2 Gardiner Means’ doctrine of administered prices

As a graduate student, Means was taught that the economy was a self-regulating machine which ensured that, in the short term, all national resources were fully utilized, international trade was always in balance, and the general price level varied directly with the money supply; and, in the long term, economic waste was eliminated, income distributed according to the marginal productivity principle, and the effective use of resources realized. He was also taught that these macro results were predicated on the economy being inhabited by small competitive owner–worker enterprises which employed little fixed capital, made a single good, and produced a negligible share of market output; and on the profit motive which, by compensating the owners for risking their capital and managing their enterprise, was the guiding force in directing the enterprises’ economic activity. Most importantly, it was impressed upon Means that for the economy to be self-regulating, the coordination of all economic activities – and, thus, the making of industrial policy – had to occur in the market and was predicated on all prices and wage rates being perfectly flexible.

While he thought neoclassical economic theory was clearly relevant to the British economy of Smith and Ricardo’s time, to the American economy prior to 1840, and to the economic activities of the oriental bazaars, Means found it completely irrelevant to the American economy of the twentieth century where the large corporate enterprise was the “representative firm,” the ownership and control of the corporate enterprise rested with different individuals, thus undermining the effectiveness of the profit motive to increase social welfare, and the corporate enterprises had the market power to administer both their wage rates and market prices. He concluded that the coordination of economic activity as pictured in neoclassical economics had ceased to occur, and with it the ending of the economy as a self-regulating machine which ensured the full, efficient, and effective use of resources, the balance of international
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	rade, and a stable price level. The clearest evidence of the collapse of the "traditional" coordination of economic activity for Means was the Great Depression. Thus, he set out to determine the manner in which economic activity was actually coordinated in a corporate-enterprise, administered price-dominated economy and the manner through which economic policy was actually made so as to achieve non-market-determined levels of economic activity. In recasting economic theory in a more realistic vein, Means centered his attention on the role administered prices played in the coordination of economic activity. His doctrine of administered prices was thus primarily concerned with the fundamental problem of setting out the forces, such as administered prices, which affected the coordination of economic activity and determined the actual manner in which the modern corporate economy operated.

The structure, organization, and coordination of economic activity

Means developed his doctrine of administered prices within the context of a specific conception of the American economy. Utilizing the methodological approach advocated by Frederick Mills (1935) - that of studying a functioning working economic system as a whole - he was concerned with identifying the relatively permanent features of the archetype corporate economy which gave it its salient characteristics. In this light, Means considered the US economy the best and most relevant example of a corporate economy and thus used it as a proxy. Since he observed that in the US economy most economic activity was repetitive or continuous over short periods of time and changed relatively slowly over longer periods, Means concluded that one salient characteristic of a functioning economy was that of economic continuity, meaning that consumers and business enterprises generally repeated their economic activities over time. Consequently, in a functioning economy characterized by economic continuity, consumers buy various consumer goods on a regular and systematic basis, while business enterprises, employing the same methods of production, produce the same goods repeatedly in response to the consumer demand for them. With this concept in mind, Means then identified those characteristics of the US economy which structured its economic activity.

The first characteristic that Means identified was the structure of consumer wants. Adopting a lexicographic approach, he argued that the consumer ranked his or her wants according to biological and social needs. Then assuming that the general biological and social needs, and hence the ordering of wants, were broadly the same for all consumers, Means aggregated the individual orderings and denoted the new syn-
thetic ordering as the structure of wants for the economy. Given the basis of its construction, Means noted that the structure was unaffected over short periods of time by changes in economic forces short of a complete upheaval in the economic system and society. However, he acknowledged that the structure did change over long periods of time and that changes in specific wants within a particular broad category of wants could occur within short periods of time. Consequently, over any specific time period, consumers would allocate their income in a manner that would satisfy their primary wants first and secondary wants last, thus generating repeating buying patterns for broad – and, perhaps, specific – categories of consumer goods.

