The Megacorp and Oligopoly

Micro Foundations of Macro Dynamics

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1. Introduction

The purpose of this volume is to provide a theoretical understanding of how prices are determined in the oligopolistic sector of the American economy and how those prices, so determined, affect the growth and stability of the economy as a whole.

The need for such an understanding would appear to be unquestionable. Persistent inflation in the period after World War II, manifested as a continuing rise in the various price indexes, has thwarted the application of the Keynesian insights to assure steady economic growth at full employment. In the process the pre-war business cycle has been replaced by what Joan Robinson (1962b), following Michal Kalecki (1943), has termed the political trade cycle. This involves the deliberate suppression of aggregate demand by the government, once high levels of employment have been attained, to meet the complaints of rentier groups that the value of the dollar is being eroded - followed by the deliberate stimulation of the economy, once the rise in the price level has been halted, to calm fears of spreading unemployment. Forced to choose alternatively between full employment and price stability, the government has been unable to achieve either with consistency.

Why the American economy should find itself caught on the horns of this Phillipsian dilemma cannot be adequately explained by recourse to the existing body of economic theory.\(^1\) While one might expect on the basis of this theory that prices would rise if aggregate demand should grow more rapidly than aggregate supply, one would not anticipate that prices would remain constant or even continue to rise if aggregate demand should begin to decline. This is because in the conventional pricing models there is nothing to suggest that the industry supply curve is not positively sloped. A decline in aggregate demand and, pari passu, a decline in the demand for any particular industry's product should, according to the existing body of theory, lead to a fall in industry price levels. Yet, as recent experience reveals, prices do remain constant and even on occasion continue to rise when aggregate demand begins to decline.\(^2\) Meanwhile, the American government, like the political authorities in other Western nations, continues to rely almost entirely on monetary and fiscal policy for dealing with inflationary pressures, despite the fact that the efficacy of these instruments derives solely from their ability to affect the level of aggregate demand. Thus the
failure of public policy can be traced more basically, as Keynes suggested in another connection, to the failure of theory. In this case, it is the failure of theory to provide an adequate explanation of the inflationary process or to suggest some means of bringing it under control without, at the same time, sacrificing the growth of real output. 3

The failure of theory can be traced, in turn, to the lack of a suitable pricing model for the type of industry which plays such a prominent role in the American economy. This type of industry is what is known as oligopoly. While superficially it is the fewness of the sellers that is the essential characteristic, actually it is the recognized interdependence to which the fewness of the sellers gives rise that sets oligopoly apart from other types of market structure. What this means is that no single member of the industry can expect to take action without evoking a response from the other firms which are its rivals. 4 Considered as a whole, the industries which evidence this prerequisite interdependence constitute the oligopolistic sector of the American economy, a delineation which cuts across manufacturing and similar sectoral lines. As one of the underlying themes of the present work, it may be stated that not only is it essential to make a distinction between the oligopolistic and non-oligopolistic sectors of the economy but that, in addition, the former gives rise to a pricing dynamic which is a significant source of autonomous inflationary pressure.

The dynamic derives from the substantial market power — or pricing discretion — which the firms in the oligopolistic sector possess and from the interaction between these firms and certain trade unions which results in the establishment of the national incremental wage pattern. Implicit in the oligopolistic pricing model which forms the core of this work is a cost-push explanation of the inflationary process — with equal emphasis on wage and profit factors — that supplements the more generally recognized excess-demand theories.

The purpose of this volume, then, is to provide a valid micro foundation for Keynesian — and post-Keynesian — macroeconomic theory. 5 The aim is to make it unnecessary to rely on the neo-classical model for microeconomic analysis, thereby removing a major source of the resistance to Keynesian ideas. This purpose is accomplished, first by developing a model based on assumptions that more accurately reflect conditions in the oligopolistic sector and, second, by relating the variable to be explained to the same key determinant as that found in the basic Keynesian system. In the oligopolistic pricing model that follows, a change in the industry price level is held to be a function, costs remaining constant, of a change in the rate of growth of investment relative to the rate of growth of internal funds generation. Put another way, prices in the oligopolistic sector are set not to maximize short-run profits but rather
to enable the firms in that sector to finance the level of investment necessary to maximize – or at least move further toward maximizing – their own long-run growth. It is this crucial link between the pricing decision and the investment decision which, among other things, sets this oligopolistic model apart from others.

