Any policy for controlling inflation must necessarily be related to the corresponding diagnosis of the causes of the current inflationary process. If it is demand inflation, then monetary and/or fiscal policy will be indicated. If inflation is administered or autonomous, the market is imperfect, and therefore price controls and an income policy will be the natural course. If inflation is structural, it will be necessary to live with inflation for a while and, at the same time, adopt long-term measures to remove the structural bottlenecks. As these causes do not exclude each other, a combination of these policies will probably be necessary. However, emphasis should always be given to the principal cause of the continuing inflation.

The object of this chapter is to discuss the anti-inflationary policy that is needed when inflation is mainly autonomous or administered, as tends to happen more and more in the oligopolistic capitalist economies in the last quarter of the twentieth century. In these economies, be they already industrialized or be they characterized by industrialized underdevelopment, this kind of inflation became even more relevant as the world economy entered the declining phase of a Kondratieff cycle at the beginning of the 1970s. Since then, inflation has started to coexist with high unemployment rates and idle capacity, this being called stagflation and, later, inertial inflation when, independently of aggregate demand, persistent high rates of inflation became common, especially in developing countries.

In order to discuss the anti-inflationary policy needed for this kind of economic situation, in the first section of this chapter we will present an abbreviated model of inflation. In the second, third, and fourth sections we will discuss and criticize the Keynesian and monetarist policies for controlling inflation. In the following sections we will examine the
"administrative" policy for controlling inflation, which is based mainly on price controls and partial deindexation of the economy, and, secondarily, on a monetary and fiscal policy. We will end by examining the "heroic" policy for controlling inflation, the freezing of prices, wages and the exchange rate.  

In any inflationary process, it is important to distinguish the factors that maintain, accelerate (or decelerate), and sanction the inflation level. The maintenance or inertial factors are a result of the economic agents' capacity to automatically pass their increases in costs on to prices, wages, and interest and exchange rates. Accelerating factors are wage increases above productivity, increases in the corporations' profit margins, and, in an open economy, a real devaluation of the currency and increases in the prices of imported components. The public deficit and an increase in the money supply, which in an economy close to full employment could be accelerating factors of inflation, are factors that merely sanction inflation in an economy with a high rate of unemployment and idle capacity. In keeping with this perspective, the inflation rate depends on the following variables: variations in the wage rate, \( \dot{w} \); variations in productivity, \( \dot{q} \); variations in the price of imported products in international currencies, \( \dot{v} \); variations of the exchange rate, \( \dot{e} \); variations in the quantity of imported raw materials per unit of production, \( \dot{x} \); and, variations in the profit margins (profit above direct costs) of the corporations, \( \dot{m} \):

\[
\dot{p} = (\dot{w} - \dot{q}) + (1 - \alpha) (\dot{v} + \dot{e} + \dot{x}) + \dot{m}
\]

In this model, the most important variables in the short run are the wage rate, the exchange rate, and profit margins. In the long run, and when inflation is not at a very high level, the rate of increase of productivity is also very relevant.

The aim of any anti-inflationary economic policy is to act against the components of Equation 4.1 in order to succeed in reducing its variations and, thus, in reducing the level of inflation.

Generally, the models for an anti-inflationary economic policy concentrate all of their attention on wages. The reason for this is simple.
Profit margins are generally considered to be constant, or at least beyond the control of those who are responsible for economic policy. Given the need to avoid an uneven balance of payments, it is assumed that the parity exchange rate remains constant. And, by definition, those responsible for economic policy are powerless over the prices of imported goods.

The exclusion of the last variable is very natural. However, the exclusion of the variations in the real exchange rate is less acceptable, since it is common for the countries which directly control their exchange rate, not having convertible currencies, to use the valorization of the local currency as a way to combat inflation. This policy was especially used by the countries that adopted monetarist strategies based on the rational expectations theory for combatting inflation, such as Chile and Argentina at the end of the 1970s. They had hoped that by announcing beforehand the exchange rate they could establish rational parameters for their inflationary expectations. The example of Mexico at the beginning of the 1980s, however, makes it clear that the temptation to overvalue the local currency is not the prerogative of the monetarist economists.

The exclusion of profit margins does not make any sense, especially when we consider that in technobureaucratic and oligopolistic capitalism, corporations have ample opportunities to manipulate their margins.³ Obviously, there are ideological motives for this exclusion.

The use of only nominal wages to orient an anti-inflationary policy, in accordance with the Keynesian analysis of inflation, has the advantage of simplifying things. More important, however, is that, via the Phillips curve, it is possible to relate inflation to aggregate demand, that is to the rate of unemployment that will have a direct effect on wages. On the other hand, the correlation between the variations in nominal wages and the inflation rate is always—and obviously—very high in every empirical study.

Thus, by neutralizing the other components of Equation 4.1, the inflation rate then depends exclusively on wages and on productivity:

\[ \dot{p} = \dot{w} - \dot{q} \]  

4.2

Productivity itself could, in the name of simplification, be ignored or put on a secondary level, especially if the inflation level is very high or if we consider that, in the short run, it is not possible to change productivity. Hence,

\[ \dot{p} = \dot{w} \]  

4.3
On the other hand, in accordance with the Phillips curve (1958), there is an inverse relation between the variation of the wage rate and the rate of unemployment, \(d\) (Figure 4.1). This gives us the following equation, in which \(a\) and \(b\) are constant:

\[
\dot{w} = a + b \dot{d}^{-1}
\]  

4.4

According to this, the lower the rate of unemployment, the greater the variation in the wage rate. Theoretically, we could even have wage deflation when there are extremely high levels of unemployment, as nominal wages go down and the curve crosses the abscissa.

