resolution (Doc. 365/74);
  - having regard to the report of the Committee on Economic and Monetary Affairs (Doc. 165/75);
1. Considers that the problems associated with the index-linking of savings give rise to differences of opinion and involve a great many economic and technical uncertainties;
  2. Therefore invites the Commission of the European Communities to examine further the entire range of problems connected with index-linking and more particularly the protection of savings;
  3. Requests the Commission of the European Communities to submit a report on the findings of this study when it is completed;
  4. Instructs its President to forward this resolution and the report of its Committee to the Council and Commission of the European Communities.

European Communities

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46705

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EUROPEAN PARLIAMENT

Working Documents

1975-1976

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10 July 1975

DOCUMENT 165/75

INTERIM REPORT

drawn up on behalf of the Committee on Economic and Monetary Affairs

on index-linking of savings

Rapporteur: Mr N. HOUGARDY

PE 40.933/fin.

English Edition

At its meeting of 13 December 1974, the Bureau of the European Parliament, following the tabling of a motion for a resolution by Lord Reay on 2 December 1974, authorized the Committee on Economic and Monetary Affairs to submit a report on the index-linking of savings.

On 28 February 1975 the Committee on Economic and Monetary Affairs appointed Mr Hougardy rapporteur.

It considered the draft interim report at its meetings of 9 January, 21 March, 24 April, 23 May and 27 June 1975 and unanimously adopted the motion for a resolution and the explanatory statement. The committee also decided on a procedure of adoption without debate in plenary sitting.

Present: Mr Leenhardt, chairman; Sir Brandon Rhys Williams, vice-chairman; Mr Hougardy, rapporteur; Mr Albertsen, Mr Artzinger, Mr Carpentier, Mr Delhôte, Mr Flämig (deputizing for Mr van der Hek), Mr Lange, Mr Normanton and Mr Suck.

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The Committee on Economic and Monetary Affairs hereby submits to the European Parliament the following motion for a resolution, together with explanatory statement:

MOTION FOR A RESOLUTION

on index-linking of savings

The European Parliament,

- having regard to the motion for a resolution (Doc. 365/74)<sup>1</sup>;
- having regard to the report of the Committee on Economic and Monetary Affairs (Doc. 165/75);

1. Considers that the problems associated with the index-linking of savings give rise to differences of opinion and involve a great many economic and technical uncertainties;
2. Therefore invites the Commission of the European Communities to examine further the entire range of problems connected with index-linking and more particularly the protection of savings;
3. Requests the Commission of the Communities to submit a report on the findings of this study when it is completed;
4. Instructs its President to forward this resolution and the report of its Committee to the Council and Commission of the European Communities.

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<sup>1</sup> Motion for a resolution tabled by Lord Reay, see Annex.

EXPLANATORY STATEMENT

The index-linking of savings has given rise to fairly wide differences of opinion within the Committee on Economic and Monetary Affairs as regards both the desirability of index-linking for savings and the conditions of implementation of indexing.

I. The desirability of indexing savings  
- social aspects

Inflation, particularly at the high rate prevailing since 1974, has had an extremely detrimental effect on savings. According to the conclusions of a Bundesbank report, German savers suffered a loss in excess of 40 thousand million DM on their savings in 1973 alone. Thus inflation results in a redistribution of income for the benefit of those who have the means of protecting themselves against it or even of profiting from it, while small savers are powerless to prevent the depletion of their resources, and can justly consider themselves at a disadvantage compared with those whose incomes are index-linked.

- economic aspects  
- economic aspects

On the other hand, analysis of the consequences on inflation of indexing savings brought to light two diametrically opposed points of view in the committee.

- The advocates of index-linking consider that partial indexing confined to savings invested by private individuals on a medium or long-term basis in the form of non-negotiable 3 or 5 year bonds, or by life assurance companies, would not have an inflationary effect. They believe on the contrary that a measure of this kind would result in a better distribution of savings towards productive investments instead of the present preference for sight deposits or alternative forms of investment.

Psychologically, the indexing of savings, far from implying a cessation of the fight against inflation, might help to reduce speculative activities, i.e., anticipatory operations which merely stimulate inflation.

- The opponents of indexing believe on the contrary that there is only one way of stemming the erosion of savings, namely direct action to control the causes of inflation. They maintain that by attempting to alleviate the consequences, however regrettable these may be, there is a risk that inflation will simply be worsened since, even if indexing is only partial, it is bound to be gradually extended and generalized. It is illusory to try to tame inflation and tantamount to opting out of the fight against it. The opponents of indexing also base their views on past attempts to protect savings in certain countries which the public authorities had to abandon

because of the inflationary consequences; indexing was found in particular to foster excessive cost rigidity.

II. Conditions for implementing the indexing of savings

Over and above these objections of principle, the opponents of indexing drew attention to the technical obstacles which militated against its practical implementation.

In addition to the choice - always a delicate one - of the type of savings and the index, these obstacles include the very notion of saver and savings and the application of indexing as a function of time.

- notion of saver

It would be artificial to attempt an isolated definition of a saver. In fact there are few situations in which the saver is not also a debtor, so that the negative and positive effects of inflation on individual assets tend to compensate each other. It appears very difficult to establish with any accuracy the balance of these compensatory effects but they must be taken into account - thus lessening to the same extent the need for indexing savings.

- small savings

It also seems difficult to fix, for example, the upper limit of 'small' savings, which could justifiably be protected against inflation.

- application of indexing as a function of time

It would also be difficult to avoid the problem of retroactive application of indexing. Failing retroactive effect, it is difficult to foresee the behaviour of holders of existing non-indexed bonds; it seems likely that they will unload them, thus seriously disturbing the financial market.

MOTION FOR A RESOLUTION

ANNEX

72

tabled by Lord REAY

(Doc. 365/74)