Aside from its greater compatibility with the Keynesian system, the pricing model developed here has several other important characteristics. For one thing, as already alluded to, it is predicated upon realistic assumptions, that is, assumptions descriptive of actual conditions in oligopolistic industries. These assumptions, justified more fully in the next chapter, pertain to the representative firm in the oligopolistic sector, a firm which, for communicative convenience, shall henceforth be referred to as a megacorp. The assumptions made about the megacorp are threefold: (1) that it is characterized by a separation of management from ownership, with the effective decision-making power residing in the former; (2) that production occurs within multiple plants or plant segments, the factor coefficients for each of these plants or plant segments being fixed due to both technological and institutional constraints, and (3) that the firm’s output is sold under conditions of recognized interdependence, the members of the industry engaging in what has been termed ‘joint profit maximization.’ Each of these assumptions is of critical importance analytically. The first bears on the motivation of the firm, determining the behavioral rule that will be followed for pricing decisions; the second assumption bears on the shape of the megacorp’s cost curves, determining the incremental expense incurred over the relevant range of output, and the third assumption bears on the nature of the megacorp’s revenue curve, or function.

Another important characteristic of the model developed here is that it leads to a determinate solution. It is this determinateness, together with the realistic nature of the underlying assumptions, which makes the model unique. On the one hand, other models which also provide a determinate solution, such as the classical Cournot duopoly model, lack realism. They are based on premises that either contradict the behavioral definition of oligopoly or are in some other crucial aspect incompatible with observed conditions. On the other hand, previously available models which are realistic, such as the frequently employed percentage markup or cost-plus model, are indeterminate. They lead to a multiplicity of possible price levels (R. Hall and Hitch, 1939; Lanzilotti, 1958). Falling somewhere between these two polarities is the ‘game theory’ approach. Whatever its merits, this approach has so far failed to produce a model of oligopolistic pricing that is both determinate and realistic.

The determinateness of the oligopolistic model presented below in
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Chapter 3 is, however, of a special type. First, the solution is discernible only from the long-run perspective of the industry as a whole, with one megacorp, the price leader, acting as surrogate for all the members of that industry. As long as the focus remains either on the individual firm acting independently and/or on the short-run situation, the price in an oligopolistic industry will continue to appear indeterminate. Second, what is determinate from the long-run perspective of the industry as a whole is not the absolute price level but rather the change in that price level from one time period to the next. Thus the price in an oligopolistic industry can be understood only in terms of the marginal adjustment that occurs with respect to a historically established figure.

That marginal adjustment, however, is fully determinate within the hypothetical model. The price leader, on behalf of the industry, will vary the industry price so as to cover (1) any change in per unit average variable and fixed costs, and (2) any increased need for internally generated funds. Whether additional internal funds are needed will depend on the prospective return from the investment of those funds relative to the real costs incurred should the industry price be increased. These real costs, which serve as the effective restraint on the pricing power, or discretion, of the megacorp, derive from three sources: (a) the substitution effect, that is, the loss of market to substitute products as the relative price rises; (b) the entry factor, that is, the probability of new firms entering the industry as the absolute price rises, and (c) the fear of meaningful government intervention, that is, the probability of action by public authorities to impair the long-run growth prospects of the megacorp. From these costs it is possible to derive the equivalent of an interest rate, it then being possible to compare this implicit interest rate on internally derived funds with not only the megacorp’s own marginal efficiency of investment but also the cost of external funds. Any resulting change in industry price will be one that is designed to maximize the long-run growth of the price leader – if not the other megacorps in the industry – by providing the price leader with an optimal quantity of internally generated investment funds.

The oligopolistic pricing model developed here is thus an elaboration of the cost-plus model cited so extensively in the survey literature – with one crucial refinement. The ‘plus’ in the cost-plus formula – why it varies both over time and among industries – is fully explained (Eichner 1973a). In the course of explaining this ‘plus’ item, the model builds on the earlier work of Baumol (1967) and Marris (1964) as to what motivates the megacorp’s executive group and on the previous work of Bain (1949) and Sylos-Labini (1962, part 1) as to how potential entry affects the pricing decision. The precise relationship between the present work and these earlier efforts to explain oligopolistic pricing behavior
is spelled out in separate appendixes to chapters 2 and 3. At the same
time, the analysis points out the irrelevance of the conventional Chamber-
lin-Robinson monopoly model insofar as oligopoly with homogeneous
products is concerned (Chamberlin, 1962; J. Robinson, 1969), it being
shown that if there is to be a determinate price in such an industry,
with the elasticities of demand actually observed in the oligopolistic
sector, it will almost certainly reflect the unexercised monopoly power
which Galbraith (1957) has on occasion pointed to (see also Galbraith
1952, 1967a). But this 'unexercised monopoly power', rather than indicat-
ing the type of satisficing behavior postulated by Simon (1955) and Cyert
and March (1956, 1963), is instead simply one of the factors which,
more appropriately termed the substitution effect, determine the shape
of the megacorp's supply curve for internally generated funds - the
latter being the analytical device for linking the pricing decision to the
investment decision.