The second characteristic that Means identified was the structure of resources and production. With respect to resources, Means identified six categories – three (natural resources, productive plant, and labor power) which were consumed in the process of satisfying wants, and three (physical environment, technology, and social institutions) which conditioned production without being consumed in the process. As for production, Means delineated its geographical structure, which consisted of showing the location of specific types of economic activity in relation to resources and consumers, its structure of the physical flow of produced goods, and its structure of money flows. Means argued that the physical flow of produced goods consisted of one-way and circular flows, with the one-way flows being specific to consumption goods, while the circular flows were found in agricultural and manufacturing industries. Consequently, as long as the consumed but not reproducible resources remained in abundance, the structure of production automatically ensured that the material inputs and capital goods needed for the production of consumer goods were continuously reproduced (Means, 1938a, 1939a).

Overlaying but integral to the structure of the physical flow of produced goods of a corporate economy, Means argued, was a continuous flow of money and series of money transactions. This included a circular flow between producers and consumers in the form of producers dispersing money for labor services and its return to them through the purchase of their goods by the consumers. It also included a circular money flow between producers reflecting inter-industry transactions, and a quasi-circular flow between producers and consumers with respect to savings and the return on savings. The importance of the various money flows was that they created a single integrated monetary economy, i.e. an economy in which both production and consumption were continuous and repetitive and that monetary market transactions were always taking place, that could not be decomposed into a “real” and “monetary”
sector. In particular, in a monetary economy the series of money transactions allowed a wide variety of monetary prices to act as mechanisms for the coordination of market activity between producers and consumers. Consequently, Means noted, factors which affected money flows, such as changes in the total supply of money, changes in the money balances held by particular economic groups, shifts in the relative flow of funds into current consumption and capital formation, and changes in price relationships, would have a pronounced effect on both the volume and direction of the physical flow of produced goods.

Since both production and consumption were continuous and repetitive in a functioning monetary economy, Means noted that market transactions were always taking place, and taking place in historical time. Business enterprises were consequently continually producing goods for demand which they know, in general, would exist, and buyers were always entering the market to buy goods which they know were being produced for them to buy. Thus each specific market in the economy was clogged with sequential transactions in historical time and each business enterprise which entered it was also engaged in sequential production and transactions in historical time. To facilitate the continual rush of economic activity within the business enterprise, Means argued, canalizing rules and goals became established. In the case of the corporate enterprise, many of the formal rules which would affect the internal coordination and direction of its economic activity were established in its articles of incorporation, especially with respect to the powers possessed by the board of directors and senior officers regarding the distribution of profits and the lines of activity the corporation was allowed to pursue. In addition, informal rules or customs, such as the use of double-entry bookkeeping or the place of work on the shop-floor, helped facilitate and coordinate production and commercial activities of the business enterprise. As for goals, Means noted that the acceptance of profit-making as the primary goal of the enterprise acted as an “invisible guiding hand” directing members of the enterprise to a common coordi-

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1 For Means, the coordination and organization of economic activity through canalizing rules occurred when the actions of individuals were limited to those which support it without being subject to administrative control. In this context, legal rules and regulations, accepted procedures, and customs constitute canalizing influences which narrow down the scope of individual action without determining it. As for the organizing and coordinating economic activity through the acceptance of common goals, Means argued that a number of people, having accepted a common goal, may be able to act independently and without communication, yet their activities may be to a greater or less extent coordinated by the logic of their accepted goal. (Means, 1939a, p. 98)
nated ending without the intervention of specific instructions (Means, 1939a; Commons, 1924).

Similarly for Means, rules and goals also facilitated the coordination of market transactions between business enterprises and buyers in the market. Informal rules, such as the widely accepted “one-price” rule or the custom of accepting money in exchange for goods, or formal rules, such as the prohibition of deceitful selling practices, helped facilitate the coordination and flow of market transactions. However, of the mechanisms for the coordination of market activity which he identified, Means placed most of his emphasis on the market mechanism and administrative coordination. He referred to the market mechanism as the organization and coordination of the economic activities of many separate producers and consumers through price and buying and selling. “Administrative coordination” referred to situations where a common authority, such as an owner or manager of a business enterprise or government bureau, organized economic resources under its control and coordinated the resulting economic activity. For Means, the clearest example of administrative coordination was found in the internal operations of the large modern corporation.