There is a trade-off in the Phillips curve between rate of unemployment and the variation in the wage rate. These, in turn, determine variations in prices. Substituting Equation 4.4 in Equation 4.3 the inflation rate is given by

\[
\dot{p} = a + b \dot{d}^{-1}
\]  

4.5

As unemployment increases or aggregate demand slackens, the rates of both the nominal wage increase and inflation fall.

The model of the Phillips curve is adopted by the Keynesian economists, as well as by the followers of the neoclassical synthesis.

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**Figure 4.1 The Phillips Curve and Autonomous Inflation**

![Figure 4.1](image-url)
The anti-inflationary policy that obviously results from this is the reduction of aggregate demand by monetary, and preferably fiscal, measures. These are preferred because the most general assumption is that full employment and the consequential inflation are mainly caused by the public deficit or, more precisely, by the increase in public sector borrowing requirements (PSBR).

There is nothing to prevent establishing a direct relation between the variation in the inflation rate, \( p \), and the variation in the profit margins, \( m \) in this model. However, it becomes difficult to establish, because profit margins, unlike unemployment, are not necessarily related to aggregate demand. Theoretically, one would expect that, as aggregate demand slackens, corporations would reduce their profit margins, just as the workers reduce their pressure on wages. But it is common knowledge that oligopolistic corporations tend to do the opposite.\(^4\)

Going back to the basic model of the anti-inflationary policy based on demand management, its limitations become obvious when the economy in question does not have full employment.

First of all, as is made clear in Figure 4.1, as the unemployment rate increases, the gains in terms of reducing the inflation rate become proportionately less. Up to unemployment level \( d_1 \), the policy of controlling demand is highly efficient. Starting with level \( d_2 \), the policy of controlling demand becomes extremely inefficient. There is an intermediate situation between \( d_1 \) and \( d_2 \).

Second, there is no reason for an oligopolized economy that has high unemployment rates and idle capacity to maintain a direct correlation between the variations in wages and in prices. In order to simplify things, we will assume that this correlation exists in Figure 4.1 up to the point of unemployment \( d_3 \). After this point, however, the oligopolistic corporations begin to increase their profit margins in order to compensate for the loss in sales. As long as the increase in margins is above the decrease in wages, the price curve (which, after point \( d_3 \), separates itself from the wage curve) begins to increase as unemployment increases.

As we will see more precisely in the next chapter, this "inflection," which at first glance seems very unlikely, becomes understandable if the economy is not only oligopolized, but also large sectors are state-controlled, and especially if the economic authorities decide that, besides controlling demand, they will put into action a process of "corrective inflation" for the distorted (artificially low) prices of the goods and services produced by the state corporations. This measure, which is justified by the need to adjust relative prices, is actually imposed because of the growing
fiscal difficulties in which the state and its corporations find themselves as a result of the recessive policy.

This is basically what happened in Brazil in 1983. The inflation level doubled in that year, while the economy went through a strong recession. The jump of the inflation rate was due not only to an increase in agricultural prices and the real devaluation (maxidevaluation) of the cruzeiro, but also to the "corrective inflation" measures such as the elimination of certain subsidies and the increase in the prices of the state corporations.

Third, controlling inflation by reducing demand, and consequently lowering wages, may become ineffective in terms of the Phillips curve, as the direct relation between unemployment and nominal wages is broken. There are two reasons for this break: the bargaining power of the trade unions and, especially, the need (generally translated into agreements with the unions or into laws) to index wages as a result of chronic inflation. In both cases, the Phillips curve is upwardly dislocated, that is, given the same level of unemployment, we will have a higher variation of the wage rate and of the rate of inflation. The trade unions' bargaining power can even lead to a real increase in wages, and thus to an acceleration of inflation, but what is more likely is that we will have inertial inflation with the indexation of wages. In this case Equation 4.4 takes on the following form:

\[ \dot{w} = a + b \cdot d^{-1} + c \hat{p}_{-1} + \hat{w}_a \quad \text{(4.6)} \]

where \( c \) is the indexation coefficient, with \( c = 1 \) in the case of a full wage indexation to past prices \( \hat{p}_{-1} \) and \( \hat{w}_a \) represents the rate of the autonomous variation in wages due to the bargaining power of the trade unions.

To sum up, the policy of controlling inflation by demand management and a reduction of the wage rate loses its effectiveness as the oligopolist corporations raise or at least maintain their margins to compensate for the loss in sales and, especially, as the workers, given their unions and their political power, obtain the indexation of wages, leading to continuous upward dislocations of the Phillips curve.

The policy of demand management must be clearly distinguished from the monetarist policy. For the Keynesians (and for the middle-of-the-road adepts of the neoclassical synthesis), there is an exchange between unemployment and inflation, whereas for the monetarists this exchange
does not exist, except in the short run. In the long run, the Phillips curve is inelastic, that is, vertical in relation to the horizontal axis. Strictly speaking, for the pure monetarist, the Phillips curve does not exist, so that it is theoretically possible to reduce prices without increasing unemployment.