Once developed to fit the simple case of a megacorp-price leader
which is a member of but a single oligopolistic industry, the model
can be altered and extended to cover other types of enterprises, including
the unregulated monopolist, the regulated monopolist and the conglom-
erate or multi-industry firm. By assigning the proper values to certain
of the key variables as well as by making certain other modifications,
even the perfectly competitive - or polypolistic\(^9\) - firm can be analyzed
within the same general framework. The effect is to cast in a somewhat
different light the pricing model which has until now dominated microeco-
nomic theory. These alterations and extensions of the basic oligopolistic
model are described in chapter 4.

To complete the reformulation of microeconomic theory, it is necessary
only to supplement the oligopolistic pricing model with an explanation
of factor pricing or, viewed differently, the distribution of income within
the megacorp. For this purpose, because of the fixed nature of the
technical coefficients - at least in the short run - the traditional marginal
productivity approach is irrelevant. Instead it is necessary to adopt an
alternative approach, one that combines the institutional economists' emphasis on power relationships and the sociologists' focus on societal
norms with the Marxian theory of surplus value, the Keynesian stress
on aggregate demand factors and the linkage between the secular growth
rate and the savings propensities of different groups brought out in
post-Keynesian macrodynamic models.\(^10\) This is done in chapter 5. There,
in a return to one of the themes brought out in chapter 2, the megacorp
is viewed as being confronted by various constituencies whose claims
against its revenue are mediated by the executive group. The two most
important of these constituencies are (1) the members of the laboring
manpower force, a significant proportion of whom, it is assumed, are
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represented in collective bargaining by one or more trade unions, and (2) the equity debt or stockholders. The latter, it should be emphasized, serve as rentiers rather than as the recipients of the residual income share. They differ from the other constituent groups only insofar as the legal conventions enable them to bring to bear certain unique forms of pressure vis-à-vis the executive group. Since this view of the megacorp’s nominal owners permeates other chapters as well, the entire treatise can be included among the growing body of managerial theories of the firm.  

The theory of income distribution developed in chapter 5 suggests that, as a result of practices that have evolved over time, the compensation received by the megacorp’s other constituencies, including the equity shareholders, is geared to that obtained by the organized portion of the laboring manpower force. This means that the trade union, in bargaining for its own members, is in effect putting forth the claims of all the households dependent on the megacorp for income. The trade union, in turn, is likely to insist upon – and the megacorp to grant – that increase in compensation which has, in a social sense, been deemed ‘fair and reasonable’ through the mechanism of the national incremental wage pattern. This pattern can be established in a number of different ways, as the practice of other countries attests. In the United States it most typically arises from the ‘key’ collective bargaining agreement negotiated in one of the major industries, usually steel or automobiles, often only after Presidential intervention with its implicit socio-political sanction. In a period of active government involvement in the economy, the agreement negotiated in the ‘key’ industry may have to obtain explicit sanction from a Presidentially-appointed tripartite board. This, of course, was the case under the anti-inflationary program announced by President Nixon in the fall of 1971 and later endorsed by Congress. But it should be noted that the same was true during World War II and the Korean conflict.

Thus the increase in compensation obtained by the megacorp’s principal constituencies – and a fortiori any increase in per unit costs – will depend, time lags aside, on the national incremental wage pattern established at the macro level. What in effect is determined in that key bargain is the nominal division between the household and business sectors of that portion of the current national income not already commandeered by government. The key bargain therefore represents the first step in the allocation of resources in the private sector between present and future consumption. In Marxian terms, the issue with which the key bargain is concerned is the disposition of the incremental surplus value created by individual megacorps, this incremental surplus value in the aggregate constituting the marginal social surplus arising in the
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oligopolistic sector. Any increase, either in wages or dividends, represents an apportionment of part of that incremental surplus value to households.

Yet the issue is not fully resolved, even after other trade unions have forced the megacorps with which they bargain collectively to grant increases in compensation equal to the national incremental wage pattern. For after the nominal wage rate has been agreed to, and per unit costs as a result determined, megacorps still retain the power to alter the various industry price levels and thereby, unconcertedly but none the less effectively, fix the real wage rate. With the theory of income distribution provided in chapter 5, it is possible to go on and explain in chapters 6 and 7 this process by which the real wage rate is determined - at least within the oligopolistic subsector of the economy. Chapter 6 uses the microeconomic base developed in the earlier chapters to sketch the outlines of a macrodynamic theory. Among the important points brought out are the following:

1. Because of the behavioral principle followed by the megacorp, investment within the oligopolistic subsector depends primarily on the expected rate of growth of industry and, pari passu, of aggregate demand. The oligopolistic pricing model which forms the core of this volume lends theoretical support to the accelerator model of investment now increasingly employed by empirical investigators - and in particular to the lagged industry sales version of that model developed by Eisner (1963, 1967). This model contrasts sharply with the determinants of investment in the competitive subsector, as well as those emphasized in economics textbooks.