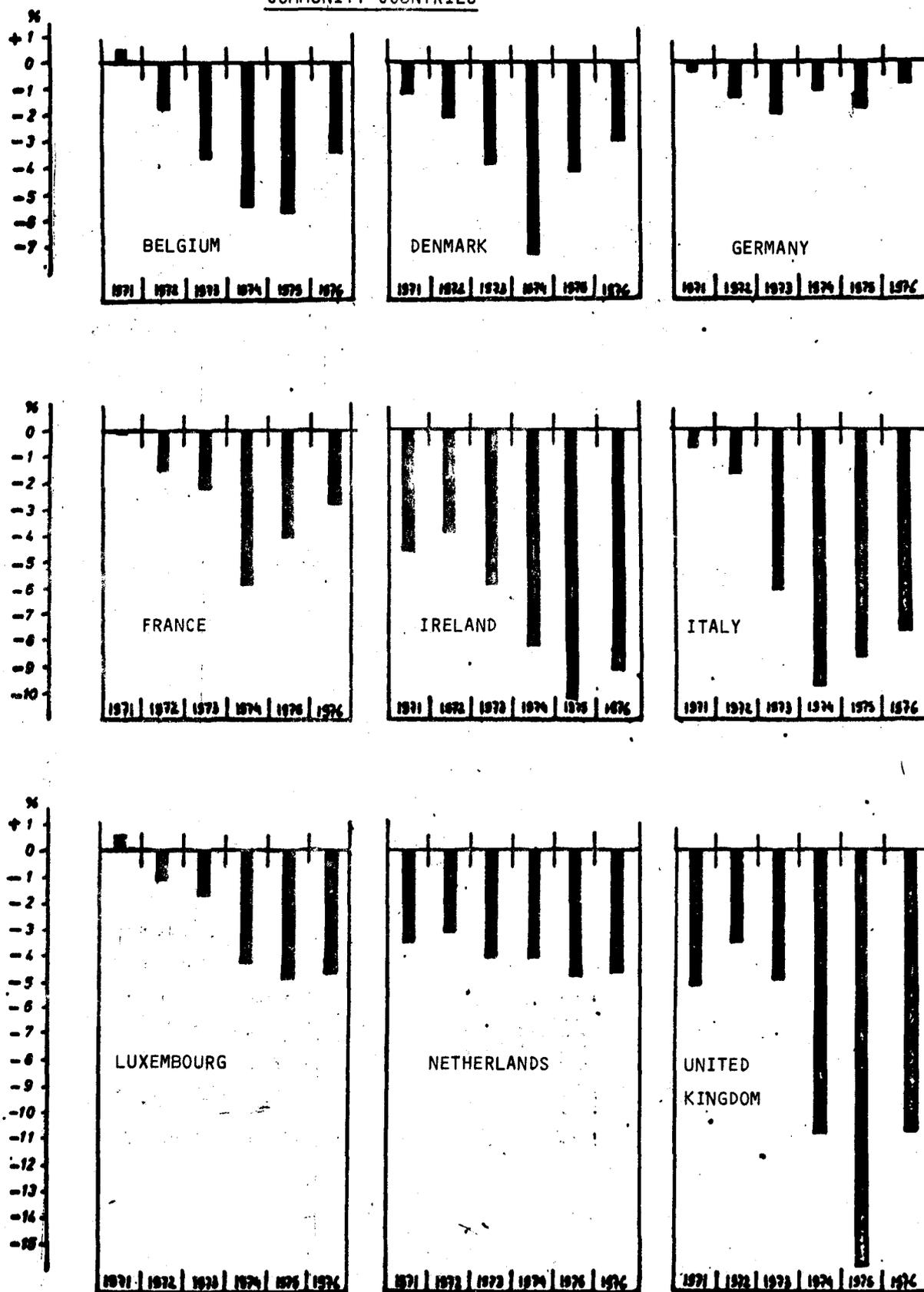
The European Parliament,

- considering that as a result of the difference between inflation rates and interest on savings accounts a constant transfer of income is taking place to the detriment of savers and to the advantage of borrowers of capital which must be considered unjustified;
  - considering that this situation also presents a risk to the stability of savings and above all of money invested for a relatively long term;
  - considering that the indexing of savings and loans permits more rational and responsible investment decisions;
  - further considering that indexing can help to break the anticipation of further inflation;
  - having regard nevertheless to the possibility that a generalized form of indexing may create a risk of sudden movements on the money and capital markets, that it may be politically impossible to attain and also not necessary to achieve the desired aim;
1. *requests* the Commission to consider the possibility of encouraging the issue of indexed, non-negotiable savings certificates in the Community and to make appropriate proposals;
  2. *Instucts* its appropriate committee to examine the question of indexing savings;
  3. *Instucts* its President to forward this resolution to the Commission of the European Communities.

## ANNEX II

TABLE I

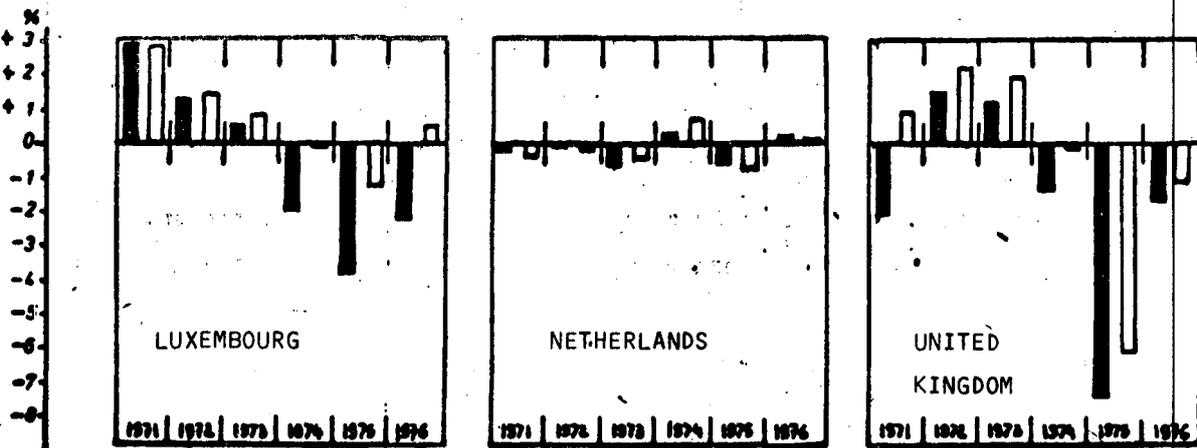
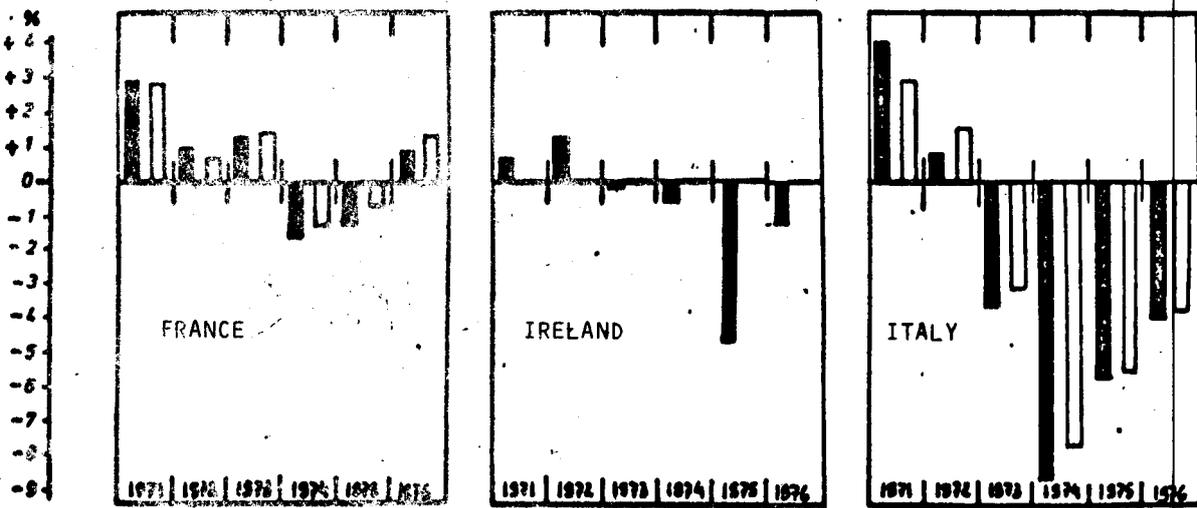
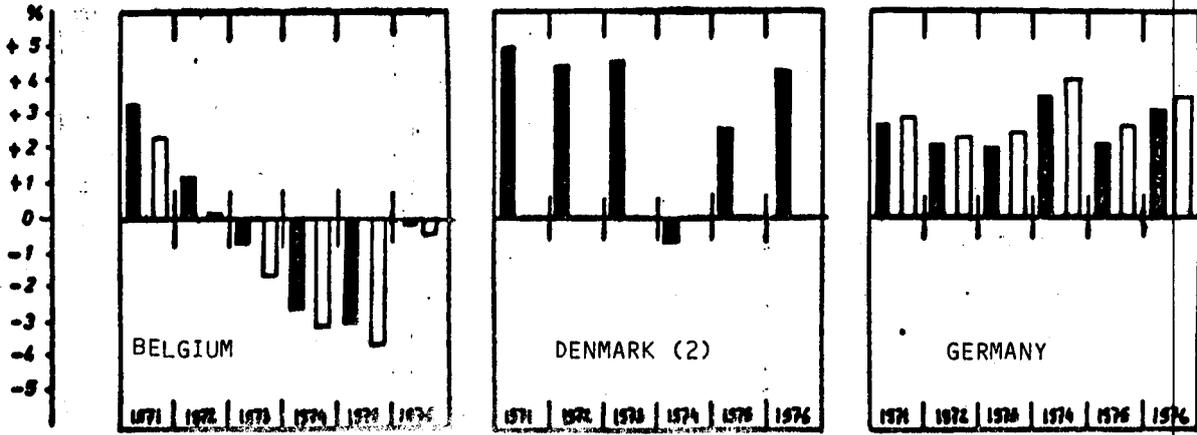
AVERAGE "REAL" YIELD (%) <sup>(1)</sup> ON ORDINARY SAVINGS BANK BOOKS IN  
 COMMUNITY COUNTRIES