Although he discussed the four organizing and coordinating mechanisms separately, Means realized that they operated in combination in a functioning economy. In particular, he realized that even large administrative units used the market in coordinating their activities, especially with respect to the prices and wage rates they set for goods they sell and labor they hire. Means noted that in a functioning monetary economy, market coordination of economic activity took place through a continuous series of money transactions:

[the] circuit [of money] flows are made up of a series of money transactions which facilitate the organized use of resources. Through these money transactions, manpower and capital funds are made available to producers; raw materials, semifinished products, and capital goods are transferred from one producer to another, and finished products or services are made available to consumers. These money transactions also provide a system of prices which are stated in terms of a common money medium and which act as a guide to the use of resources, stimulating some uses and repressing others. (Means, 1939a, p. 108)

By providing the context in which the system of prices operated, the flow of money transactions permitted the organization and coordination of economic activity via prices regardless of whether the prices were flexible and determined within the market or inflexible and administered to it. Thus the flow of money transactions permitted administrative units to use prices to coordinate and organize economic activities between themselves and with small business enterprises who did not have the
market power to determine their own prices. However, Means noted, the
"adequacy" with which the flow of money transactions was coordinated
in the market depended on the extent to which flexible market prices
dominated market transactions.

In considering this question, Means noted that the specific organiza-
tion and coordination of economic activity in a market economy
depended upon the relative dominance of each of the four mechanisms
and of the specific canalizing rules and common goals in existence. Not
being interested in analyzing traditional, feudal, or centralized econo-
 mies, he directed his attention to dealing with a market economy and the
particular rules and goals associated with it. However, he realized that
even a market economy could have many forms – depending, for
example, on whether the market mechanism was dominant or not, and
on the specific goals and canalized rules in existence. Using the degree of
aggregate and market concentration of economic activity as a basis,
Means identified three basic types of market economies – atomistic
economy, factory system, and corporate economy. He defined an a to-
mistic economy as one with virtually no aggregate or market concen-
tration. In such an economy, the form of production was owner–worker
enterprises producing a single good to sell on the market to equally small
buyers, and the mode of transaction was haggling and bargaining
through which an agreed-upon price and quantity was determined. He
equated the atomistic economy with the competitive economy described
by Marshall and subsequent neoclassical economists, but thought its
historical existence in the United States was limited to the period prior to
1840. The factory system emerged in the United States around 1840 as a
result of a significant increase in the degree of aggregate and market
concentration, with the latter increasing more than the former, as a result
of the increased scale of production of the individual enterprise.
Consequently, large numbers of workers became employed in the enterprise
and thus subject to managerial administration as to the hours and the
manner they worked. Aside from administering economic activities
within the enterprise, the owner could also administer wage rates and the
price at which he sold his goods. In fact as the size of the business
enterprise grew, the owners realized that administrative price-setting
reduced the cost of making transactions. So as the size of the business
enterprise grew, so did the pervasiveness of administered prices and
wages. As a result, the mode of transaction changed from haggling and
bargaining to the “one-price–no bargaining” approach.

Finally, Means defined a corporate economy, which he felt began to
emerge in the United States in the 1890s, as one in which both the degree
of aggregate and market concentration had increased, with the former
increasing to a much greater extent. The corporate form of enterprise consequently controlled a significant portion of the economy's economic activity. As in the factory system, the corporation administered its internal economic activities, and the prices at which it sold its goods. Moreover, the mode of transaction of "one-price-no bargaining" was maintained and extended. On the other hand, unlike in the factory system, the owners of the corporation did not necessarily control or manage it, thus undermining the role of profit in the organizing and coordinating of economic activity. In addition, while the corporation could administer its wage rates, it also might have to bargain with unions over them. Finally, in the corporate economy, the interest rate and the price of new security issues were also administratively determined (Means, 1933, 1939a, 1962).