2. With the oligopolistic sector in fact accounting for most of the private investment actually undertaken, the savings-investment equilibrium adjustment process needs to be reformulated. Assuming household savings to be relatively constant and only a minor contributor, in any case, to capital formation in the business sector, it follows that the critical savings decisions are those made by megacorps. These decisions are reflected in the margins above contracted costs at which price levels in the oligopolistic sector are set. Thus, as in the pre-Keynesian schema, the decisions of how much to save and how much to invest are in the hands of the same party. However, because the price levels must necessarily be set on the basis of expected sales volume - forecasts of which are subject to considerable error due to fluctuations in aggregate demand - the possibility of ex ante and ex post savings diverging, at least within the oligopolistic sector, nevertheless remains.

3. Given the first two propositions, a post-Keynesian macrodynamic model along the lines first set forth by Robinson (1956, 1962a) and Kaldor (1957) then emerges (see also Kaldor and Mirrlees, 1962). The model follows the earlier work in almost every important respect, including
the assumption of a flexible savings ratio and the rejection of a neo-classical production function. The one significant modification is that the flexibility of the savings ratio hinges, not on a presumed difference in the marginal propensity to consume out of wages and out of profits - and the effect that this difference has on aggregate savings as the share of national income accruing to property owners varies - but rather, on the power of megacorps, through the control which they exercise over prices, to alter the savings ratio. In this model the possibility of achieving steady growth, ignoring the influence of the government sector, depends on the ability of megacorps to set their prices so as to achieve a rate of growth of real savings equal to the rate of growth of real investment dictated by industry growth trends. This need not, however, be an optimum growth rate nor one unaccompanied by inflation.

Chapter 7 picks up on this last point, first exploring what might determine the optimum, or 'potential' growth rate. The conclusion reached is that the limit set on the rate of economic expansion by the availability of manpower and the rate of technological change is merely that - a limit which the economy can only approach - and that the real explanation for why growth rates in an advanced economy like that of the United States are not greater than observed is the difficulty of engineering any change in the secular growth rate. The oligopolistic sector, because of the factors determining the level of investment and the rate at which it generates internal funds, tends to exert pressure on the economy to maintain whatever growth rate has previously been established; and efforts by the government to put the economy on a different growth path are unlikely to succeed unless a complex set of adjustments can be made. The conventional policy instruments available to government, both fiscal and monetary, are ill-suited for this role. Indeed, they are likely to make the task of achieving macrodynamic balance at a higher growth rate all the more difficult. These shortcomings of the conventional policy instruments form the underlying theme of the chapter, and this theme is carried through in a final section reviewing what happened to the American economy during the 1960s.

Chapter 7 also points out that the aggregate supply function is quite different from what it is generally assumed to be, at least insofar as prices are concerned. The argument is based on the earlier showing that the price level in oligopolistic industries depends not on fluctuating levels of sales but rather on changes in costs and/or changes in the long-run demand for and supply of investment funds. This means that the aggregate price level itself - at least that portion attributable to the oligopolistic sector - will be insensitive to, that is, independent of, short-run fluctuations in demand. It will instead reflect the adjustment necessary to bring the need of megacorps for additional investment funds
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into line with the claims against revenue arising from forced acceptance of the national incremental wage pattern. In this respect, as several writers have suggested, the aggregate price level serves as a 'safety valve', dissipating otherwise unmanageable pressures by both the household and business sectors for additional current resources. It also, of course, makes the aggregate price level less amenable to control through the conventional policy instruments available to government.