The monetarist theory developed at the University of Chicago is naturally very complex. It is useful, therefore, to reduce it to its simplest form so that it can be more easily understood. We are not interested here in all of its nuances, as they can be found in the works of Milton Friedman and his followers.5

The monetarist school represents a counterrevolution against the Keynesian school; it claims to have reestablished the old neoclassical theory of general equilibrium, following Walras and Pigou. For the monetarists, money does not have any real effects on the economy. Money only determines the general level of prices, without having any influence on the level of production. This is possible because monetarist economists adopt the hypothesis of a constant relation (in the long run) between the demand for money and real income. The money demand function is converted into a nominal theory of income, postulating that the exogenous supply of money determines the nominal level of income and the price level. Therefore, for the monetarists, the process of hoarding, which was studied by Marx and Keynes, does not exist. The real rate of interest is determined in the real sector of the economy where aggregate savings determine the level of investments at the full employment level. Without going into details of the "new quantitative theory of money" developed by Milton Friedman, we can use the following equation to express their propositions:

\[ M + V = Y + \pi \]  

in which \( M \) is the rate of variation of the money supply, \( V \) the rate of variation of the income velocity of money, \( Y \) the rate of growth of real income and \( \pi \) the rate of increase of the price index.

As \( V \) is maintained constant in the long run, variations in \( M \) reflect ultimately on the level of prices \( \pi \), for the real sector of the economy, represented by \( Y \), is given exogenously by the natural rate of growth determined by supply factors such as the rate of population growth and technical progress. The basic argument is that, as the empirical relation between the real demand for money, \( M/\pi \), and real income, \( Y \), is stable, in the long run, prices would vary in direct proportion to the increase in the nominal money supply above the natural rate of growth of the real national income.
The basic monetarist strategy for controlling inflation is therefore very simple: stick firmly to a program of rigid control of the supply of money so that inflation will come down. In the short run, control of the money supply can have some effects on real income, but, in the long run, this will adjust to its natural level and the price level will stabilize. This control will only have real effects, bringing about a reduction in aggregate demand, as long as it is greater than aggregate supply. However, once an equilibrium between aggregate supply and aggregate demand is achieved, prices could theoretically be brought down by a continuous and programmed reduction of the money supply without affecting the employment level.

In order to understand how this would be possible, it is necessary to consider the role of expectations. For the monetarist, current inflation is basically a function of the expectations of increases in future prices, \( \dot{p}^e \). Instead of writing, as would a structuralist, based on the inertial theory of inflation, that present inflation is equal to past inflation, the monetarist will write:

\[
\dot{p} = \dot{p}^e
\]

It is important, therefore, in monetarist anti-inflationary policy, to counteract the expectations of the economic agents. For the monetarist, the basis for inflationary expectations is not past inflation, about which nothing can be done, but the expected economic policy: (1) an expected increase in the money supply, (2) expected devaluations of the currency in relation to foreign currencies, and (3) expected increases in nominal wages. Therefore, it is up to the economic authorities to act on these three variables, establishing guidelines for the corporations, the workers, and the consumers. In this way, the economic authorities should establish limits for the nominal growth of the money supply in a descending rhythm. They should also establish limits for the nominal exchange rate devaluation (announcing beforehand a declining rate of devaluations) and for nominal increases in wages, making both compatible with the reduction in the money supply and with the predicted future inflation rate.

As long as the basic guidelines are formulated correctly (have internal coherence) and as the economic authorities have credibility in the eyes of the economic agents, prices will automatically begin to fall. Although nominal wages would be going down, real wages theoretically would not go down, since the inflation rate would be reduced concomitantly. On the other hand, there would be no need for unemployment to force real wages down, since the workers and the corporations would tend to adjust
themselves in a disciplined manner to the basic guidelines established by the economic authorities.

In this best of possible worlds described by the monetarist economists, in which there is no crisis because the automatic mechanism of the market permanently guarantees full employment, there is one ingredient missing: the interest rate. According to the orthodox monetarists, it would not go up as a result of the restrictive monetarist policy for two theoretical reasons: (a) because the international interest rate is the same in all countries; and (b) because, internally, the interest rate does not depend on the supply and demand for money, but rather on the supply and demand for savings.

The lack of realism in this theory is obvious. On the one hand, an ex ante relation as stable as the monetarists claim between the real demand for money and the production level does not exist. On the other hand, the idea that inflation is based on expectations is obvious, but the corollary that it is sufficient to establish basic guidelines that are compatible with each other, so that the economic agents will obediently reduce their expectations, is far from true. Economic agents base their expectations on past inflation (distributive conflict theory) rather than on future economic policy.

Actually, the monetarist experiments in combatting inflation generally result in a serious recession. They assume that inflation is the result of the public deficit, which provokes excess demand and an increase in the money supply. Thus, they end up adopting a policy of controlling aggregate demand. On the other hand, the policy of establishing basic guidelines for the exchange rate has the result, as was seen in Chile and Argentina, of overvaluing the local currency, with serious consequences for the balance of payments. Also, the policy of establishing basic guidelines for nominal increases of wages ends up being transformed into an authoritarian policy for a compulsory and drastic reduction of real wages.

Actually, the Keynesian demand management policy, which the monetarists in the end also adopt, emphasizing the control of the money supply, is perfectly acceptable when the economy is near full employment. Given this situation, restricting aggregate demand should lead the corporations to cut their profit margins and the workers to accept cuts in their wages or, at least, not increase their wages above increases in productivity.
The greatest restriction to this kind of policy, the fact which makes it inefficient, is that its defenders tend to also use it when there is unemployment. They adopt this practice, however, because (a) to constrain demand through macroeconomic fiscal and monetary policies is politically much easier than to adopt administrative controls (in fact, monetary policies are even easier than fiscal policies because they are less discriminating); (b) because, in spite of its inefficiencies, this policy always attains some results, given the existence of competitive sectors, especially those producing agricultural and mineral raw materials and the unorganized sectors of the working class.