1) i.e. taking account of the change in the general consumer price index

AVERAGE "REAL" YIELD (%)<sup>(1)</sup> OF BONDS IN COMMUNITY COUNTRIES TABLE II

Government stock  
Private-sector bonds



1) i.e. taking account of the change in the general consumer price index  
2) All Government stock and private-sector bonds

ANNEX IIIFRANCELEGAL TEXTS RELATING TO INDEXATION

Order No. 58-1374 of 30th December 1958

Article 79

1. All general provisions laid down by law or regulation for the automatic indexation of the prices of goods or services shall be repealed. In each particular case, the conditions for the application of this repeal shall be laid down by decree countersigned by the Minister for Economic Affairs and Finance and the Ministers concerned.

2. Notwithstanding the foregoing, the provisions of Article 31(a) of the Labour Code relating to the indexation of the guaranteed minimum wage shall remain in force.

3. All new statutory provisions or provisions in collective agreements providing for indexation based on the guaranteed minimum wage or on the general level of consumer prices shall be prohibited.

Current provisions involving such indexation shall cease to be applied except where they concern alimony or the formation of annuities with the nature of alimony.

Order No. 59-246 of 4th February 1959

Article 14

The provisions of Article 79-3 of Order No. 58-1374 of 30th December 1958 shall be replaced by the following provisions:

"3 - In new statutory provisions or provisions in collective agreements, except where they concern alimony, all clauses shall be prohibited which provide for indexation based on the minimum guaranteed wage, the general level of prices or wages, or on the prices of goods, products or services

which are not directly related to the subject of the statute or the collective agreement or to the activity of one of the parties."

"In current statutory provisions or provisions in collective agreements, the clauses providing for such indexation shall cease to have effect beyond the level reached at the time of the last revalorisation prior to 31st December 1958 when these provisions concern, directly or indirectly, reciprocal obligations to be discharged successively".

ANNEX IVFEDERAL REPUBLIC OF GERMANYLegal texts governing indexationCurrency Law of 20th June 1948

§ 3: Money debts may not be denominated in a currency other than the German mark except with the agreement of the authority competent to issue authorisations relating to foreign currencies. The same provision shall apply to money debts, the amount of which in German marks must be fixed either by reference to the rate of another currency, to the price of gold or to the price of other goods and services, or by equivalence to a certain quantity of gold, of goods or of services.

Foreign Trade and Payments Law (Aussenwirtschaftsgesetz) of 28th April 1962

- § 49: - The first sentence of § 3 of the Currency Law of 20th June 1948 shall not apply to legal acts between residents and non-residents.
- The Bundesbank shall be competent to issue the authorisations laid down by § 3 of the Currency Law of 20th June 1948.

THE FEDERAL REPUBLIC OF GERMANYVALUE GUARANTEE CLAUSESThe Bundesbank's policy in granting permits

(April 1971 monthly report of the Bundesbank)

*The possibilities of recourse to value guarantee clauses have in recent times occasionally been the subject for public discussion. Under the terms of Article 3 of the Currency Law of June 20, 1949, in conjunction with Article 49, para. 2 of the Law on Foreign Trade and Payments, "money debts in Deutsche Mark, the amount of which is to be fixed in terms of the exchange rate or the price or quantity of fine gold or other goods or performances, may only be contracted with the permission" of the Deutsche Bundesbank. The following survey describes the principal considerations upon which the Deutsche Bundesbank acts when granting permits for such value guarantee clauses and the prerequisites thereof.*

**Purpose and scope of the regulation laid down in Article 3, Currency Law**

The regulation laid down in Article 3, Currency Law, is intended to emphasise the principle of nominalism for money debts by stipulating that the effectiveness of such value-safeguarding agreements as are at variance with the said principle be made dependent upon prior approval by the Deutsche Bundesbank. The principle of nominalism means that the amount of a financial commitment expressed in a specific sum shall not change simply because the price or value of individual goods or services, or a greater number thereof, increases or decreases; in other words, in the case of money debts it is the nominal value which is to be relevant rather than the "purchasing power" of the money.

The regulation laid down in Article 3, Currency Law, according to which the legal effectiveness of such agreements to safeguard value as fundamentally run counter to nominalism is made dependent upon prior approval by the Deutsche Bundesbank, does not, however, merely give expression to an abstract principle. Rather does it provide a possibility of counteracting the acceleration of inflationary tendencies by withholding approval. Once value-safeguarding clauses, or particular types of such clauses, have come into common use, price increases in individual sectors or in the economy as a whole would be transmitted to a large number of already constituted financial claims. This would inevitably have repercussions on the general price level, which in turn would affect the reference figures of value guarantee clauses, thereby inducing renewed price rises. The purpose of the regulation must not be disregarded when examining the question of whether a particular clause comes within the scope of Article 3, Currency Law, at all.

Not every linking of an amount owed in Deutsche Mark with the movement of the price or value of certain goods or services requires approval under the terms of Article 3, Currency Law. It is impracticable at this juncture to quote all the types of value guarantee clauses for which no permission is required; but mention may be

made of two fairly common kinds. In the first place, Article 3 is not concerned with the so-called "relational clauses", i.e. agreements which establish a relation between a liability and the price or value of goods or services of a similar nature to the performance incumbent upon the creditor. The wording and the purpose of the regulation make it clear that only references to the future price or value of dissimilar goods or services shall be subject to approval. Such relational clauses are frequently encountered in connection with salary or pension arrangements providing that the remuneration shall conform to the salary or pension paid for comparable positions. A further category of clauses exempt from approval has now become somewhat more common, namely the "reserved performance clause". With clauses of this kind the amount owed does not simply increase or decrease in the measure in which the reference figure changes; instead, it is agreed that under certain pre-conditions, which normally apply when specific prices change, the Deutsche Mark liability shall be newly fixed by the contracting parties or by third parties. Such clauses do not require prior approval whenever a change in the prices selected for comparison, or of some other reference figure, does not have a direct effect on the guaranteed claim but instead the claim is newly fixed by independent legal action, commensurate allowance being made for the consideration of equitable treatment. Only in the last-mentioned cases may it be assumed that the guaranteed liability is not "determined" by the price or value of some other goods. Whenever, on the other hand, in the event of a change in the price or value of certain goods or services, a clause results in a corresponding change in the money debt to be guaranteed - not, admittedly, "automatically", but in effect just as inevitably as an "automatic" clause, despite the formal necessity of "fixing anew" - such clause, to be effective, requires prior approval. If it were possible to circumvent the requirement of prior approval merely by an appropriate formal drafting of value guarantee clauses, the regulation laid down in Article 3, Currency Law, would hardly be able to fulfil its purpose of preventing the uncontrolled dissemination of value guarantee clauses.

**Comments on the principles followed in granting approval**

Obviously the question of the conditions under which certain value guarantee clauses can be regarded as objectionable or otherwise from the angle of monetary policy and of whether approval can accordingly be granted or must be withheld cannot be explored with an eye to the possible repercussions of a specific agreement between two particular contracting parties but only in quite general terms. It would clearly be impossible in each individual case to prove that this or that particular clause might have detrimental consequences for the stability of the currency. The Bundesbank's investigations aim at establishing whether value guarantee clauses, if

they occur in greater numbers, may have a dangerous impact on the stability of the currency in the sense of an acceleration of price rises. It would thus appear expedient to list the general principles observed when granting permission, if only because the large number of cases to be decided by the competent Land Central Banks requires that equal treatment be assured.