In delineating these three types of economies, Means realized that the American economy of the twentieth century did not match any one precisely. Rather, it was a hybrid in which some markets were unconcentrated and thus behaved as if in an atomistic economy, while others were relatively concentrated and behaved as if in a factory system or corporate economy. However, he felt that as an analytical device, the US economy could be divided into two sectors – the administered sector in which internal and market coordination was the dominant mechanism coordinating economic activity, and the market sector in which the market mechanism was the dominant coordinating mechanism. Thus, before examining the role prices play in the coordination of economic activity

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2 In categorizing the two sectors according to market concentration, Means defined an unconcentrated market as, using Marshall's well known phrase, one of "trees in the forest." The market for cotton was unconcentrated in Means' view because, of the 4,850,000 farms producing cotton in 1935, the four largest produced 0.14 percent of the output. In contrast, in 1935 there existed less than 170,000 separate manufacturing enterprises and in the least concentrated manufacturing industry (women's, misses' and children's apparel n.e.c.) there existed about 10,000 manufacturing establishments with the four largest enterprises producing 1.4 percent of the total output (or ten times the amount of the four largest cotton farms). Thus for Means all manufacturing markets were relatively concentrated and therefore belonged in the administered sector since it was not possible to have a forest of competing enterprises in each market as in the case of the cotton market. More generally, Means felt that retail distribution and consumer services' markets and various natural resources and securities' markets were relatively concentrated and belonged in the administered sector, while agricultural markets, construction markets, and some natural resources and security markets were relatively unconcentrated and belonged in the market sector. It is also of interest to note that because of the scale of production of an efficient manufacturing establishment was large in comparison to the market, Means felt that it was not possible in general to "atomize" a manufacturing market, even if each establishment was made a manufacturing enterprise (Means, 1933a, 1939a, 1962, 1964n).
within and between the two sectors, it is first necessary to delineate the price-setting behavior of the archetypical business enterprise in each sector.

Pricing and the business enterprise

For Means, the structure of production and costs of the business enterprise, and the pricing procedures it adopted, were determined by its time horizon and business strategy which, in turn, were determined by its scale of production and the degree to which enterprise could assert its presence in the market. These latter two factors were ultimately determined by the interaction of technology and the managerial and organizational structure of the enterprise. Thus, for example, if the interaction of technology and organization created a small-sized enterprise with virtually no market power, then, as Means argued, the enterprise would adopt a very restricted time horizon and devise an appropriate business strategy in light of it which would manifest itself in the structure of production and costs and pricing procedures adopted by the enterprise. Inherent in this argument was that varying degrees of enterprise size were correlated with relative degrees of market concentration, implying that pricing, prices, and the enterprise itself differed between the market and administered sectors. Therefore to adequately delineate the role of prices in the coordination of economic activity, it is necessary to do so in the context of (1) the atomistic enterprise found in the market sector and (2) the corporate enterprise found in the administered sector.