The final chapter draws out the policy implications of the preceding analysis. There a strategy is set forth for remedying the lack of effective social control over the megacorp revealed earlier. The key recommendation is that a system of national indicative planning be established. This recommendation is based on a proposition which emerges as the major policy conclusion of the study - namely, that effective social control over the individual megacorp can be achieved by no more and no less than regulating both the rate of growth, and the composition, of aggregate investment. If this conclusion is valid, Keynes (1936, p. 278) will turn out to have been more prophetic than is generally realized when he suggested that 'a somewhat comprehensive socialization of investment will prove the only means of securing an approximation to full employment.' For the principal reason that unemployment has been as high as it has been since the end of World War II is that governments have mistakenly attempted to arrest the wage-price inflationary spiral by curtailing aggregate demand. If the arguments to be presented in this volume are correct, the wage-price spiral can be prevented only by bringing the megacorp, not to mention trade unions, under more effective social control via the regulation of aggregate investment. What should give some heart to those who fear the government assuming an overbearing role in the economy is that this form of regulation is far less stifling than the alternatives which others have insisted are necessary - and indeed far less stifling, in important ways, than the type of regulation so recently instituted in this and other countries to deal with the problem of inflation.

Before proceeding further, it might be worth while to pause and make clear the conceptualization of the economic system that underlies the entire work.

In the analysis that follows, the economy will be viewed primarily in terms of three sectors - household, business and government - each characterized by a different type of decision-making unit. In the household sector the pertinent decision-making unit is the family. Its unique role in the economic system is two-fold. First, it alone supplies the manpower resources indispensable to the production process. Second, it alone provides the economic system with a rationale, the ultimate
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justification of the system being its ability to reduce the material barriers to the realization by the family of its goals in life. Despite the obvious importance of the household sector it will be dealt with only peripherally, largely because the primary concern is with price determination in the business sector. The behavior of the family as it affects prices follows a relatively stable pattern and can, for that reason, be taken largely for granted.

The pertinent decision-making unit in the government sector is the political sovereignty exercising, through its monopoly of coercive power, exclusive jurisdiction over specified activities within a given geographical area. In the United States there are numerous such political sovereignties, including the many municipalities and states; however, this volume shall be concerned primarily with the Federal government because it alone exercises control over aggregate fiscal and monetary affairs. Much of what will be said about that political sovereignty will, of course, apply to the national governments of other countries, too.

The political sovereignty's unique role in the economic system is again two-fold. First, it alone determines the rules by which the economic system is to be operated. These rules include, in the case of the Federal government, what may constitute legal tender and monetary reserves. Second, it alone is capable of transcending the economic system by using its taxing power to commandeer resources outside normal market channels.

The pertinent decision-making unit in the business sector is the firm or enterprise. Its unique role is simply to direct the production process, determining what goods or services are to be made available, in what quantity and by what means. A fundamental premise underlying this treatise, as already noted, is that for an adequate understanding of how the economic system presently functions in the United States it is necessary to divide the business sector into at least two components, one consisting of all oligopolistic industries, the other, all remaining industries (cf. Averitt, 1968). Each of these industries consists of a cluster of firms, all of whom keep a watch on the same set of prices. Indeed, this description provides the operational definition of an industry that will be used throughout this work - that group of firms which share a day-to-day interest in the same set of price quotations for a class of goods they are each capable of producing. While the manner in which these price quotations are established will vary according to the type of industry, this is not the basis for distinguishing the oligopolistic subsector from the rest of the business sector. The critical distinction has to do instead with the nature of the representative firm. In the oligopolistic subsector, the representative firm is the megacorp; in the rest of the business sector, it is the vestigial neo-classical proprietorship.
The analytical importance of this distinction between the oligopolistic and non-oligopolistic subsectors forms the principal subject matter of the chapters that follow. Suffice it for now to indicate the actual empirical significance of oligopoly in the American economy.

Taking value added as the measure of an industry's relative impact on the economy, it would appear that only in manufacturing and, to a somewhat lesser degree, in mining is oligopoly the predominate form of market structure. In manufacturing, for which the only reliable data are available, oligopolistic industries account for approximately two-thirds of all value added (Kaysen and Turner, 1959, ch. 2; Shepherd, 1970, part 2). This prevalence of oligopoly in manufacturing would by itself make the phenomenon worthy of understanding, despite any low incidence in the rest of the business sector. However, the prevalence of oligopoly in manufacturing has a significance which goes beyond what can be measured in terms of value added. To appreciate this fact, it is necessary to further schematize the business sector.