The "Principles to be observed in granting permission", the current version of which is reprinted at the end of this article, contain a "negative catalogue" which enumerates both specific obligations and specific types of clauses for which permission is either invariably refused or granted only under certain conditions.

Obligations in respect of which such restrictions apply are as follows:

- Financial commitments resulting from money and capital transactions, i.e. from loans, bonds, capital and pension insurances, bank balances or agreements of any other kind involving repayment of a sum of money; in connection with liabilities of this type permission is refused without exception;
- Lease and rent contracts relating to premises or rooms; in this instance permission can only be considered if the lessor undertakes to be bound for a contractual period of not less than ten years.

Types of value guarantee clauses subject to restrictions are the following:

- Clauses under the terms of which an increase - not, however, a decrease - in value is to form the subject of an agreement (so-called minimum clauses); no permission is granted in such cases;
- Clauses in which a relationship with wages or salaries is established; in such cases permission is granted only when recurring payments for the lifetime of the beneficiary are involved, or when the wages referred to materially affect the cost incurred by the partner to the contract in rendering the counterpart performance;
- Clauses which make the amount owed dependent upon movements in the cost of living; in such cases permission is considered if the liability refers to recurring payments to be made over a period of not less than ten years;
- Clauses making reference to other indices, such as the construction cost index; these are eligible for a permit only to the extent that the price movement as expressed therein is of material significance for the cost incurred by the contracting party;

- Clauses making the amount owed dependent upon the movement of the price or value of real estate, in these cases permission is granted only in connection with the exploitation of land in agriculture or forestry.

The practice of granting permission as governed by these principles has successfully ensured that the field of money and capital has been kept entirely free from value guarantee clauses. The Bundesbank has at all times regarded value guarantee clauses in conjunction with liabilities in this field as being particularly dangerous, because in view of the vast number of these liabilities a massive expansion of such clauses, which might ultimately include bonds, savings accounts and credits safeguarded by indices, would exercise an adverse effect on the monetary system and on the conduct of money and capital transactions. In the field of money and capital it may be assumed that interest rates normally provide some measure of compensation for depreciation risks. Accordingly, in countries where value guarantee clauses (index clauses) have been admitted in money and capital transactions - generally on a temporary basis only - a split in interest rates has developed, in the sense that "guaranteed" claims show lower rates than unsecured ones. As far as can be seen, clauses not requiring permission, on the number of which the Deutsche Bundesbank has no influence, have not hitherto been employed in the field of money and capital transactions in the Federal Republic of Germany.

Since the Bundesbank was anxious to nip in the bud any form of thinking in terms of indices, clauses linking the amount owed with the movement of living costs were sanctioned only in exceptional cases up to 1964, even in fields other than that of money and capital transactions. It was felt that this policy might be relaxed once it had become clear from earlier experience that the application of the cost of living index as a reference figure represents the lesser evil, inasmuch as this particular index, being comparatively well-balanced, is capable, by comparison with other standards, of reflecting changes in the value of money with a maximum of accuracy without passing on specific price rises, which may in certain circumstances be particularly high. At the same time, the originally rather more lavish granting of permits for wage and salary clauses was appreciably cut back because in view of the upward movement of wages and salaries extremely high growth rates for the money debts linked thereto tended to occur. To a large extent these growth rates were not the outcome of changes in the value of money but were due to the general increase in the productivity of the economy and the occasionally pronounced labour shortage.

In 1969 it became necessary once again to revise the policy of granting permits for such clauses as - especially in heritable building right contracts - tied the amount owed to movements in real estate prices. The rise in land

**Applications for permits pursuant to Article 3, Currency Law, and their treatment**

Year	Applications	Permits granted	Negative certifications	Applications rejected	
				by interim notice 1	by formal notice of rejection
1960	10,485	7,122	1,846	1,491	32
1961	12,482	9,253	1,738	1,419	32
1962	14,913	11,333	2,070	1,540	30
1963	16,588	12,903	2,205	1,450	30
1964	21,012	16,322	2,837	1,833	31
1965	23,822	17,497	3,686	2,908	22
1966	26,415	20,321	3,734	2,328	13
1967	24,281	19,028	3,614	1,808	8
1968	25,585	20,324	3,943	1,320	7
1969	29,383	22,776	5,127	1,453	22
1970	33,796	24,999	6,585	2,190	

1 Comprising only those interim notices in respect of which the application did not result, after due amendment, in the granting of a permit or in a negative certification.

prices, particularly in highly urbanised regions was such that these prices could no longer be used as a yardstick for a value guarantee, especially since the increases in claims arising from such clauses went far beyond a value guarantee conceived as a protection against "losses in purchasing power". Incidentally, the effects of such clauses on the movement of interest rates on heritable building rights and the concomitant repercussions on a large number of rents are so serious that the Federal Government feels impelled to consider whether it would not be possible by a change in the ordinance on heritable building rights to counteract rises in the pertinent interest rates brought on by such adjustment clauses.

**Recourse to value guarantee clauses**

As can be seen from the above table, the number of clauses submitted to the Deutsche Bundesbank for the granting of permission has grown with significant regularity. Applications mounted from something like 10,000 in 1960 to roughly 34,000 in 1970, in which context it must be observed that the figures do not include enquiries as to whether value guarantee clauses require permits or are eligible for them, which in 1970 accounted for 2,500 cases. The number of permits granted and negative certifications issued, i.e. statements to the effect that a certain clause does not require a permit, rose in line with the number of applications. The number of permits went up from approximately 7,000 in 1960 to 25,000 in 1970, while the number of negative certifications increased from 1,800 in 1960 to approximately 6,500 in 1970.

In assessing the total of permits granted it must not be overlooked that their number also comprises collective permits (in 1970 approximately 700), whereby one permit is granted for a large number of value-guaranteed claims of a single creditor. Municipalities, for instance, which

regularly convey heritable building rights in large numbers, are accorded a collective permit valid for a period of twelve months, which covers all agreements made in compliance with the terms of the respective permit.

When establishing the number of value guarantee agreements actually entered into it will have to be borne in mind that presumably not all agreements requiring permits are submitted for consideration, even though it may be assumed that whenever recourse is had to the services of notaries public or attorneys, contracts are regularly submitted to the competent Land Central Bank. Finally it must be remembered that it is impossible to estimate the extent to which value guarantee clauses not requiring permits are agreed without being submitted to the Deutsche Bundesbank with a request for negative certification. It may be assumed that in the case of value guarantee clauses clearly not requiring a permit the issue of a negative certification by the Deutsche Bundesbank is frequently dispensed with.

A notable feature is the small number of formal rejections. This is probably due, not least, to the Bundesbank's practice of not immediately refusing the permission sought by formal notice of rejection whenever objections to the granting of a permit present themselves in the light of the principles governing permission. In such cases the applicant is told *informally* that for certain specified reasons he cannot expect to be granted a permit in a particular case. This procedure is designed to avoid the final ineffectiveness of the clause conceivably (Art. 139, Civil Code) resulting in the invalidity of the entire contract. Moreover, applicants are thereby enabled to modify their value guarantee agreement in such a way as to be eligible for permission or for certification to the effect that no permit is required. Only in isolated cases have applicants insisted, after objection had initially been raised in the informal procedure, upon their original application being decided by formal notice of refusal which they can then contest by going to court. The number of interim notices handed out is considerably higher than that shown in the table, which covers only those cases which were not taken up again with the Bundesbank after receipt of an interim notice, either because the parties dispensed altogether with the value guarantee or the requisite permit, or because they resorted to clauses exempt from permission without requesting a negative certification.

