

CHAPTER 1

INTRODUCTION

The purpose of this thesis is to examine inflation as a process of *restructuring*. Every inflation theory is based on some explicit or implicit assumptions regarding the underlying structure of economic and social institutions, but the common methodological presumption is that structure is an ‘exogenous’ variable. Although the organization of consumption, production, trade, ownership and authority are continuously changing, and although these transformations are sometimes cited as potential causes for inflation, it is nevertheless customary to treat structural changes as if they were independent of the inflation process itself. As a consequence, the usual presumption is that, *for the purpose of inflation analysis*, economic structures and institutions could be taken as given.

Our principal goal throughout this work is to question the validity of this commonly-shared conviction. We shall argue not only that the socio-economic structure could not be taken as given, but that structural change is the very essence of the inflation process. Furthermore, instead of perceiving inflation and structural change as two interrelated but separate variables, we would contend that they are in fact two sides of the same dynamic process. Rephrasing Milton Friedman’s famous dictum, we claim that *inflation is always and everywhere a phenomenon of structural change*. This is the main contribution of our thesis.

The necessity of continuous structural change stems from the very meaning of social structure. If we follow the historical interpretation of Lewis Mumford in his *Myth of the Machine* (1967; 1970), the evolution of modern ‘civilization’ after it first emerged in the third millennia B.C. was marked by the cannons of *power*. Following the appearance of divine kingship in Egypt and Mesopotamia, economic institutions were increasingly dominated by the related urge to conquer nature and dominate other human beings. Contrary to the docile static traits of neolithic cultures, the power orientation of ‘civilized’ societies made them prone to dynamic change. Indeed, the institutions of power are largely inconsistent

with a stationary structure: power means a *quest* for power, a desire to *alter* techniques and *augment* authority. Power, in other words, is not merely a state but also a process, which implies that any power-based economic structure is necessarily a dynamic one.

The first question, then, is how can we treat the dynamic process of inflation as if it originates from a static structure? The answer to this question, we submit, is related to the utilitarian bases of modern economic thinking: economists often think about economic problems in terms of 'welfare' rather than 'power.' Note that the fundamental economic categories of 'commodity,' 'price,' 'gross national product,' 'prosperity,' 'investment,' 'consumption,' 'economic policy' and alike, are geared mainly to the question of 'well-being.' The common denominator underlying these categories is *utility* and their measurement is firmly rooted (though only in principle) in the hedonic calculus of pleasure and pain. The issues of power, authority, coercion and persuasion are not absent from the economic framework, of course, but they are largely external to the central question of welfare. Indeed, unlike utility, the concept of 'power' is rarely quantified in economics and is all but missing from the basic economic categories such as those listed above.

The distinction between utilitarian notions and power-based structures bears on inflation theory. A hedonic world view is consistent with a static structural framework. In a society driven by utility-seeking individuals, structural change appears as coincidental or instrumental, but not as an end in itself. Inflation in this framework could still be affected by structures and institutions, but it does not influence them in turn -- at least not in any significant way. To use the common aphorism, inflation is structurally 'neutral.' A power-oriented society, on the other hand, could be conceived only in terms of continuous restructuring since this is the very essence of power seeking. If the prime engine of capitalist civilization is not utility maximization but the quest for power over nature and man, we may no longer retain the 'neutrality' assumption. From this latter viewpoint, inflation should be conceived in terms of ceaseless structural change.

In light of this distinction, we propose in this work to examine the relationship between structure and inflation from two different perspectives. In the first part (chapters 2 to 5), we deal with inflation

and structure, focusing on the common approach which sees inflation and economic structure as related but mutually-distinct conceptual entities. In the second part (chapters 6 to 9), we suggest an alternative point of view for inflation *as* restructuring, in which inflation and structural change are perceived as two sides of the same dynamic process.

The difference between a static hedonic-based approach and a dynamic power-based perspective manifests itself in a number of interrelated ways. (1) By focusing on given structures, the first framework for inflation is naturally disposed toward the method of equilibrium analysis. The second approach, on the other hand, starts from the fundamental premise of continuous restructuring in which neither equilibrium nor disequilibrium are very useful concepts. (2) In the first approach, it is customary to classify structures as a hierarchy of ‘imperfections,’ or departures from an *a*-historical hedonic society, ranging from the ‘natural’ voluntary state of perfect competition to the coercive ‘distortion’ of monopoly power. From the second viewpoint, however, the basic emphasis is not on the distinction between competition and monopoly, but rather on the dynamic interaction between cooperation and conflict as the fundamental duality of modern economic institutions. (3) Where the first perspective distinguishes between the ‘real’ magnitudes of the material world and the ‘nominal’ categories of the monetary domain, the second approach includes both of them within the double-sided reality of ‘business’ and ‘industry.’ In this latter framework, the domain of money, credit and debt is as real as the domain of production and consumption, whereas the sphere of commodities is no less pecuniary than that of banking institutions and monetary policy. (4) Given its focus on welfare, the first approach takes the individual actor as its basic building bloc. The second perspective, on the other hand, emphasizes the primacy of power, thus placing the coalition and collective action at the centre of attention. (5) Whereas the former framework emphasizes passive reaction to exogenous events within a given structure, the latter approach accentuates deliberate initiatives which constantly seek to alter the existing order.