Atomistic enterprise

The atomistic enterprise, which Means considered to be the archetype neoclassical competitive enterprise, was an owner–worker enterprise, i.e. an enterprise in which ownership, control, and management resided in the same individual or a group of individuals. Consequently, the owners assumed both the risks and the responsibilities of the enterprise and, thus, received not only the wages of “management” and interest on capital, but also the pure profits. Since it was the glitter of profits which induced the owners to undertake these responsibilities, they devised business strategies designed to maximize their profits. Moreover, the owners–controllers also made the decisions of how much to save and when to acquire new capital equipment. Thus both the owner’s wealth and the size of their enterprise were determined by their own actions and limited, in part, by their preexisting wealth. Finally, because the owners were also the workers, there was virtually no administration of work in
the workplace by a central management and the enterprise's scale of production was ultimately limited by the amount of work the owners were willing or could do. With respect to the technological foundation of the atomistic enterprise, Means argued that the technology employed by the enterprise did not require the use of much fixed capital or material inputs produced elsewhere. Rather, the production processes based on the technology were labor-intensive, did not have a significant division of labor, were not vertically integrated to any extent, generally utilized a single type of material input, and produced a single good (or line of goods). Correspondingly, the costs of the enterprise were determinable and divided into pay-out costs (that included wages of management and some material input costs), and capital costs (that included both depreciation and the competitive rate of profit). Inherent in such technology and production processes was that the enterprise's scale of production was extremely small and limited to the declining physical and mental exertion of the owners which, in turn, produced a gently upward-sloping marginal cost curve. The interaction between technology and the organizational and managerial structure of the atomistic enterprise conspired to severely limit its scale of production.

Because of its small scale of production, the owners of the atomistic enterprise faced a very large market in which its contributions to market output are extremely small. Consequently, their enterprise was just one in a forest of enterprises competing in the market while another forest of enterprises was waiting in the wings for the first sign of high profits. As a result, they did not possess any market power to determine their fate, such as determining the price for their goods based on their specific market situation. In devising their business strategy, the owners of the enterprise were therefore forced to limit their time horizon in regard to making profits to the immediate transaction under consideration. In particular, the owners had to approach each market transaction as an isolated event in which their objectives were to get the best price for their goods and leave the market empty handed. Then using the market price of the previous transaction as a proxy for the next transaction, they would produce the amount of goods that would maximize their profits (or at least produce an acceptable level of income) for the upcoming transaction, which meant producing the amount that equated the enterprise's upward-sloping marginal cost curve to the expected market price. As a result, production took place in discrete batches which were taken to the market to be sold. Finally, in selling their goods on the market, the owners essentially engaged in an act of trading or haggling and bargaining over the price with prospective buyers in an effort to reach the best price possible that it would also clear the market of their goods.
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The importance for Means of the trading/haggling and bargaining pricing process for reaching a transaction price was that the price was determined in the pricing process itself. Hence it reflected the particular and largely episodic economic forces operating in the market at that time rather than the needs of the atomistic enterprise. Moreover, because of this, the transaction price for a series of transactions was extremely sensitive to variations in these economic forces, especially those from the side of demand, since the amount of goods supplied to the market was largely fixed for any particular transaction. Transaction prices would consequently vary with nearly every transaction, increasing or decreasing in response to increases and decreases in demand. However, as long as the transaction prices remained above the enterprise’s average pay-out or variable costs, the owners could and would continue to engage in subsequent acts of production and exchange, at least for a limited period of time; but if the transaction prices persistently failed to cover the enterprise’s capital costs, they would leave the market. Thus while the pricing procedures of the atomistic enterprise produced profit-maximizing and market clearing prices, they also produced extremely flexible prices which did not reflect the owners’ desire to maintain their enterprise over time (Means, 1933, 1939a, 1962).

Corporate enterprise

Within the administered sector, the business enterprise, Means argued, had two logical forms – that of a small single establishment, non-corporate enterprise and that of a large single or multi-establishment corporate enterprise. While both engaged in administering prices and other aspects of administrative competition, the non-corporate enterprise primarily existed in those markets especially characterized by easy entry, competitive rate of profit, competitive waste, and focused on profits in the current pricing period. However, Means viewed such an administrative enterprise and its market situation as a logical construct more than as an operational piece of economic reality, and as economically insignificant in a sector which was dominated by large corporate enterprises. Thus, when developing his doctrine of administered prices, he virtually ignored the non-corporate enterprise (Means, 1962).3