Each class of goods or services produced by the business sector can be viewed as having traveled, before emerging in final form, a production path uniquely its own, beginning with the initial extraction of raw materials from nature and continuing through the further processing, transportation, distribution, etc. of those raw materials at each successive stage. This progressive flow of total output is perhaps best represented, though still quite imperfectly, by the triangularization of an input-output table. At different points along the various paths, usually where two or more flows come together to create a new product, different industries are located. What is particularly true of industries in the manufacturing sector is that they lie astride a large proportion of all production paths - and at points where the volume of flow is perhaps most easily regulated. The pervasiveness of oligopoly in manufacturing thus takes on a special significance; it is no mere coincidence that oligopoly first emerged in that sector when it did. As the historical record makes clear, oligopoly was established primarily as a means of offsetting the downward pressure on prices during the latter third of the nineteenth century resulting both from the ability of supply to outpace the secular growth of demand and from the susceptibility of the economy to cyclical declines in activity (Eichner, 1969; Porter, 1973). The manufacturing sector, because of its strategic location, was the logical point at which to attempt the stabilization of prices. If, because an industry is oligopolistic, the member-firms possess a certain degree of market power, this market-power will be felt by those industries situated both antecedently and subsequently along the production path. To the extent that these other industries are without a comparable degree of market power, the range of discretion enjoyed by the oligopolistic industry in the manufacturing sector will,
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In fact, be all the greater. The significance of oligopoly’s pervasiveness in manufacturing, then, is that such industries are strategically located in the economic system and possess sufficient market power to influence, somewhat independently through their pricing decisions, the flow of output throughout the business sector.

The economic system as a whole is defined not only by this flow of goods and services within the business sector but also by other flows as well. In one direction, providing the economic system with its rationale, move the various goods and services produced both by the business sector itself and by the other two sectors. This flow, with numerous feedback loops to handle factor inputs, constitutes the ‘real’ economy. In the other direction, serving as payment for the goods and services received, move the claims against total output which take the form of money. This flow, with the Federal Reserve Board serving as the overall regulating authority, constitutes the monetary economy. The two flows are equilibrated – except for certain of the governmental connections – through markets such as those for consumer goods, raw materials, etc. The adjustments necessary to equalize the contrary flows can come about in one of three ways: through a change in the quantity of goods or services being supplied, through a change in the amount of claims being given up in return, or through a change in the price ratio that defines the exchange relationship between the two flows. Assuming an initial equilibrium, a change in any one of these three variables will, of course, require a change in at least one other.

One of the most important controversies among economists at the present time centers on the question of the extent to which, by regulating the monetary economy, it is possible to regulate the real economy as well. Some economists would argue that the potential for effective control already exists; others would argue that, with certain changes in the authority of the Federal Reserve Board, effective control could be established. The premise underlying this volume, however, is that the function of the monetary system is primarily to provide lubricating fluid for the real economy. To use it instead as a hydraulic control device is to run the risk not only that the regulation will be clumsy and ineffectual but that it will also seriously impair the working of the entire system. With hydraulic control resting on the ability to restrict the total availability of claims, only generalized restraint is possible; there is no way of directing pressure to the particular parts of the economy where it is specifically required or desired. Moreover, if price ratios are simultaneously being used to adjust the conflicting claims of households and business firms on current resources, and if business firms possess sufficient market power to assure that the prices they decide upon will prevail, then the burden of adjustment will fall on the real economy.
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- with socially undesirable consequences for output and employment. For this reason, the treatise assumes that it is better to seek out those critical variables in the operation of the real economy that are susceptible to social control, allowing the monetary system to function instead as a sympathetic facilitating mechanism. This is not to suggest that monetary policy be eschewed entirely - if indeed that were possible. It is merely to point out that the role of monetary policy is essentially complementary and subordinate.

When families and business firms, in exchange for the goods and services they provide, receive more claims than they choose to exercise the two types of decision-making units will necessarily emerge as net savers. This they will do by increasing their stocks of financial assets - with the output against which they have not exercised their claims thereby becoming available for capital formation. In the usual conceptualization of the economy it is the role of families as savers that is emphasized. This volume, however, plays down the importance of households in this respect. It does so for two reasons: first, because much of what the family does save is the result of involuntary action, the financial assets being accumulated through life insurance and pension programs over which the family has little or no control; and second, because the family accounts for only a minor portion of total private savings.  

Instead, as already noted, this treatise emphasizes the role of business firms as savers, the savings themselves taking the form of 'cash flow', that is, a combination of depreciation allowances and retained earnings. Since it will be argued that the cash flow is not simply a residue or balance figure, but is in fact a quantity deliberately chosen to enable the megacorp to achieve its investment goals and since, moreover, the cash flow does not include all of the megacorp's discretionary income, the less passive and more inclusive term 'corporate levy' will be used throughout. It includes, besides cash flow, the cost of advertising, research and development (R & D) and similar expenditures designed to enhance the megacorp's long-run market position; and it will be used interchangeably with such terms as discretionary income, internally generated funds, and individual megacorp savings.