As regards the yardsticks chosen by contracting parties to guarantee the value, the following table shows that reference to the movement of a cost of living index ranks foremost. In 1970 approximately 20,000 permits were issued for clauses of this kind, which figure represents about 80% of all permits granted. Clauses referring to the salaries of established government employees and other wages and salaries, which up to the modification of the principles underlying permission in 1964 had risen

Permits granted, by type of yardstick most commonly applied							
Year	Permits granted, total	of which (yardsticks applied)					
		Cost of living index	Other indices	Salaries of established govt. employees	Other wages and salaries	Real estate prices	Foreign exchange rates
1960	7,122	863	219	3,684	617	483	301
1961	9,293	1,103	333	4,915	749	674	513
1962	11,333	1,219	321	6,580	915	759	484
1963	12,903	1,241	343	7,962	912	969	422
1964	16,322	2,237	424	9,269	938	1,987	513
1965	17,497	8,554	491	4,304	533	2,073	501
1966	20,321	11,346	509	3,513	547	2,945	496
1967	19,026	11,906	421	2,568	568	2,417	548
1968	20,324	13,965	329	2,204	471	2,405	512
1969	22,776	18,849	332	1,982	569	2,011	577
1970	24,999	20,449	603	1,853	586	516	560

to more than 10,000, have declined to barely 2,500 owing to stricter application of the principles. References to foreign exchange rates have remained comparatively constant; such clauses are chiefly employed in follow-up import contracts, export supply contracts and other types of contracts connected with foreign trade. Such clauses actually serve as a protection against changes in exchange rates rather than as a safeguard for Deutsche Mark claims against losses in purchasing power.

Most permits are granted on the basis of the requirements laid down in the principles underlying the granting of permits regarding the life of agreements on value guarantees in connection with long-term obligations. Frequently this concerns contracts for the purchase of land, under which the purchase price is paid in instalments over many years or in the form of a pension; approximately 10,000 permits were granted for such contracts in 1970, i.e. 40% of the total. During the past year 6,000 permits concerned value guarantee clauses in heritable building right contracts, a further 6,000 clauses in lease and rent contracts, lease contracts in respect of premises to be used for industrial purposes being far in the lead, since premises of this kind are normally leased at longer term than living quarters.

The question of whether recourse to agreements on value guarantees is already so widespread that the transfer of price movements from one sector to another might assume dangerous proportions can still, on the evidence of the figures available, be answered in the negative. It is true, however, that recourse to clauses not requiring permits will have to be given close attention since it is difficult to assess the extent to which they are employed. Recourse to them, which it is not possible to control, might increase considerably if the legal requirements regarding the prerequisites for a clause not subject to permission are progressively eased.

**Principles to be observed in deciding upon applications for permits in accordance with Article 3, Currency Law, (Item 2 (c) of the Currency Ordinance for Berlin).**

— Deutsche Bundesbank Bulletin No. 1018/64 of August 26, 1964, published in the Federal Advertiser No. 160 of August 29, 1964, amended by Bulletin No. 1006/69 of September 9, 1969, published in the Federal Advertiser No. 169 of September 12, 1969 —

By virtue of the amendment to Deutsche Bundesbank Bulletin No. 1018/64 by Bulletin No. 1006/69, the principles to be observed in deciding upon applications for permits in accordance with Article 3, Currency Law, (Item 2 (c) of the Currency Ordinance for Berlin) are now worded as follows:

To inform the public on the principles it observes in deciding upon applications for permits in accordance with Article 3, Currency Law, (Item 2 (c) of the Currency Ordinance for Berlin) the Deutsche Bundesbank calls attention to the following points:

1. Clauses providing that the amount owed in Deutsche Mark will be determined by the future exchange rate of some other currency, by the future price of gold or the future price or value of other goods or services (Article 3, sentence 2, Currency Law; Item 2 (c), sentence 2 of the Currency Ordinance for Berlin) will not be approved in the case of

(a) financial commitments arising from loans, including obligations of any other type converted into loans, from bonds, capital and pension insurances, bank balances or agreements of any other kind involving repayment of a sum of money (financial commitments arising from money and capital transactions);

(b) lease and rent contracts relating to premises or rooms, except where the contract is concluded for the life of the lessor, for a period of not less than ten years, or in such form that notice of its termination cannot be given by the lessor before ten years have elapsed.

2. Irrespective of the type of obligation such clauses will not be approved whenever

(a) unilaterally an increase in exchange rates, prices or value is to result in a rise, while conversely a decrease in exchange rates, prices or value is not to entail a corresponding reduction, in the claim for payment ("minimum clauses", "unilateral clauses");

(b) the amount owed is to be tied to the future price of gold;

(c) the amount owed is to be generally dependent upon the future "purchasing power" of the Deutsche Mark or some other yardstick which does not reveal what prices or values shall be the determining factors.

3. In addition, no clauses will be approved according to which the amount owed

(a) is to be dependent upon the future movement of living costs (a part of living index), except in the case of recurring payments to be made for life, or until the recipient attains the capacity for gainful occupation or a specific goal in his education or training, or for a period of not less than ten years;

(b) is to be dependent upon the future individual or average movement of wages, salaries, pensions or annuities, except when

(aa) a regularly recurring payment is involved, to be made for life or until the recipient attains the capacity for gainful occupation or a specific goal in his education or training, or

(bb) the amount still owed in each case is made dependent upon the movement of wages or salaries which exercise a material influence on the cost incurred by the creditor;

(c) is to be dependent upon the future price or value of other dissimilar goods or services (for instance upon the construction cost index or some other index reflecting the movement of prices or values of a number of goods or services) except when the amount still owed in each case is made dependent upon the movement of prices or values of goods or services which are produced, sold or rendered by the debtor in his own establishment, or which materially influence the cost incurred by the creditor;

(d) is to be determined by the future exchange rate of some other currency, except in the case of

(aa) follow-up import contracts between importers and first purchasers, export supply contracts between exporters and their immediate suppliers, or purchase contracts in "interrupted" merchanting trade whenever the merchandise is passed on unchanged through sale by the importers, the exporters or the merchanting traders, or

(bb) sea passage or sea freight contracts;

(e) is to be dependent upon the future individual or average movements of the price or value of real estate, except when the obligation is confined to the exploitation of land by agriculture or forestry.<sup>1</sup>

4. Provided that a permit required pursuant to Article 3, sentence 2, Currency Law, (Item 2 (c), sentence 2 of the Currency Ordinance for Berlin) is not precluded under the terms of the above principles, it may generally be assumed that such permit will be granted.

5. In the case of contracts as described in item 3(d) it may also be assumed that permission to enter into a commitment in foreign currencies (Article 3, sentence 1, Currency Law; Item 2 (c), sentence 1, Currency Ordinance for Berlin) will be granted.

6. These principles replace the principles of December 12, 1958, as announced in the Federal Advertiser No. 243 of December 18, 1958 by the Deutsche Bundesbank Bulletin No. 1009/58. To the extent that they deviate from the former principles by precluding a permit they shall apply to agreements concluded later than October 31, 1964. These principles shall govern all applications for permits decided upon after announcement of these principles.

7. The right to amend these principles is reserved.

8. Applications for permits in accordance with Article 3, Currency Law, (Item 2 (c) of the Currency Ordinance for Berlin) should be filed with the competent Land Central Bank.

<sup>1</sup> (inserted by Bulletin No. 1006/69; item 3 (e) applies to agreements concluded later than November 30, 1969.

ANNEX V IF R A N C E

Text of the letter relating to the protection of  
small savings from Mr. GISCARD D'ESTAING to Mr. BARRE,  
Prime Minister, 16th November 1976:

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"The inflationary situation which has beset the world economy for several years affects savings directly. It is probably possible for some savers, using the advice of financial institutions, to protect their savings effectively, by taking advantage of interest rates and by substituting one form of investment for another. But this is not the case for those who can devote only a small part of their resources to saving and who often have access to only a single type of investment.

In these circumstances I feel that small savers whose main concern is the protection of capital, should dispose of a simple and specialised savings instrument which, in return for a limited interest rate and a real stability of deposits, would guarantee them lasting security for their assets.