3 Means’ analysis of the non-corporate enterprise was undertaken as a response to the Chamberlin–Robinson theories of monopolistic or imperfect competition. That is, stung by comments from economists that “you failed to utilize Chamberlin’s [sic] description and analysis of what he calls monopolistic competition” (Frank, 1938b; also see Means, 1938c), Means attempted to fashion an explanation of administered prices based on traditional monopoly analysis but without utilizing the marginalist apparatus associated
In the administered sector, Means argued, the corporate enterprise took the form of a single plant— or, more commonly, a multi-plant operation. In the former case, ownership and control were generally vested in the same person, while management of the plant’s operations was carried out by a supervisory staff. The management structure was centralized, and the supervision of the workers in the workplace, while immediately in the hands of the staff, was closely watched by the owner himself. However, the most prevalent form of the corporate enterprise, he argued, was the multi-plant industrial corporation, in which ownership and control were separated, while control and management were closely linked. As a consequence, the controllers and high-level management, as opposed to the owners, were the center of policy formation and directed the coordination of economic activity. As a result, they controlled the destiny of the corporate enterprise. Moreover, because management could continuously reorganize itself so as to make itself efficient at any scale of production, Means argued, the size (or number of operating plants) of the corporation had no limit (Bonbright and Means, 1932). Consequently, management, in its drive to have the corporation grow larger, could internalize many former market activities while taking on new ones by employing a bureaucracy to coordinate them (Means, 1939a).

Because of the large size of the corporate enterprise, Means argued that there existed barriers to entry to the markets in which it operated. Consequently, management did not have to be primarily concerned with making the maximum amount of profits on each transaction or for the current pricing period (which covered a number of sequential transactions). Moreover, because the managers had no legal claim over corporate profits, they had no reason to try to maximize the corpor-

with the Chamberlin–Robinson theories (see Means, 1944n, 1947, 1948m, 1953bn, 1953cm, 1957). However, this project which took place over a ten-year period from 1943 to 1953, was undertaken against Means’s better judgment since his own experience as a monopolistic competitor had led him to reject the relevance of Chamberlin’s theory as early as 1934 (Means, 1983) and, moreover, since he completely rejected marginalism:

My own hunch is that the current marginalist theory of business behavior as applied to conditions of imperfect competition will ultimately be put in a museum along with the dodo and the theory of consumer surplus. (Means, 1953am; see also Means, 1946m, 1980m, and Amihud, 1980m)

Consequently, when Abraham Kaplan’s and Robert Lanzillotti’s work on target rate of return pricing appeared (see pp. 78–9), Means re-fashioned his explanation of administered prices, while consigning his monopoly analysis to the non-corporate enterprise that inhabited markets where entry was easy. But such enterprises and markets, he noted, were unimportant in a corporate economy (Means, 1959a, 1962; Lanzillotti, 1960m).
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ation's profits in the "long period." Rather, as a result, they had the freedom to adopt a policy of obtaining profits over time which would not induce entry or otherwise inhibit the growth of corporate profits or the corporation itself. Given this latitude, management could and did in fact engage in a multitude of competitive activities aimed at maintaining the corporate enterprise as a going concern while meeting dividend and other obligations.  

To carry out their growth strategy for the corporation, management adopted, Means argued, an administered price policy. That is, within the current pricing period, management set its price and administered it to the market for a series of transactions. Thus rather than having the price determined in the process of the transaction itself, as it was for the atomistic enterprise, management determined its price prior to the transaction itself. As a result, it had the freedom to alter its administered price frequently in response to changes in sales or inventories or maintain it for a long period of time covering many sequential transactions. At the same time, corporate management also adopted a production policy, which Means called the "flow principle of production," that let the level of market activity regulate the rate of production at the given administered price (Means, 1962).  

By uniting administered prices with the flow principle of production, corporate management was explicitly stating that the variations in the cost of producing a unit of output brought about by changes in demand did not affect the administered price at which the output was sold during the pricing period. That is, when producing its output, Means noted that

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4 In the 1940s, Means had begun dismissing the notion that management tried to maximize current profits (see Means, 1974, 1949m). He subsequently reached the more revolutionary position that corporate management seeks neither short- or long-period maximum profits nor frames its business strategies in terms of long or short periods as theoretically defined in neoclassical economics or classical political economy.