The counterpart of the corporate levy in the government sector is, of course, the excise tax, whether it takes the form of a levy on sales, imports, luxuries, alcoholic beverages or the like. While this type of tax might at first seem less significant than others, the phenomenon of a government levy being incorporated into the price structure is, in fact, a fairly general one. As this volume attempts to demonstrate, the tax on corporate net income is simply passed along to customers in the form of higher prices and thus it serves as the equivalent of
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A generalized sales tax. Even the personal income tax, which stands as the one important type of government levy that is not an excise tax, influences to some degree - the extent to which it affects work incentives - the price structure of labor inputs. Needless to say, it is the total revenue from all taxes, excise and non-excise, that constitutes the level of savings generated by the government sector.

In this conceptualization of the economy, the megacorp and the political sovereignty both occupy similarly strategic positions - even if there nonetheless remain crucial differences in their respective powers. Both play a critical role in the capital accumulation process, the megacorp by seeing to it that facilities are created for the production of marketable goods and services, the political sovereignty by seeing to it that facilities are created for the provision of non-marketable, that is, public or collective goods and services. In developing those facilities, both the megacorp and the political sovereignty are able to tap savings in one of the other sectors - even though for the most part they prefer to adjust their respective levies to generate a level of savings equal to the level of desired investment. Finally, since the amount of revenue actually realized from their respective levies depends on the level of aggregate economic activity, both may find themselves running an unexpected surplus or deficit of savings. It is the ability of the megacorp and the political sovereignty to initiate the process of capital accumulation, then finance investment expenditures through levies of their own that makes these two types of economic decision-making units the logical points within the real economy at which to attempt to exercise control - for the first prerogative largely determines, in the aggregate, the rate of economic growth, the second the stability of the system and the two together the relative welfare of individual family units.

The economic system is a mechanism not merely for maintaining existing material standards of living but, more important, for improving upon those standards. In other words, the system for all its feedback loops is not closed or circular. It is open-ended, with a built-in capacity for increasing the output of goods and services. That built-in capacity derives from the ability of business firms - megacorps in particular - and political sovereignties - primarily the national government - to obtain control over resources, withholding those resources from current consumption so that they can be used to increase the system's productive capacity. The resulting increase in goods and services is what is meant by economic growth. The theory of pricing contained herein is predicated on the assumption that economic growth is continuous - even if the rate itself fluctuates. Its conclusions apply only to an economy in which such a positive rate of growth is the normal expectation.

In an economy that is either stagnant or in secular decline, the theory
developed in the chapters which follow has little or no applicability. It is precisely for an economy of this type that the neo-classical microeconomic theory is best suited. Thus, just as the theoretical model outlined below is inappropriate for analyzing a stagnant or declining economy, so the neo-classical model is inappropriate for an expanding economy. Indeed, as Joan Robinson (1971, chs. 1 and 2) has pointed out, the use of the neo-classical analysis in a growth context involves a fundamental contradiction. A positive rate of economic growth has, however, been the predominant experience of American society since at least the origins of the megacorp around the turn of the century. For this reason, the theoretical model developed below is the more appropriate one for understanding contemporary problems.

Economic growth, however, occurs within limits set by the larger society's current stage of economic development. Thus it is necessary to distinguish economic growth from economic development. The latter depends, not on the output of goods and services at any one point in time but rather on the extent to which the society's human resources have been developed, both in terms of producing individual skills and of establishing the complex of institutions necessary for giving those skills full scope. In other words, economic development depends on the growth and human skills, economic growth on how completely those institutions and skills are then utilized. It is, of course, possible to develop new institutions and to increase the skill content of a society's population; but the time horizon is quite long and significant results cannot be expected in less than a generation. The current state of economic development, then, serves as the ultimate constraint in the intermediate run - what is referred to here as the planning period - on the rate of economic growth which a society can hope to achieve. Put another way, the increase in output cannot exceed the expansionary limits of the existing stock of skills and institutions.

It should be noted that the intermediate run or planning period, is the time required to bring a new plant into operation, beginning with the decision to build it. In addition, reference will be made throughout this work to the pricing period - the interval between changes in the industry price level; to the short run - a duration of time less than the planning period; and to the long run - a duration of time greater than the planning period, extending potentially into the indefinite future.

The current stage of economic development is important for another reason. It determines the appropriateness or relevance of any particular body of economic theory. An underlying assumption of this volume is that as an economic system continues to evolve, creating new types of institutions to replace the old, the currently preferred conceptual framework with its attendant theoretical models becomes increasingly
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less relevant until finally, when an entirely different stage of development has been reached, it becomes an actual handicap to understanding. Thus the neo-classical theory of the firm, devised with the institution of the nineteenth-century proprietorship in mind, is a poor analytical device for explaining the behavior of the twentieth-century megacorp. This point about the relativity of economic theory applies as well, of course, to the oligopolistic pricing model presented below.