It is not a matter of introducing the general indexation of savings: such indexation could only weaken our economy's ability to free itself from inflation. The aim is to set up the machinery which will ensure effective protection of small amounts of capital so as to meet the needs of the French citizen of our time.

I would ask you to be good enough to initiate a study, by the methods which you consider appropriate, of the features of such machinery. In particular, thought should be given as to how these savings can be best employed so as to be of maximum utility and so as to reduce the cost of protecting the capital. This machinery should be ready by 1st January 1978."

ANNEX VII

REPLY BY THE GOVERNOR OF THE BANCA D'ITALIA TO  
PARLIAMENTARY QUESTIONS ON THE POSSIBLE INDEXATION  
OF FIXED INTEREST SECURITIES, GIVEN BEFORE THE SENATE  
COMMITTEE FOR FINANCE AND THE TREASURY AT ROME,

3rd NOVEMBER 1976

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The issue of indexed securities is a means of broadening the range of financial instruments at the disposal of lenders and borrowers. When inflation rates are liable to vary appreciably as time goes on, the effect of indexation is to protect the lender when inflation exceeds the rate assumed, which itself serves as the basis for fixing the nominal interest rate of the contract, which will in the end prove to be too low. However, indexation can also protect the borrower in periods when inflation slows down, because if this slowdown has not been taken into account in the forecasts and consequently nominal rates have not fallen, then in practice they would prove to be too burdensome for him. In short, indexation is a means at the disposal of the contracting parties of definitely fixing the rights and obligations resulting from the contract established in real and not nominal terms.

For example, capital and interest, or both, may be geared to parameters representative of the purchasing power of the currency in general or on particular markets, for example on the market in the products or services sold by the firm which has contracted the indexed loan, or on the market in the good in which the debtor has invested the yield of the indexed loan, for example, a house.

The recurring difficulties on the long-term securities market since 1969, following the very sharp cyclical fluctuations of short-term rates, mean that it has become essential to stabilise the amounts of savings flowing into institutions lending against securities and real estate by introducing a new form of indexation; namely financial indexation: this would mean issuing medium or long-term securities, the coupon of which would be indexed to the trend of short-term rates. This is a formula which has already been applied in respect of medium-term bank loans; it establishes a correlation between the cost, which is very variable, of collecting the funds in the form of bank deposits and the yield of at least a part of its use by the bank.

This formula could usefully be extended to the financial market. A very far-sighted representative of the employers, Mr. Franco Mattei, recently came out in favour of the creation of this type of security. These considerations concern the relationships between private lenders and borrowers.

As early as March 1974, the case which to me seemed most to justify real indexation clauses was that of real estate loans, where inflation benefits private individuals (not firms) who acquire goods, often second residences, intended to appreciate in time both in absolute and relative value.

The housing savings plan ("risparmio-casa") which envisages the introduction of a system of financing to take account of the decline in the value of money, both for the collection of savings and for the granting of loans, has not, however, been approved by Parliament and has not yet been presented during the new legislative period.

The proposed system, which involves the indexation of the financial savings of those wishing to purchase a dwelling, was mainly designed to help households on medium or low incomes for which, in the current situation, the decline in the value of savings, coupled with the increase in the price of housing, has made it virtually impossible to accumulate the funds needed to make the purchase. The plan, therefore, enables them to maintain the real value of savings during the period when they are being accumulated and, on the worst assumption, to maintain constant the real charge of paying off the loan: the amount of the earlier annual repayment instalments would be lower and the later instalments would be higher. The parameter chosen for the monetary adjustment is the cost-of-living index, which is also used to calculate the cost-of-living allowance, thus reducing the risk of an increase in the debt exceeding an increase in incomes.

The financial indexation system was applied by ENEL<sup>1</sup> in 1974 and 1976 to attract the public back to the bond market; this indexation aims at guaranteeing holders of securities that their return will be adjusted to the trend of interest rates on the bond market. It limits the risk of capital losses, but not the losses due to the decline in the value of money, since the adjustments to market conditions take place by variations in the nominal rate.

The ENEL experiment did not meet with great success, probably because the adjustment mechanism is not very easy to understand and especially because the reference index chosen, namely long-term rates, only partly reflected the changes occurring in the return on money.

In general in periods of inflation, if the upward adjustment of nominal rates is not sufficient to guarantee lenders a real positive return, the capital losses which lenders suffer constitute one of the mechanisms for absorbing inflationary stimuli. The existence of such a mechanism dampens the effects on prices of the excessive demand for money deriving from the monetary financing of the public deficit and wage increases. To prevent the better protection of savers, on the assumption made, from causing the inflation rate to accelerate, "absorption areas" must be created or enlarged in other sectors, mainly in that of earned income, by lengthening the intervals between the adjustments provided for in the sliding scale mechanism. The impact of price variations due to intervention by the political authorities and to seasonal factors should also be neutralised, and exchange rate fluctuations due to speculation should be deferred.

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<sup>1</sup> ENTE NAZIONALE PER L'ENERGIA ELETTRICA, public Italian undertaking for the generation of electricity.

POSITION ADOPTED BY THE COMMUNITY AT THE CONFERENCE ON INTERNATIONALECONOMIC COOPERATION ON THE INDEXATION OF RAW MATERIALS' PRICES

(Paris, April 1976)

In the final resolution of its Seventh Special Session, the United Nations General Assembly set itself the goal of achieving stable, remunerative and equitable prices for raw materials and primary commodities of export interest to the developing countries. It also recommended that a study be made of certain solutions whereby the purchasing power of the developing countries might be safeguarded. The Community, which subscribed to this resolution, is willing to enter into discussions on the question of indexing the prices of raw materials, albeit without prejudice to the conclusions of the debate on the results of the studies of direct and indirect indexing schemes and other solutions worked out by the General Secretariat for the IVth Session of UNCTAD, studies to which the Community is giving its closest attention.

Nevertheless, on the basis of the document on indexation presented by the Group of 19 at the March session, a certain number of remarks may be put forward regarding the merits of raw materials price indexation considered as a mechanism for stabilizing and increasing the revenues of the developing countries on a lasting basis.

The Community is fully conscious of the importance of the question of raw materials and primary commodities in promoting the economic development of the developing countries in stable conditions. The action taken by the Community in the field of development has been prompted by this very concern. However, arguments of a general economic nature have led the Community to formulate conclusions which differ from those put forward in the paper presented by the Group of 19 on the question of indexing prices of raw materials and primary commodities.

The indexation of a commodity's price means that it is no longer determined, for a given period, by the fluctuations of supply and demand. Indexation thus replacing the market mechanisms in the determination of prices, all imbalance between supply and demand at this price level can be eliminated only by controlling the quantities produced and traded. The administrative difficulties entailed by this type of intervention would very rapidly jeopardize their effectiveness.

By definition, indexation freezes the relative prices of different commodities and, hence, the structures of production. In particular, the prospect of prices being fixed at levels which would, depending on the case, differ from those which might result from the interplay between supply and demand in the absence of indexation, can lead to excessive or inadequate investment and gives rise to the production of substitutes. More generally, the fluctuations in the terms of trade of a country reflect the evolution of the structural and cyclic features of its economic activity and that of its trading partners. In fact, the Community has always declared itself in favour of improving the situation of the developing countries, not by seeking to freeze prices but rather by concentrating upon the improvement of structural factors.

Raw materials and primary commodities represent a major share of the imports of developing countries, particularly the poorest among them. Designed - or tending - artificially to raise the price of part of the imports of developing countries, indexation would exacerbate their balance of payments and inflation problems. The working out of price arrangements or compensatory mechanisms designed to avoid this pitfall would merely introduce further distortions into the organization of the markets and an element of inefficacy into the allocation of development aid.