The strict monetarist strategy is unacceptable on all levels. The strongest argument in its favor would be the stable relationship between the money supply and the real income. But, first of all, this relation is often not verifiable. A correlation exists most of the time, but in an *ex post* form, which therefore does not establish a causal relationship. On the other hand, the concept that it is possible to reduce inflation without recession through a reduction of the money supply is strictly false, since the economic agents do not accept the basic guidelines on inflation established by the economic authorities. As a result, the monetarist strategy reduces itself in practice to a strategy of controlling aggregate demand, as reducing the money supply and the volume of internal credit provokes a recession.

Actually, the monetarist policy tends to be much more pernicious than the Keynesian policy for a number of reasons. First of all, the belief in a stable relationship between the demand for money and real income leads to much more prolonged policies to restrain the high-powered money and internal credit than the Keynesian defenders of the policies for controlling demand are disposed to adopt. Second, the resulting rise in the interest rate inhibits investments and impedes or stifles the cyclical recuperation of the economy. On this point, the Keynesian theory that the interest rate depends on the supply and demand for money is much more realistic than the classical theory, adopted by the monetarists, that the interest rate depends on the supply and demand for savings. In spite of the fall in investments, the interest rate goes up in keeping with the monetary restriction.

Autonomous or inertial inflationary pressures, being independent of excess demand, continue to manifest themselves, even in the middle of a recession, thus generating stagflation—the combination of inertial inflation with recession. In this situation, the reduction of the real money supply maintains high interest rates, favors financial speculation, and prevents or hinders the recuperation of the economy. Last, because the guidelines are not voluntarily obeyed, there is the tendency toward a real
exchange rate valorization and larger deficits in the balance of payments. On the internal level, the most likely outcome will be the authoritarian imposition of limits for nominal wage increases, given the inefficiency of the monetary restrictions.

To sum up, the policy of controlling aggregate demand when there is unemployment can lead to a reduction in the inflation rate, but with a very high social and economic cost, given the inefficiency of this kind of policy for this part of the Phillips curve. The monetarist policy, in turn, only succeeds in obtaining results to the extent that it generates unemployment and, thus, confuses it with that of controlling aggregate demand. Or else, it succeeds to the extent at which authoritarian governments are able to impose a drastic reduction in real wages and/or promote an artificial valorization of the local currency.

We have a third type of anti-inflationary economic policy, which we will call the administrative policy for prices and incomes or, simply, the administrative policy. This kind of economic policy is based on the theoretical assumption that, in modern capitalist economies, coordination of economic activities is carried out more and more by administrative measures—by the big corporations and the state—which are partial substitutes for the market mechanisms.

Although this policy can also be useful during full employment, it is especially valid when there is unemployment and idle capacity, or when there is inertial or autonomous inflation, which comes together with administered inflation. The only efficient way to fight administered and inertial inflation is by the adoption of administrative measures—basically price controls.

The broad objective of the administrative policy is to reduce the inflation rate without either deepening the continuing recession or hurting, in terms of income distribution, the workers and the competitive sectors of the economy. Monetarist and Keynesian (demand administration) policies not only deepen the current recession, but they also tend to aggravate the concentration of income. This happens because the economic authorities only act on the economic aggregates—the money supply, public expenditures, aggregate demand—leaving the adjustment of relative prices to the market. The result is that the oligopolist sectors tend to increase their income share at the expense of the workers, the salaried middle class, and the small- and middle-sized competitive businesses. An administrative policy is used to try to make the reduction of the inflation rate compatible
with controlled economic growth and, through income policy, to avoid greater distributive imbalances.

To the extent that the economy is already operating with high rates of unemployment and idle capacity, the first measure taken is to stimulate aggregate demand through a more flexible monetary policy. This also lowers the interest rate and, in consequence, increases investments and the corporations' sales. Lowering the interest rate has a directly anti-inflationary effect, as interest is a cost the corporations pass on to prices. The increase in sales, in turn, allows the corporations to lower their profit margins (profit over sales) without hurting their profit rate (profit over capital).

It is necessary, however, to note that demand should be stimulated moderately, with caution, so that the economy does not achieve full employment. If this happens, the sectors that have reached full employment will then increase their margins and wages, thus reactivating inflation.

Also, if the economy has balance-of-payments disequilibrium, an accelerated recovery would aggravate this problem because the demand for imports increases. Even though an administrative control of imports could be useful for this, its ability to restrain the increase in imports will always be relative.

The fundamental strategy for an administrative policy is to hinder the operation of the accelerating factors of inflation and to succeed in weakening or annulling the inertial factors that maintain the inflation level. This can be done in two alternative ways: gradually or, if inflation is already too high, by utilizing a shock strategy.

In order to make this strategy operational, the fundamental instruments are administrative price controls and a planned deindexation of the economy. Concomitantly, it would be necessary to gradually reduce the real public sector budget deficit and increase the money supply in such a way that the whole economy can adjust to progressively lower levels of inflation.