We begin to explore these issues in Chapter 2, where we deal with mainstream macroeconomic approaches to inflation. Much of this literature is related to the disintegration of the Phillips Curve trade-off between inflation and unemployment, and its methodology is characterized by a series of forced departures from neoclassical tenets. Although capitalism has been plagued by both inflation and

unemployment since the 16th century, from the *analytical* perspective of mainstream macroeconomics, their combination appears as an exceptional deviation from the natural state of things. Starting from the assumption of utility maximization in the context of a perfectly competitive equilibrium, the concurrence of inflation and unemployment is then seen as the unfortunate consequence of assorted ‘imperfections’ and ‘distortions’ which create temporary ‘disequilibria.’ There are structural imperfections, such as union power, government intervention, and oligopoly which prevent full employment and price stability; there are informational imperfections which confuse rational actors to invest in unemployment despite the inflationary boom; there are expectational imperfections which create a comedy of errors in which the market fools its own participants, having them raise their prices despite a lack of demand; there are institutional imperfections which create habits and inertia and break the fundamental link between scarcity and price movements; and finally, there are exogenous forces which menace the economic system and upset its stable, mutually-beneficial, equilibrium.

This constant resort to ‘imperfections’ and ‘rigidities’ points to a fundamental weakness in the macroeconomic treatment of inflation and stagflation. The forced reference to real structures, to power relations, and to historical (as opposed to equilibrating) change, appears as a necessary methodological evil. These features are treated not as part of the ‘economic system,’ but rather as exogenous constraints imposed on that system. Stagflation, in other words, appears as an anomaly which can be rationalized only by extra-economic causes and, as a result, the ‘success’ of mainstream models at explaining the shifting Phillips Curve becomes a sign for their own deficiency.

Not surprisingly, then, attempts to examine the broader structural roots of inflation and stagflation were conceived as challenges to the microeconomic foundations of the neoclassical synthesis. The bases for these initiatives were laid already during the Great Depression of the 1930s, when many economists began to question received notions about price behaviour and business behaviour. In Chapter 3, we turn to assess the methodological debate surrounding these issues. The challenge to conventional neoclassical thinking emanated first from the discovery of ‘administered prices,’ and then from suggestions that businessmen followed ‘markup’ pricing. The claims that concentrated industries had relatively inflexible prices and that modern industrial firms were not necessarily driven by the

maxims of profit maximization were disheartening for the marginalists, but they were also problematic for those who sought to anchor macroeconomics in a more realistic view of industrial organization. The possibility that modern corporations were not trying to optimize some objective profit function inserted an invisible wedge into the price-making process. While the businessman might be following some standard pricing procedure, for the economist these procedures appeared rather arbitrary, leaving him or her unable to predict the resulting outcome. Thus, by emphasizing the importance of structure for actual pricing, the empirical literature on business behaviour in fact acted to undermine the methodological basis of price theory itself.

These problems have been largely ignored in the market-structure approach to inflation which we examine in Chapter 4. The modern dual structure of competition and oligopoly, together with the two ethics of market prices and markup pricing, proved a convenient starting point for alternative explanations of post-war inflation. Whereas the neoclassical synthesis was constrained by the fundamental tenets of optimizing behaviour, the resort since the 1930s to non-maximizing assumptions created an endless number of possible inflation theories. Much of the ensuing literature has been concerned with identifying the 'proper' markup formula and the temporal interaction between its various components. Most theories involve some variation of cost smoothing with fixed profit markup, but there are also those which emphasize the inflationary role of changing profit margins. Because of their more realistic point of departure, the studies in this area offer important insights which are often lacking from standard macroeconomic models. Yet, despite these advances, the market-structure approach to inflation is still limited in certain important ways.