Moreover, certain industrialized countries also are exporters of raw materials and primary commodities. While indexation would benefit some of them, in the case of others, and particularly those which, like the Community countries, must tackle serious balance of payments and inflation problems - it might by contrast reduce growth potential and, possibly, arbitrarily diminish their

development aid capacity.

In addition to these considerations of a general economic nature, others may be put forward that are linked to the overall situation.

While the prices of raw materials rose steeply in the phase of galloping inflation during the first half of this decade <sup>(1)</sup>, it is true that during the ensuing phase when economic activity diminished these prices dropped, albeit to a varying degree, depending on the commodity. In the current situation, when the economic policies pursued by most countries are aimed at sustaining the revival of economic activity while at the same time curbing inflation, any mechanism (such as direct indexation) likely to help to maintain inflation, or, worse still, intensify it, would inevitably call for new measures intended to check it. Such measures would be liable to have repercussions on the recovery of international trade.

The foregoing considerations are not meant to suggest that the market mechanisms, as they at present operate, are always satisfactory to producers and consumers. However, it is not by systematically superimposing upon existing distortions a factor of further imbalances that the countries that produce and consume raw materials stand to gain. A certain number of ways and means are being studied by the C.I.E.C. and by other specialized institutions - or have already been set up - to improve market structures and to stabilize the developing countries' export earnings. It is within this context that certain price revision methods might most suitably be devised.

For example, a consensus has emerged among producer and consumer countries within the framework of recently renewed commodity agreements (coffee, cocoa, tin) concerning the objectives of these agreements: chief of these is the maintenance and increase of the export earnings and purchasing power of exporting developing countries while taking due account of consumer interests. With regard to price review and revision, these are carried out in accordance with various criteria relating both to the economics of the commodity in question,

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(1) By way of illustration, the raw materials price index (excluding oil) established by the World Bank rose from 81 in 1972 to 116 in 1974 (see in particular UNCTAD document TD/B/563, July 1975).

the evolution of the world economic situation and the changes occurring in the international monetary system. The Community fully subscribes to such realistic operational measures which will make it possible to fix prices that are both remunerative for producers and equitable for consumers.

METHODS OF PROTECTING THE HOLDER OF BONDS AGAINST INFLATION AND  
THEIR EFFECT ON INTRA-COMMUNITY CAPITAL MOVEMENTS IF THEY WERE  
ADOPTED

The high rate of inflation prevalent in most Member States has led the members of the Working Party on Securities Markets to look into the question of protecting the holder of fixed-interest securities against losses caused by the fall in the value of money.

The experts concentrated on two aspects in particular:

- the methods which might be used in this connection,
- the effects on intra-Community capital movements if they were adopted by some member countries, and the related problem of the adoption of concerted policies on the subject by member countries.

**I. General**

1. The real yield on bonds falls when the currency in which they are denominated depreciates, dropping to zero or even becoming negative when the rate of inflation matches or exceeds the coupon rate of the securities. Further, the capital loss may be compounded by a fall in the stock market price of securities brought about by the rise in interest rates which usually occurs in times of high inflation.

This drop in the real value of invested savings is mainly to the advantage of the borrowers. To begin with, it would therefore be necessary, if only for considerations of equity, to adopt measures to restrict and even eliminate this transfer of wealth.

But this observation must be qualified.

Firstly, because these transfers of wealth from lender to borrower frequently cancel each other out, in the whole

or in part, when only a single estate is involved. This is, for instance, true of banks, which have liabilities which depreciate at the same time as their claims, or of individual bond holders who acquired real assets with borrowed funds. The latter situation occurs very frequently as ownership of real property becomes easier.

Secondly, if one wished to compensate the holders of bonds retroactively, the date to be taken into consideration would need to reflect the date and terms when the bonds were acquired. It would be inequitable to compensate all bondholders as if they had held the bonds from the date of issue, because the bonds might have been purchased on more favourable terms later than that date.

Compared with the situation before the First World War, there are perhaps not many estates at the present time which are made up exclusively of bonds, and still more rare are persons who depend only on fixed-interest securities for their income. Nevertheless, such situations do arise in the case of private individuals such as retired farmers who have invested the proceeds of the sale of their land in stocks, or institutions, particularly pension funds. The latter are obliged to finance expenditure which increases at about the same rate as inflation while the value of their assets is steadily shrinking, and this alone would justify the adoption of suitable provisions in their favour. Nevertheless, these various reservations show that the problem of protecting the holder of bonds is not as simple to resolve as might first appear.

2. Apart from considerations of simple equity, it should be pointed out that a continuing high level of inflation will strengthen the need for measures to help

(1) A note prepared by the working party of the EEC Monetary Committee on securities markets attached to the annual report of the Monetary Committee - O.J. 14th June 1976

bondholders and savers in general if the finance needed to sustain economic growth is to be made available. In many European countries, the post-war years show that this was the main reason behind the measures taken at the time to protect savings.

3. The most effective protection for holders of claims would obviously be success in combating inflation itself, and the members of the Working Party agree that keeping the value of money comparatively stable should remain a primary objective. But despite the stabilization policies adopted in the member countries, and owing probably to the variety and complexity of factors behind the progress of inflation, the currencies of the Community countries are all depreciating, although to differing degrees.

Consequently, there is unanimous agreement among the experts that a study should be made of ways and means of giving holders of fixed-interest securities minimum protection against the decline in the real value of their investments.

4. Finally, it is for consideration whether arrangements to protect the interests of savers should cover the past as well as the future, and this raises the problem of the compensation to be paid to bond holders for the losses they have suffered.

## II. The various methods of protecting the bondholders

The various methods of ensuring that the real value of the bondholder's capital and of his income from this capital remains comparatively stable can be broken down into three groups:

1. techniques for bringing issues more closely into line with market conditions;
2. increasing, in one form or another, the nominal yield of loaned funds, so as to ensure that the real yield on the capital remains positive;
3. index-linking.

The members of the working party mainly concentrated on the first two points, but index-linking was also discussed at length. However, the general feeling was that the introduction of index-linking raised a general problem which involved much more than the protection of the holder of fixed-interest securities.

In addition, the inconclusive results of past or current index-linking schemes have led the majority of the experts to adopt a very reserved, not to say negative attitude to this matter.

### 1. Techniques for bringing issues more closely into line with market fluctuations

To begin with, issues could be brought closely into line with market conditions if operators were given greater freedom in setting the conditions and terms of new issues. This would help to recreate on national markets conditions similar to those prevailing on the international capital market, where, given the absence of any regulations, lenders and borrowers can at all times adapt to circumstances.

The techniques to be considered relate to the level of interest rates and the maturity of loans.

(a) The bondholder would no doubt be better protected by an interest rate policy designed to allow him a positive return on his capital. However, the level of interest rates on national markets depends on the economic situation in each country and particularly the intensity of inflationary pressures, but also on the action taken by the monetary authorities, which is itself determined by the general requirements of economic policy. The monetary authorities are in any case, far from enjoying complete freedom of action in this field, their freedom being restricted by the influence of external factors once cross-frontier capital movements have been freed to a satisfactory degree.

These general considerations explain why protection of the holder of fixed-interest securities or of the saver generally cannot be one of the monetary authorities' major policy objectives.

Consequently, the holder of fixed-interest securities will always incur a loss once the cost of money rises above the interest rates on his securities. Of course, this risk exists even in times of comparative stability, but is considerably greater in times of inflation.

Some of the risk can be removed if the interest paid on bonds is periodically brought into line with market conditions. Variable-rate issues, which appeared first on the international capital market and then on certain national financial markets, perform this task.

Examples of such transactions carried out in the Member States include a loan which ENEL in Italy floated in June 1974; this loan carried an interest rate which, without being allowed to drop below 4% per half-year, varies in line with the average stock market yield of a sample of bonds. Similarly, in December 1974 in France the Groupement de l'Industrie Siderurgique floated a loan carrying an interest rate that is to be established in the light of average rates on the money market during the six months prior to the coupon's date of maturity.