If inertial inflation, or stagflation, is accompanied by a balance-of-payments deficit, as was the case of Brazil at the beginning of the 1970s, these measures would only have results if the adjustment policy adopted is not intended to correct the distortions in relative prices by using measures of "corrective inflation." If this happens, as in Brazil in 1983, inflation will tend to accelerate rather than to reduce its rhythm. Although the
orthodox adjustment policy is aimed not only at the equilibrium of the balance of payments, but also at reducing the inflation rate, its effect on inflation is the opposite of that desired. This is especially true in the first phase of the adjustment process, because of the real exchange rate devaluation and the other measures to correct relative prices, especially through the elimination of a large variety of subsidies that characterize orthodox adjustment policies.

These policies, which are supported by the monetarist and Keynesian theories, are actually extremely inefficient for combating inertial inflation. This is because they insist on not accepting inflation as autonomous of demand and thus inertial, but rather as caused by the public deficit and an excess of available credit. The public deficit and excess supply of money would also cause the foreign trade deficit, so that the same policy would solve both of these imbalances. Aside from an exchange devaluation and adjustments in relative prices, there would also be a reduction in the absorption of external resources by a cut in the public sector borrowing requirements, or rather, in the public deficit, and a cut in the money supply, or more precisely, in banking credit. These measures would provoke an increase in the interest rate, a cut in investment, a reduction in demand, and recession. Consequently, once excess demand is eliminated, profit margins and wages would be reduced and, therefore, the result would be an inflationary deceleration, as well as a diminution in the demand for imports and an increase in the supply for export.

We have already analyzed the inadequacy of this theory for explaining inertial inflation, which is not a result of excess demand. In the same way, a balance of payments problem, expressed by a deficit in the current account balance of the country while the trade account presents a surplus, is not necessarily the result of an excess in current effective demand. The current account deficit can be derived from external causes, such as a deterioration in the terms of exchange of the country or an increase in international interest rates. It can even be provoked by interest on past debts—interest that has no relation to current aggregate demand. This was precisely the case of Brazil in the first half of the 1980s. Thus, the economy can be in a deep recession and, nevertheless, not only have inflation, but also have a deficit in its current account, which is not the result of excess current expenditure. The current amount deficit may originate from a structural imbalance due to a large interest payment on a stock of debt accumulated in the past. In this situation, cutting the absorption of goods may have little effect because the problem lies in the payment of interest.
Let us first examine the gradualist administrative strategy for controlling inertial inflation. Price controls and partial deindexation, or indexation according to a future declining rate of inflation, are the two basic instruments of an administrative policy for controlling inflation.

The difficulties related to administrative price controls are well known: (1) it is not possible to control all prices; (2) a very competent and big bureaucracy is necessary in order to exercise partial control; (3) the bureaucratic apparatus is easily subject to corruption; (4) the unavoidable errors when prices are administered provoke discrepancies between the set prices and equilibrium value, or, more precisely, production price, resulting in serious allocatory distortions; and (5) when setting wages, the tendency is to reduce the real wages of the workers.

Although all of these difficulties are real, administrative price controls are still recommended for the simple reason that, when there is inertial inflation and stagflation, there is no alternative. Given that prices increase autonomously of demand (inertially), we have already seen that the administration of aggregate demand is highly inefficient. Thus, there is no better strategy than that of trying to administratively control prices, especially those of the oligopolist sectors that are capable of increasing their prices independently of the existence of pressures from demand.

In order to do this, it will be necessary to create a specialized bureaucratic apparatus. This apparatus must be permanent, since the oligopolization of the economy is a permanent factor in contemporary capitalism. No doubt, this bureaucratic apparatus will undergo the risks of corruption, and it will certainly commit errors. But corruption is a phenomenon that can be partially controlled. Although the errors in setting prices can be significant, they will be fewer than those committed by an imperfect market where inertial inflation prevails.

As for errors in controlling prices, it is necessary to point out that they can be serious, provoking large distortions in the allocation of resources and in income distribution, if two basic precautions are not taken. First of all, prices must be set by a permanent process of trial and error, of successive approximations, instead of by technocratically established formulas. Second, the aim of this process of trial and error should be for the set price to come as close as possible to the production price, that is, to the price that a competitive market would tend to establish.
These two correlated precautions are essential for simultaneously (1) reducing the inflation rate, (2) guaranteeing a satisfactory allocation of resources, and (3) avoiding distortions in income distribution.

The permanent temptation to those who control prices is that of giving special treatment to the first objective to the detriment of the other two. In these terms, they confront the law of value: they artificially valorize the exchange rate, lower real wages, and maintain the prices of the state-owned corporations and some private sectors with less political power at artificially low levels. As a result, aside from the distortions in relation to income distribution and the allocation of resources, there are other problems: disregarding the officially set prices, the buildup of inventories, the black market, and disorganization of the economic system. Inevitably, the short-run results will be annulled in the long run or even worsened by a new price explosion.

Administrative price and wage controls could be complemented with incentives and fiscal penalties aimed at obtaining the adherence of the corporations. These kinds of measures were suggested by Weintraub (Weintraub 1978, 153), and could be an important auxiliary instrument for directly controlling wages and profit margins. In Brazil, during the 1960s and 1970s, firms that failed to obey price controls were not only fined, but were also excluded from financing by state-owned banks and forbidden to sell to the state.

Once the necessary precautions are taken, administrative price controls can be successful in gradually reducing inflation by controlling the factors that accelerate and maintain the inflation level.