Firstly, much like the neoclassical view, structural theories, too, are based on ideal types for corporate behaviour. The main goal of such theories is to explain the impact of alternative economic structures and institutions on inflation and stagflation, but since the crucial link between these variables is still the individual economic actor, it becomes necessary that such actor follow *stable* rules of conduct. In this sense, emancipating the modern corporation from its universal fixation on profit maximization is merely a pretext for locking it back into more convenient but equally rigid and arbitrary behavioural assumptions. Ultimately, both the macroeconomic and structural literature treat the economic agent as

a *passive responder*, an *intermediary* between exogenous shocks and endogenous adjustments. In the final analysis, both approaches lead to the same inevitable question: If everyone is merely reacting, where are the social and economic changes coming from?

Of course, this question rarely arises since, as we already noted, most writers tend to assume that, for the purpose of analysis, structure could be taken as given. Indeed, the second similarity between mainstream and structural inflation theories is their common resort to the concepts and methods of equilibrium analysis. In economics, the notion of equilibrium has two principal interpretations: stability and desirability.¹ In terms of stability, equilibrium usually means that, in the absence of exogenous shocks, the endogenous variables of the system have no tendency to change. With desirability, equilibrium denotes the 'chosen' position of economic agents; it is where they wish to be, given their exogenously-imposed constraints. Mainstream macroeconomics makes extensive use of both of these interpretations, but so does the structural literature. According to this latter school, economic agents are not necessarily bound by profit maximization and perfect competition, but their behaviour still follows *predetermined* rules of conduct and they operate within a *given* structure. As a result, the market-structure literature, too, is alien to the process of structural change. In our opinion, this common resort to equilibrium is fundamentally flawed. The focus on stability as the state to which the system tends to converge already repudiates the primacy of historical change, whereas the notion of desirability removes the very motivation for initiating such change. Indeed, would human beings develop a language, material technology and social institutions if they were already in equilibrium? Would they go to war or come to peace from such a state? Could science emerge from the paralysing convenience of self-fulfilment? Would content breed a quest to conquer nature and man? With this in mind, can we still assume that the economic relationships behind inflation and stagflation are nevertheless stable? In this context, even the notion of disequilibrium is misleading because, as a *deviation* from equilibrium, it already presupposes the primacy of stability and stationarity.

The related notions of passive reaction and static structure which characterize most inflation theories are linked to a fundamental preoccupation with utility and well-being. Analyzing the effect of

¹ See for example Asimakopulos (1978, pp. 42-4).

socio-economic structures on prices and inflation is rarely an end in itself. Eventually, it is a basis for answering a more rudimentary question, namely, the bearing of inflation on the price of utility, or 'living' as Griliches (1971) prefers to put it. At first sight, this may seem as a rather narrow interpretation of economic theory. How could one identify welfare and utility as the common denominator of *all* inflation theories, when every political economist since Marx seems to stress social relations and institutions as the *ultimate* subject of inquiry? Is it not true that, while neoclassical economics focuses mainly on utility (or 'use value'), Marxian and institutional economics are concerned primarily with social structures (or 'exchange value')? And if we identify the power orientation of political economy as the basic starting point of structural inflation theories, should we not conclude that these theories are fundamentally different from their mainstream counterparts? The answer is yes and no!

Although the market-structure literature may formulate its *questions* in terms of economic power and social institutions, its *empirical categories* are very close to those used by mainstream neoclassical economics. In the case of inflation theory, this distinction is most obvious when we go back to the very definition of inflation. The phenomenon of inflation is defined as a broad change in the prices of commodities and, while the macroeconomic and structural analyses explain the inflationary process from different theoretical perspectives, they *measure* it in much the same way: from both perspectives, the underlying emphasis is on *commodities as articles of utility*. Even in the Marxian scheme, where the world of commodities is seen as a 'mirror' for social relations, quantities are still measured in terms of 'use values' (note that 'exchange values' are denominated in units of 'unskilled labour' and those could be calculated and expressed only in the utilitarian terms of functional production and hedonic consumption). In other words, the basic categories for inflation analysis -- even when such analysis is focused on the structure of power -- are counted in material rather than social terms.

The significance and implications of this claim are examined in Chapter 5. Here we argue that, because of their hedonic basis, standard price and quantity indices (such as the Consumer Price Index, or GNP measured in 'constant dollars') are in fact biased in favour of neoclassical theories for inflation. In other words, we suggest that the very measurement of inflation is already predisposed toward a particular set of explanations and may thus be inadequate for other, competing theories. As it turns

out, the use of existing indices presupposes a society of free, utility-maximizing individuals, organized in a perfectly competitive framework and prevailing in a continuous state of equilibrium. Whenever these assumptions are not fulfilled, that is, whenever inflation occurs in the context of antagonistic groups, power conflicts and historical change, the indices become partially or wholly inadequate. Thus, if we want to integrate such concepts into our *explanation* of inflation, we must also incorporate them into our *definition* of inflation. Instead of measuring the *changing price of hedonic pleasure*, we may want the concept of inflation to reflect the *changing structure of social power*.