It should, however, be noted that this technique normally protects the holder against a loss in the nominal value of capital, but not always against a loss in its real value. Such is the case when the interest rate stays below the rate at which the value of money falls because inflation rates (and in particular, expected rates) are only one of the factors determining interest rate levels.

(b) Another technique which facilitates adjustment to changing market conditions for the operators is the reducing of maturities of loans. Its advantage for the holder is that he, during periods of sharply increasing interest rates, can switch more rapidly to better yielding investments. Also the loss in value will not be so large with short-term bonds as it is with long-term securities. A trend towards bonds with shorter maturities has in fact been observed during the past few years in certain Member States of the Community.

Thus, the average maturity of new loans issued by public authorities and enterprises in Germany has been shortened in recent years from about 15 to 20 years to 10 years and temporarily even five years in the autumn of 1974, and that of mortgage bonds from 30 to 40 years to 5 to 10 years.

In Belgium, there has been a similar trend and an increasing number of loans are issued with an intermediate maturity which gives the investor the option of repayment or of holding on to his securities until final maturity, with the interest rate then generally higher.

Similarly, the loan contracts could feature anticipated repayment clauses for the benefit of lenders, while at present such clauses are usually for the benefit of borrowers only, or provision could be made for frequent and regular options of repayment after a certain date. The GIS loan in France mentioned above carries a clause of this type from the second year.

## 2. Increasing the yield of loaned funds

(a) The techniques described above can only be applied to new issues and therefore only protect new investors. This leaves the case of the holders of old bonds whose capital is shrinking as a result of inflation and of rising interest rates. Generally, no overall solution has ever been evolved for this problem since it is virtually impossible to find the resources that would be required to compensate the holders. This is particularly true with regard to securities issued by the central government or public bodies, which are heavily indebted in some countries. The amounts which would need to be paid to bondholders would call for a very substantial increase in tax revenue, which in most countries would probably be difficult to obtain.

Additionally a basic problem should be pointed out. As far as public saver protection is concerned it could be considered desirable to amend loan conditions in favour of the saver during the term of the loan, consequently deviating from the actual prospectus conditions. Such measures, one imagines, could also

be taken as a result of governmental influence. On the other hand, measures of this kind would hardly represent real help for the saver, for they might create precedents which put the character of a fixed-interest security (fixed interest, fixed maturity) into question. They could also contribute to an unfair overburdening of the issuer which he, in the form of prices or higher taxes, would have to pass on. Furthermore, in a large market there exists the possibility that, unjustly, investors who sold bonds on the secondary market before the measures took effect would not benefit from the improvement in conditions. Insecurity on the market and a corresponding loss of confidence would follow although the opposite result was sought after.

This does not exclude the possibility, in the case of the existence of flexible loan conditions, of such conditions being implemented by the issuer in order to accelerate the amortization of low interest bonds, thus avoiding the necessity of savers being bound to interest rates for too long a period of time — these interest rates, considering the tendency towards increased inflation, appearing to be too low.

In Germany, this solution has been recently adopted. There the mortgage banks and other issuing banks have committed themselves, via their associations, to the Government to using an annual amount of DM 200 million for the voluntary redemption of their low interest (5 and 5.5%) debt. These voluntary redemptions are, in most cases, carried out by repurchase outside the Stock Exchange at the average issue price. These repurchases are limited in amount per individual bondholder who has also to prove that the securities have been his property since a certain date. This is designed to exclude, wherever possible, the benefit of these measures to securities previously acquired at the Stock Exchange at prices below the issue price. A further form of voluntary redemption is the anticipated drawing or redemption of single tranches or whole issues.

In various countries there are also isolated cases of private or public sector borrowers who have agreed to repurchase their securities below the stock market price — usually when new issues are launched, such as the recent IMI issue in Italy — or to raise the interest paid on bonds in circulation, as has happened recently in Austria.

(b) Consideration could also be given to tax arrangements under which tax is levied only on that part of the interest which exceeds the rate of the fall in the value of money, i.e. the real income. Some years ago in Germany a taxpayer tried to obtain a ruling along these lines from the Federal Finance Court, but without success at the time.

Similar proposals have been made in several countries by various economic and political groups. Under all of them, tax would be levied only on part of the nominal interest yield: either on the basic interest rate — interest received in excess being exempt — or only on that part of the interest that corresponds to the proportion of the rate in excess of the rate of inflation. None of these proposals has as yet been implemented, at least in the various Community countries.

- (c) In practice, the interest paid to bondholders is increased only indirectly and in a general way through measures to encourage savings generally. Examples include the French tax exemptions for bond interest up to FF 3 000, the tax exemptions granted in some countries for funds invested in the form of securities under savings schemes, and premiums granted by the State.

### 3. Index-linking

Index-linking is a highly controversial technique. It consists of establishing a link between the nominal value of capital or interest, or both, and an index of purchasing power.

The cost-of-living index is usually taken as a reference but this is not an absolute rule and it is equally possible to use the wholesale price index (Brazil), the index of a foreign currency's rate of exchange (the US \$ in Israel) or an index reflecting the activity of the borrower (turnover for example).

A large majority of the members of the working party agreed that it was hardly possible to isolate the problem of indexing fixed-interest securities from the more general problem of indexing claims in the economy as a whole (1).

In the present economic setting, it would be difficult to introduce index-linking on to the financial market without extending it to other forms of saving. However, general index-linking of savings would in the end be likely to sustain, if not exacerbate, inflationary pressures. Merely because of transfers between accounts, the financial institutions and the banks would be obliged to index virtually all their commitments whilst being practically unable to reassess their old claims.

It would no doubt be possible to restrict index-linking to financial assets tied up for a given period of time, such as fixed-term deposits and deposits at notice, or blocked savings accounts. However, were such a distinction to be made, the financial institutions and the banks, particularly those in countries where credit institutions

are highly specialized, would find themselves in very different competitive situations, depending on the proportion of indexed items in their resources. Finally, choosing a reference index for financial assets is, in itself, quite a delicate matter.

Apart from these general considerations, another decisive reason that in the view of a majority of the experts militates against adopting index-linking as a measure to protect the holder of fixed-interest securities is that the experience gained in the past has not been very convincing. The Finnish authorities had had to acknowledge failure in this field. The Brazilian model, which is frequently cited as an example, operates against an economic and political background that would be difficult to imagine in Europe.

In the Community, France is the only country where there were any significant issues of index-linked bonds by the public and the private sector (during the 1950s). However, careful studies have shown, at least where securities issued by the private sector are concerned, that holders of index-linked securities had generally not been any better protected than if they had bought ordinary bonds.

Index-linking to general purchasing power indices and to indices of certain products or raw materials, representative of price levels (for example gold), has not been permitted in France since the 1958 stabilization plan, but index-linking to the price of goods and services produced by the borrower is still permitted. In other countries, notably Germany, any linking with the monetary value of goods and services, or with indices representative of the general price trend, is subject to authorization, which, however, is never granted in the financial field.

In the United Kingdom, there has not been a full indexed savings scheme of any kind so far. However, the Government are introducing in June and July 1975 two modest, experimental indexed savings schemes strictly limited to small savers and in restricted amounts. Under these schemes only capital will be indexed. A small bonus will be paid at maturity which will give the saver a low but positive real rate of return. There are no proposals for extending indexation beyond these schemes.

### III. Effects on intra-community capital movements of the adoption by one or more States of measures to protect bondholders

Let us assume that one or more Community countries take measures to protect holders of fixed-interest securities. Would such decisions disrupt capital movements to the detriment of the other member countries? There is no clear-cut answer to this question.

1. In the present circumstances it should first be borne in mind that private individuals investing in fixed-interest

(1) The subject is discussed further in the study by the OECD Financial Markets Committee entitled 'Index-linking of fixed interest securities' (OECD, Paris 1973).