5 Means defined the "pricing period" as a period of calendar time which covered a series of sequential transactions. Depending on the aims of management and the nature of the market in which the corporate enterprise competed, the pricing period could be as short as a week or as long as three months or a year. The number of transactions within the pricing period could vary greatly as well. Defined in this manner, the pricing period is neither the same as the short period found in neoclassical economics or congruent with the analytical units of time utilized by economists in general. Although the pricing period is a necessary element in Means' definition of administered prices, his first reference to the concept comes in 1947 (see Means, 1947am) and he does not fully integrate it into his definition until 1962.

6 The flow principle of production is also a necessary feature of Means' definition of administered prices, but which was not articulated until after S. Dubrul (1957m) sent him a copy of Wilford Etteman's monograph, Price Determination: Business Practice versus Economic Theory, in late August 1957 (see pp. 124-9).
the corporate enterprise incurred both pay-out or variable costs (which consisted of such items as raw materials and operating labor costs), and fixed costs (which consisted of supervisory labor, depreciation, interest, and property taxes). Moreover, he noted that average variable costs were constant while average fixed costs were declining with respect to increases in the flow rate of output, with the consequence that average total costs declined with an increase in the flow rate of output. Thus, for management to set a cost-based price which did not reflect the cost changes resulting from every variation in the flow rate of output, Means argued that they had to utilize the standard flow rate of output approach to eliminate the problem of cost variability. In utilizing the standard flow rate of output, management was able to calculate its standard average total cost (SATC) – a cost that, by virtue of the manner in which it was determined, was independent of the actual costs of producing any specific unit of output. Thus, Means argued, any price based on SATC would not reflect the costs of producing a specific unit of output (Means, 1962).

The uniting of administered prices and the flow principle of production also implied that the actual events surrounding any specific transaction or the variation in conditions prevailing during the current pricing period did not affect the mark up for profit. To do this, Means stated that management selected a target rate of return on equity capital invested in producing the output to determine a total amount of profit needed to be raised during the current pricing period for growth purposes. In deciding upon the specific rate of return, Means argued that management took into account the degree of market competition and the prices of competitors, and thus arrived at a rate of return that would not undermine the corporation's position in the market. Hence the rate of return decided upon by management was designed to maintain a healthy financial condition for the corporate enterprise and to generate enough funds to permit a continued expanded capacity so as to maintain its desired growth rate. In this manner, Means argued, management would maximize the corporation's value as a going concern. With the rate of return (and, hence, the total expected profits) for the current pricing period determined, management would then calculate the mark up for profit which, when attached to SATC, would yield the administered price. Because the target rate of return was expected and based on the

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7 Means had begun articulating this position by the mid-1940s. Means also recognized that a single rate of return would not be generally applied to all products (Means, 1947, 1949m, 1962).

8 In a short note, Means (1938b) once argued that corporate enterprise capital expenditure was a function of the current and the preceding years' level of production. Thus, since the corporation desires to generate its investment funds internally, it is possible to argue that
long-term prospects of the corporation's growth, Means noted that it was not readily altered over time and certainly not altered during the current pricing period. By setting the administered price in this manner — i.e. before production and the current pricing period starts and based on SATC and a long-term growth-determined target rate of return — it was, Means concluded, inflexible with respect to sequences of market transactions and variations in the flow rate of output over the current pricing period.9