With this in mind, we then turn to the second part of our work, where we offer a new approach for inflation as a dynamic process of structural change. The overall historical and analytical framework for this approach is set in Chapter 6. We begin with a critical interpretation of Thorstein Veblen and Mancur Olson, whose separate writings offer a convenient starting point for our analysis. Building on Veblen's fundamental distinction between 'business' and 'industry' and Olson's taxonomy for 'collective action' and 'distributional coalitions,' we suggest that, in the modern context of large-scale business enterprise, price inflation tends to appear together with industrial stagnation and that both phenomena are linked to the process of capital accumulation and the dynamic restructuring of business power.

According to Veblen, the evolution of mature capitalism since the end of 19th century could be best understood as a dynamic conflict between the universal goals of industry and the differential principles of business enterprise. The material sphere of industrial production depends on cooperation, coordination, integration and standardization, whereas the pecuniary realm of business power hinges on competition, friction and mutual injury. The distribution of income is a pecuniary phenomenon achieved through the subjugation of industrial activity to business ends. Specifically, since business ownership is an extra-industrial activity, business income could be generated only by limiting industrial activity to 'what the market could bear at profitable prices.' Now, as long as the market expanded faster than industrial capacity, as was the case in the United States until the late 19th century, the conflict between industry and business remained dormant. From the early 20th century onward, however, the growth of productivity started to surpass the growth of population, creating a chronic predicament of excess capacity. To survive under this new order, business enterprise had to actively curtail industrial capacity

and that necessitated collective action. The main vehicle for such action was the ongoing process of corporate amalgamation or, to use Olson's terminology, the progressive accumulation of distributional coalitions. Furthermore, since the formation and reformation of business coalitions occurs through the accumulation of capital -- that is, through the pecuniary capitalization of earning capacity -- the whole process was not only stagnationary, but also inflationary.

Starting from this perspective, our basic hypothesis is that, in a 'mature' capitalist context of rapid technological change and limited population growth, the dynamic interaction between business and industry appears as a double-sided process. On the *disaggregate* level there is ceaseless business reorganization, with continuous changes in corporate concentration and in the structure of corporate coalitions, while on the *aggregate* level the consequences of this restructuring appear in the form of asset inflation and industrial stagnation. In other words, we suggest that macroeconomic stagflation and the restructuring of business institutions are two sides of the same process of modern capitalist development.

Our first step toward examining this broad hypothesis is to develop a new inflation index. In Chapter 7, we argue that inflation could be interpreted in two distinct ways. In conventional usage, the noun inflation is used to denote a general rise in commodity prices. However, this same process of price changes could also be viewed as a dynamic interaction between the business and industry spheres of economic activity. To understand this duality, note that every broad 'multiprice' index P also has a 'value-quantity' approximation, given by the ratio between the overall money value V and the overall material quantity Q of the underlying commodity basket. Consequently, if we define inflation as the rate of change of P , we could also approximate it by the difference between the rates of change of V and Q .

Although the standard 'multiprice' and 'value-quantity' interpretations for a price index are mathematically equivalent, their implications for inflation analysis are radically different. From the standard 'multiprice' perspective, inflation is defined as a process of price changes and that definition is independent of the underlying process of restructuring. From a 'value-quantity' point of view, on the other hand, the very definition of inflation is already rooted in the structural processes which bring that inflation about: variations in the overall value of the basket are determined in the business sphere, while

changes in its overall quantity reflect developments in the industrial sphere.

Given our basic hypothesis on the structural roots of inflation, we suggest that price changes are only a corollary of the more fundamental interaction between business and industry. Thus, instead of focusing on standard, single-variable indices which measure the rate of change of prices, we propose a new type of double-variable indices which contrast the rate of change of a broad 'business-sphere' variable (such as nominal GNP or corporate sales), with the rate of change of a general 'industry-sphere' variable (like output or employment). While the common indices are still useful for a wide range of applications, it is only by decomposing the inflationary process into its business and industrial aspects, that we can start exploring its structural causes.