The basic maintaining factor of inflation, that which makes it inertial, is the formal or informal indexation of the economy or, in other words, the capacity of the economic agents to pass increases in costs on to prices independently of the existence of demand pressure. The first concern of the administrative policy should, therefore, be directed toward breaking this indexation.

The basic rule in the process of breaking the indexation process is to establish an index to correct prices in keeping not only with past inflation, but also with future inflation, which is bound to decline. The object of this type of indexation is to reestablish the average real price of either merchandise or the work force (wages), thus annulling the perverse effects of the eventual acceleration (or deceleration) of average real price inflation on them.
Let us suppose that the general rate of price increases is going down because of a fall in the price of raw materials and agricultural products, which we shall assume are not indexed. The usual formula for indexing prices and nominal incomes—the application of the past inflation rate—has the effect of increasing average real prices and real incomes since the loss of value in the previous period is greater than in the current period. This idea is valid not only for the prices of goods, but also for wages and all other incomes. It can be understood more easily by looking at Figure 4.2, where we can see the usual formula for correcting prices "by peaks," that is, by the application of past inflation to reestablish the peak real prices. As inflation declines, average real prices and incomes increase, impeding the action of the anti-inflationary policy. In the axis of ordinates of Figure 4.2 are real prices or wages, $p_i$, (or w), in which $p_i$ is the real price or income that corresponds to a determined indexed sector, and w is the real wage rate. In the abscissa, we have the successive periods of readjustment in which indexation was practiced. The solid line corresponds to the real price or wage, which decreases between two periods of monetary correction. The inclination of the curve is smaller between corrections, because, in the example, inflation is declining. At the end of each period, the price or income is completely corrected because the rate of inflation of the preceding period restores the real price or income of the previous peak. As a result, the dotted line, which connects the midpoints of real prices or
wages, corresponding to the average real price or wage, goes up. The indexation, therefore, is inconsistent because it increases rather than maintains the average real price or income. Thus, it becomes much more difficult to reduce inflation, since this kind of indexation tends to automatically reproduce the past real inflation in the present.

Actually, prices, wages, and nominal incomes are corrected periodically, but with different time lags, each one trying to recover the real peak price or income of the previous period. But, as it is distributively inconsistent to maintain real peak price or income simultaneously, inflation does its job by reducing their purchasing power.

The formula for alternative indexation, which takes into account half of the past inflation in order to reestablish the average real price, and half of the predicted future inflation, in order to guarantee that the average real price is maintained in the following period, is shown in Figure 4.3. The inflation rate undergoes the same decline in this figure as in Figure 4.2. However, as the correction is made in keeping with half of the past inflation and half of the predicted future inflation, the average real price is kept constant.

This formula can be expressed in the following way:

\[ P_{t+1} = P_t (1 + 0.5 \hat{p} + 0.5 \hat{p}_r) \]  

4.9

Figure 4.3 Indexation Based on Past and Future Inflation  
(Declining Inflation)
in which $P$ is the nominal price for goods or services, $p$ is the past inflation rate and $p_f$ is the future predicted inflation rate.

Naturally, the difficulty with this formula is in predicting future inflation. However, it is possible to introduce corrections *a posteriori*, in order to cancel the effects of erroneous predictions.

This formula should also undergo corrections in keeping with increases in productivity. It would be necessary to increase wages in real terms in keeping with the average increase in productivity. Once this measure is adopted, and assuming that there is neutral technical progress in which the capital output ratio remains constant, the rate of surplus value, that is, the relation between profits and wages, also remains constant, and there will be no inflationary pressure.⁸

In relation to the price of goods and services, it would be necessary to consider the increase in productivity in each sector of the economy and reduce real prices correspondingly. As wages are supposed to increase according to the increase in the average productivity of the economy—rather than proportionally to the reduction of real prices due to the increase of productivity in each sector, as is assumed in pure (fundamental) economics—the reduction of real prices in each sector due to increases in sectorial productivity should be less than if there were no real increases in wages in keeping with increases of the average productivity of the economy.

To sum up, it must be emphasized that a gradual, planned deindexation should be carried out by taking into consideration a declining future inflation and variations in productivity.

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The planned deindexation and administrative price controls should reach all sectors of the economy, including financial assets. In a formally indexed economy such as Brazil's, wages, the exchange rate, financial assets, and the prices of the state corporations are generally indexed. A planned and partial deindexation, corresponding to indexation in keeping with past inflation and predicted future inflation, should therefore reach all sectors. This is the only way that it is possible to reduce inflation without provoking serious distributive distortions.

As the prices of the corporate sector are not formally indexed, it is necessary to control them administratively. Actually, it is sufficient to control the prices—and therefore the profit margins—of the oligopolistic
corporations and of some essential products. Control of the competitive sectors is, in practical terms, impossible, given the large number of firms and of goods. Aside from this, it is not necessary because the market is capable of controlling them.

But, in relation to the essential products of the competitive sectors—especially agricultural, mineral, and animal products, it is also necessary to take two types of administrative measures: price controls and the formation of buffer stocks, emphasizing the latter measure.

All of these interventions in the market have a relatively arbitrary nature. Formulas can be applied, as referred to in the previous section, but their accuracy is always very relative. For this reason, trial and error is inevitable in the process of administering prices.