The upper limit to the rate of economic growth set by the current stage of development is merely that: an upper limit. The actual growth path, it can be assumed, will in fact be quite erratic, with pronounced cyclical fluctuations in aggregate economic activity. This is because the economy will necessarily find itself beset from time to time by a major shift in some exogenous factor. It is this bombardment of the economic system by forces from without that precludes a theoretical stationary state from ever being actually realized. Thus it is the tendency toward disequilibrium rather than the tendency toward equilibrium which is the fact of actual economic experience; and both the megacorp and the political sovereignty in their respective planning and operational activities must be prepared to take that fact into account.

Were the economic system capable of reacting to the change in the exogenous factor quickly enough by making the appropriate price adjustments, the adverse affects might easily be contained without the need for any conscious intervention. But this is more than can be expected of the price mechanism. Consequently, the shift in the exogenous factor will necessarily lead to some change in real flows - even if the change is somewhat muted by whatever price adjustments have occurred. If sufficiently pronounced, the change in real flows can, in turn, be expected to cause a change in expectations which, when made the basis for subsequent decisions in the private sector, will tend to be self-confirming. In the absence of some further shift in one of the exogenous factors, such as a change in government policy, the working of the economic system per se will tend to reinforce whatever trend has previously emerged, whether that trend is consistent with an optimum growth path or not. In presupposing this underlying dynamic, the treatise merely accepts the thrust of the Keynesian argument that, because price adjustments cannot be relied upon to completely neutralize the effect of exogenous shocks to the economic system, a continuous situation in which some significant portion of society’s resources remains unemployed is not-only-likely but, indeed, highly probable.

The duration and amplitude of any cyclical deviation from the optimum growth path will depend to a large degree on what response the various megacorps and the political sovereignty make to the change in real flows. To the extent that any one of them continues to generate a level of
savings that is greater than its rate of investment, it will contribute to the slackening of aggregate economic activity; to the extent that it continues to generate a level of savings that is less than the rate of investment, it will contribute to the stimulation of the economy. In these matters the megacorp and the political sovereignty both enjoy considerable discretion. The power of the latter to alter the level of its expenditures and/or taxes is widely recognized, as is the power of the megacorp to alter the level of its investment outlays. But the power of the megacorp to alter its rate of savings through a change in price is no less critical to the stability of the economic system. What is required, if fluctuations in aggregate economic activity are to be minimized, is that any imbalance between savings and investment which arises in one sector, whether it be business or government, be offset by a deficit of the opposite sort in the other sector. Yet this is not likely to happen with sufficient speed or certainty unless there is some specific mechanism for coordinating ex ante decisions between the business and government sectors.

The point of reference for this volume is the economic welfare of the individual. That welfare, it can be demonstrated, will depend both on whether the growth rate of household income is, over time, being maximized (i.e. how close the society comes to the optimum growth path permitted by the current stage of development) and on whether fluctuations in aggregate economic activity are minimized (i.e. how little the economy deviates from that optimum growth path). Since the megacorp plays such a critical role in the growth and stability of the economic system, it seems clear that the economic welfare of the individual is closely tied to the performance of this institution. But the megacorp affects the economic welfare of the individual in yet another way. Basic to this treatise is the recognition that different households stand in different relationship to the megacorp. Some are merely final consumers of the products which the megacorp turns out. Other households have members who, in addition, are employees of the megacorp. Still other households have members who, as stockholders, hold legal title to the megacorp’s residual income. These different relationships bear significantly on the economic welfare of the individual, for they determine the extent to which as a member of some household the individual will share in the bountifulness of American society.

As a final introductory word, it might be well to state precisely what is claimed of the theory presented below. Like any theory, it does not encompass all the phenomena of its universe - the universe in its case being that of the oligopolistic sector. But, it can be argued, the theory does encompass more of those phenomena - with respect,
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for example, to prices, investment and wage rates - than the alternative body of theory derived from neo-classical assumptions. As such it provides, not a final vantage place for viewing those phenomena but rather, a better point of departure for further analysis and empirical study. In other words, since resort must be had to some body of microeconomic theory in policy formulation and scholarly research, the theory presented below, it is asserted, is the better choice - at least with respect to the oligopolistic sector. Certainly its assumptions, if not its conclusions, are more consistent with what is known about the industries and firms that comprise that sector. The conventional neo-classical analysis, on the other hand, has only the comfortableness of accustomed modes of thinking to recommend it. To fit the reality of the oligopolistic sector its conclusions and its assumptions must be drastically altered.