In Chapter 8, we turn to these structural features, linking inflation with the process of aggregate concentration. Starting from the business-industry representation for inflation, we argue that changes in each of these spheres are affected by the separate developments occurring in the core of large companies and in the periphery of smaller firms. Thus, in a given universe of corporations, the overall rate of change of sales in the business sphere and the overall rate of change of employment in the industrial sphere will be determined by the underlying rates of change occurring in the subgroups of large and small firms. At the same time, the relative changes of sales and employment in each subgroup will also affect the distributive shares of that subgroup in the aggregate sales and employment for the corporate universe. In other words, the inflationary interaction between business and industry is driven by the same structural forces affecting the process of aggregate concentration for sales and employment!

We examine this process of inflationary restructuring with data pertaining to the U.S. manufacturing and mining sector between the early 1950s and late 1980s. Our empirical analysis addresses several important questions: How did the business-industry interaction develop in the core of large corporations as opposed to the periphery of smaller firms? What were the relative contributions of each group to the overall rate of manufacturing and mining inflation? Was the relationship between inflation and aggregate concentration systematic or random? If the restructuring was systematic, what was its nature and how did it change over time? The data suggest that post-war inflation was indeed

associated with systematic corporate restructuring. The relatively low inflation of 1950s and 1960s arose from a combination of low inflation in the periphery of small firms, coupled with even lower rates in core of large corporations. Underlying this differential performance were systematic changes in distributive shares, involving rising aggregate concentration for corporate sales and even faster increases in the aggregate concentration for employment. The period of the 1970s and 1980s was fundamentally different. Inflation was now much higher and was accompanied by serious stagnation. This new experience was associated with a reversal in the relative contributions. The core was now leading with higher rates of inflation accomplished by a combination of stable rate of aggregate concentration for sales and a falling aggregate concentration for employment.

What generated the low inflation and rising aggregate concentration of the 1950s and 1960s, and why did we have higher inflation together with stable or declining aggregate concentration in the 1970s and 1980s? Were inflation and restructuring driven by the same cause? What was it? In Chapter 9, we root inflationary restructuring in the basic process of capital accumulation. Following our analysis in Chapter 6, we begin by arguing that, in the modern context of large-scale business enterprise, the guiding principle of big business is *differential pecuniary accumulation*. Corporate performance is measured in *nominal* terms and its ultimate yardstick is the pace of capital accumulation *relative to other firms*. In seeking to accumulate faster than the average, the large firms can follow two main strategies. They can either expand their differential *breadth* of accumulation in the industrial sphere by augmenting productive capacity and employment faster than the average, or else they can try to increase their differential *depth* of accumulation in business sphere by raising their net profit per employee faster than other companies. Each of these paths is associated with a different business strategy. The first depends mainly on the pace of mergers and acquisitions, specifically on the rate at which smaller firms are amalgamated into their larger counterparts. The second strategy, on the other hand, hinges on inflationary process, particularly on the ability of large firms to exceed the average rate of inflation. A theoretical and empirical analysis of these relationships leads us to conclude that, in the context of large-scale business enterprise, there is an intimate link between the macroeconomic dynamics of inflation and stagnation on the one hand, and the distributional path chosen by the large corporate coalitions on the other. Successful merger-driven expansions in their differential breadth of accumulation

induce the large firms to maintain moderate rates of inflation, which is probably what happened during the 1950s and 1960s. A decline in merger activity, on the other hand, drives them to try and increase their differential rate of accumulation *via* inflation, which in turn creates an inflationary spiral accompanied by industrial stagnation. This latter scenario helps explain the historical experience of the 1970s and 1980s.

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The theoretical arguments and empirical evidence provided in this thesis strongly suggest that the macroeconomic experience of inflation and stagnation is interwoven with the fundamental structural processes of capital accumulation and corporate concentration. The nature of this interaction, however, is *historical* and that has far-reaching implications for our empirical research programme. The basic starting point in this work is that economic processes are to a large extent qualitative and hence 'non-stationary' in nature. In our opinion, stagflation emerges from the dynamic *transformation* of a power-oriented society, so its causes and appearance could not be arrested into a stable econometric model. Since the stationary, *a*-historic premise of such models goes counter to the historical singularity of structural change, we have deliberately chosen not to use any econometric estimation and testing and limit ourselves to the careful analysis of tables and graphs.

In this light, it is also important to qualify the scope of our theoretical claims and empirical findings. While the process of inflationary restructuring is neither new, nor limited to a particular society, it is necessary to emphasize that our thesis was developed with the modern U.S. experience in mind. Our specific framework was for a 'mature' capitalist economy, characterized by a large domestic market, expanding foreign trade and growing integration within a rapidly-changing world market, and it is only in this kind of setting that our method and conclusion may have a certain claim for generality.