In the previous section, we referred to a method of indexation that takes future inflation into account. This kind of indexation strictly corresponds to a process of partial deindexation, to the extent at which it assumes a declining future inflation. A more direct formula for partial deindexation would be to arbitrarily establish a percent reducer for the past inflation rate (80 percent, for example) and correct prices, wages, the exchange rate, and financial activities in accordance with this formula. If inflation were declining, a reducer of this kind would correspond to the indexation formula based on future inflation. Partial deindexation and indexation based on future inflation are, therefore, very similar processes.

On the other hand, any formula for indexation or partial deindexation of prices is a form of administering prices, of an administrative control in keeping with a predetermined rules. When the inflation is autonomous in relation to demand, there is no other alternative for controlling it than to combine various types of administrative price controls, including partial deindexation and indexation based on predicted declining inflation.

Controlling inflation by using the formula being proposed here—a combination of administrative price controls for the oligopolistic sectors and a partial deindexation (via a reducer and/or considering a declining future inflation) with a fiscal and monetary policy that reduces the public deficit and the money supply as inflation falls—could only be successful if the government is capable of assuring a satisfactory allocation of resources and avoiding distortions in income distribution.

Obviously, this is not an easy task. It would not even present immediate results. It would be much easier to reduce inflation through a violent reduction of wages or else by harming the firms in the competitive
sectors. This has happened systematically in Brazil. However, the resulting distortions in relative prices eventually need to be corrected and, when they are, space is opened for a new acceleration of inflation.

The danger of increasing the distortions in relative prices is, therefore, the biggest problem that appears when fighting inflation. Prices cannot be far from the price of production for much time. This is true for both the small competitive firms, including the agricultural ones, as well as for the large state-owned corporations. These are the two kinds of firms that tend to be used the most for combatting inflation, but, sooner or later, they are forced to reconstitute their prices in order to survive and maintain their rate of profit, thus causing new inflationary acceleration. This is because the factors that accelerate inflation—increases in profit margins and real wages—are nothing more than changes and recompositions of relative prices that come from the function of the law of value.

It should be noted that these kinds of distortions can be derived from government incompetence and political pressures put on governments. But even if there is no incompetence, the distortions will necessarily appear if the program for controlling inflation by using administrative methods has the tendency to last indefinitely. Also, new corporations' strategies for outwitting the controls are developed as the controls are prolonged. Thus, it is necessary to think about administrative controls as a temporary strategy or, more precisely, as a strategy of variable rigidity, mixed with partial liberalizations—which allow the market to correct certain distortions—followed by new emphasis in the scheme of control. Otto Eckstein observed, however, that the minimum period for a price- and wage-control program should be three years (1981, 110).

The efficiency of administrative price and wage controls has been the subject of various studies whose results have not been absolutely conclusive, but which, in general, tend to confirm the effectiveness of this kind of policy. Otto Eckstein and James A. Girola studied five episodes in which price controls were adopted in the United States (World War I, World War II, the Korean War, wage-price guidelines of the Kennedy-Johnson administration, and the direct controls of the Nixon administration). They concluded that these controls were highly effective in retarding price increases during the two world wars and during the Nixon administration (1978, 323-333).

Studies carried out in Britain and reported by Victor Argy (1981, 354) and A. J. Hagger (1977, 206) concluded that wage and price controls
succeeded in controlling wages but not prices. However, according to Argy, the wage controls only succeeded in retarding wage increases in such a way that "every attempt at a prices and incomes policy [PIP] in the United Kingdom since 1965 ended in a wage explosion" (1981, 395). Hagger, in turn, concluded:

To sum up this discussion of the findings of the various econometric studies of the effectiveness of prices and incomes policy, we may say that while the United States studies give consistent support to the view that prices and incomes policy is effective, the weight of the United Kingdom Studies appears to be fairly heavily in the other direction. (1977, 208)

These studies are undoubtedly useful because they recount experiences that had both good and bad results. They are not and cannot be conclusive because their results depend on many factors: the competence and political support of those in the government, and the favorable situation of the other economic variables, especially an increase of productivity.

In Brazil, for example, the administrative price controls established since 1967, when the Interministerial Price Council was formed, have had good results. At that time, however, the government counted on high political legitimacy (support from the civilian society), and was favored by an expansionary phase of the business cycle, during which there was a large increase in productivity. The attempt to repeat this performance in 1980 failed because the government no longer could count on the same political power, and the attempt to stimulate economic growth was artificial in that it found no support in an expansive movement of the business cycle. The measures of corrective inflation adopted in the immediately preceding period (the second semester of 1979) also had produced an inflationary acceleration that administrative controls were unable to stop.

The existence of unsuccessful experiences with administrative price controls does not condemn this kind of policy, just as the successful ones do not confirm it. They only serve to point out the errors that should not be repeated and the strategies that have been shown to be most effective. The concrete fact is that, in oligopolized and indexed economies, when there is unemployment together with stagflation, this is the only valid alternative for economic policy. Monetary and fiscal policies with demand management are also important, but they perform a complementary role. When they are put in the forefront, the result is more recession and more distortions in allocation and distribution and, in some cases (as happened in Brazil in 1983), more inflation.
Our first proposal for an anti-inflationary policy is to gradually control inflation through administrative price and income controls, including a partial and planned deindexation of the economy combined with measures to reduce the public deficit and money supply as inflation is lowered. Thus, monetary and fiscal policies appear in a subordinated form, as the money supply and the public deficit, when inflation is autonomous or inertial, and are factors that only sanction inflation.

Meanwhile, it is possible to imagine a point at which this kind of gradual policy is no longer effective. This would be when inertial inflation reaches levels that are so high, and its autonomous character is so strong that the gradual mechanisms no longer function. This will happen especially when the measures for partial deindexation and for administrative control are counterbalanced by new supply shocks, that is, by new accelerating factors resulting from disorganization of the economy, distortions in relative prices, and from the need to correct these distortions through corrective inflation. At this point, it will be necessary to think about a second and more radical alternative for fighting inflation.

The analyses of the historical experiences of controlling inflation also indicate that, in certain circumstances, a global and rapid attack is preferable to a gradualist treatment. After looking at various experiences with anti-inflationary policies, Leland B. Yeager concluded that "almost all of the successes that have come to our attention involved stopping or drastically slowing price inflation within a few months." (1981, 38).

In these conditions, a "heroic" policy of administrative price controls and the total deindexation of the economy could be the only adequate alternative. It needs to be clear that this is not the classic "shock treatment" of the orthodox economists; it is not intended for wiping out autonomous inflation by a violent repression of demand and a consequent recession. The inefficiency of this kind of policy has already been shown. For example, in 1981, a shock treatment was applied to the Brazilian economy and the rate of inflation more than doubled.

Assuming that the economy is indexed and is strongly oligopolized, what is intended is that, on a given day, a decision be made to completely deindex the economy—wages, prices, the exchange rate, rents, and interest—and then to freeze all prices from that point on. For example, if inflation is around a level of 300 percent, the most optimistic hypothesis would be that, with these measures, it would be reduced to zero the next day.
Obviously, this hypothesis is not entirely realistic. But, in order to reduce inflation substantially once the "heroic" solution is adopted, it is necessary to imagine the process in several stages.

There would be a first stage, prior to the act of deindexation, and the freeze (D Day) in which it would be necessary to make the last adjustments in relative prices. This would not be difficult for merchandise prices because, when inflation is at very high levels, business firms tend to make adjustments more and more frequently in their prices, so that the lags between the readjustments are reduced. As for wages, it would be ideal if the readjustments were already semestral or even quarterly, and would take place on the same day for all categories of workers. Then, if D Day were on a day exactly in the middle of two readjustments, the workers would receive the equivalent of the average real wage on that day. If this is not possible, it will be necessary to adopt a somewhat complicated formula (for the understanding and agreement of the workers) to convert nominal wages, with different months as the basis for indexation to the average real wage of the previous six or twelve months.

Next, on D Day, inflation would not fall to zero because it would be impossible to control all prices. There would still be some distortions in relative prices to be corrected. Also, control of the competitive sectors through administrative means is almost impossible. The important thing is for the inertial mechanism that maintains inflation to be broken, if not totally, at least in great part. A low rate of inflation will continue to exist through new accelerating factors that will be the result of the necessary adjustments in relative prices.

Finally, as a third stage, the freeze will have to be partially relaxed. At this point, however, the inflation level will probably be very low. It will continue to be reduced through the gradual administrative policy that we described earlier.

We call this policy "heroic" because it is risky. Its objective is to not provoke a recession, and it aims to not produce distortions in allocation or distribution. However, the measures are radical and can lead to the disorganization of the economic system and especially of the financial system which, in inflationary situations of this kind, is both a big beneficiary and a big factor for instability. Because of this, the heroic policy for fighting inflation can only be adopted when inflation has clearly gotten out of the control of conventional economic policy, or when civil society as a whole is convinced that the distortions caused by the high inflation rates are more serious than the eventual risks of the heroic solution.11
1. See Chapter 2 in this respect.

2. See, for example, A. J. Hagger (1977), who makes an excellent, didactic summary of the theories of inflation and of controlling inflation.

3. It is true that, in normal operating conditions, the oligopolies, when avoiding price competition, tend to maintain their profit margins constant; but, in an inflationary economy subject to shocks and with wider cyclical fluctuations, margins no longer continue to be constant.


5. For a critical summary of monetarism and of its empirical tests, see Meghnad Desai (1981).

6. The radical economist Howard J. Sherman, after observing that Nixon, between 1971 and 1974, used wage and price controls in peacetime for the first time in the history of the United States, noted that these controls caused allocative inefficiencies and were clearly geared toward favoring the corporations, as well as toward favoring the black market (1983, 212).

7. This is basically the formula that was used by Mário Henrique Simonsen to correct wages in Brazil during the 1970s, when he was still an advisor to the planning ministry. The distortions were the result of its poor application and not of its theoretical conception.


10. The failure of the policy of "wage-price guidelines" is debatable even for the Kennedy-Johnson administration. As James Tobin notes, between 1961 and 1966, unemployment was reduced from 7 percent to 4 percent, while inflation was maintained at 2 percent. In the following period, from 1966-1969, inflation grew as a result of the financing of the Vietnam War (1981, 22).

11. This chapter, including this last section proposing the "heroic solution," was written in the second semester of 1983 and published in the Revista de Economia Política in July 1984. In August of this year, after a great acceleration of Brazilian inflation, Francisco Lopes published a short paper proposing, not as a second alternative but as the only one, the same type of policy and calling it a "heterodox shock." When we wrote this chapter, the inflation level was changing from the 100 to the 200 percent level (see Chapter 7). In the second semester of 1984, the 200 percent level was well established, and new accelerating factors began to act. The
inflation rate only reached the 300 percent level in the beginning of 1986, when the Brazilian authorities opted for the shock.