Means viewed competition among corporate enterprises as consisting of a series of strategic moves and counter-moves. Thus the intensity of competition could be measured by the frequency and number of moves made over a specific time period. In this context, he argued that the potential for severe competition existed among corporate enterprises because of the continuous and sequential nature of market activity combined with the desire by corporations to increase their share of market transactions and volume of market sales. Since simple price competition to obtain such an objective would not work because all competitive price declines would quickly be met and thus would threaten the corporation's financial health, corporate managers would be driven to adopt competitive tactics that would not be easily matched by strategic counter-moves or would directly threaten the corporation's financial integrity. Means therefore argued that sales promotion designed to create, maintain, or alter goodwill among the buyers but which did not disturb prices in the market fitted the bill quite nicely. Thus competition among corporate enterprises emerged as an extension of their internal administrative activities as embodied in the administered prices in the market and the administered sales campaigns designed to alter customer goodwill, and hence market share and growth rate. Since the competitive pressure of the sales campaign was felt with each passing transaction in the market, Means concluded that constant and severe competitive pressures confronted all corporate enterprises (Means, 1962; Clifton, 1977, 1987).

the target rate of return (and, hence, the mark up for profit) is largely a function of the desire for investment funds. However, when faced with the argument Means demurred, arguing that while the need for investment funds could play a role in pricing, it was only one of several factors (Means, 1978b; Eichner, 1978c).

9 In those industries where material inputs make up a large part of the value of the product and whose prices frequently change, resulting in frequently changing output prices, Means noted that the administered mark up for profits remained relatively stable for many sequential transactions. Thus, in such industries, corporate managers frequently revise their administered prices to match any changes in cost while infrequently revising their administered margin for profits they add to their costs (Means, 1939a, 1939b).
Administered prices and production, employment, and inflation

Adopting John Commons' terminology, Means denoted a continuous and functioning monetary economy in which the continuous flow of economic activity was coordinated by market and administered prices, administrative coordination, rules, and goals, and all market transactions had a social basis as a going concern. However, because the mechanisms that coordinate and organize economic activity within the market and administered sectors differ in degree and emphasis, Means realized that a good overall coordination of activity between the two sectors could not be assumed. In particular, the clash of market and administered prices, of maximizing profits on each transaction and the desire for long-term unmaximized profits, and of market and non-market controls would affect the overall coordination of economic activity and with it the full use of the economy's resources. To explore the impact of the clash of market and administered prices on the operation of the economy, Means utilized the twin concepts of balanced economy and balanced price structure. He defined the former as a going concern in which the utilization rate of productive plant and natural resources and rate of employment remained stable over time; while the latter was defined as a specific set of market and administered prices associated with a given balanced economy, and hence with a given rate of employment and of plant and resource utilization. Thus in a balanced economy with a balanced price structure, there would be no variations in the economy's growth rate or large continuous variations in production and employment in specific industries. However, if the price structure became unbalanced due to a change in the level of aggregate demand, or to administrative action then, as Means argued, the resulting clash of market and administered prices would directly affect the utilization of all economic resources, including labor, productive plant, and natural resources.

Administered prices and business fluctuations

Means noted that in the market sector, market prices behaved procyclically over the fluctuation of business activity, while production remained relatively unchanged. Specifically, he argued that during the decline in business activity, market prices declined significantly (as measured by percentage change in magnitude) and relative to declines in production, while during the upswing of business activity, they advanced significantly and relative to production. Such behavior, he felt, could be explained by reference to the economic behavior of the owners of the
atomistic enterprise. As noted above, the owners limited their profit-making activities to the immediate transaction at hand. Thus, using the market price of the previous transaction as a proxy, the owners would produce the amount of output that would maximize their profits at the proxy price. But, when they actually entered the market, they had to obtain the best price possible that was consistent with selling all their output. Hence, over a series of transactions, given the fortuitous nature of demand, the owners would face a sequence of changing market prices and, as a consequence, would constantly be altering the amount produced.

Now in the context of a decline in business activity, Means argued that the owners would discover that the market price in each successive transaction was lower than the preceding market (proxy) price. Because the marginal cost curve of the atomistic enterprise increased slowly, the incremental decline in the market price with each successive transaction would be matched with a much greater incremental decline in production. However, as the downturn lengthened and the market price declined, the owners would reluctantly accept a reduction in their standard of living, and hence in their wages of management, thus shifting the enterprise's marginal cost curve downward and therefore limiting the extent to which production had to be reduced. The net result of all this, Means concluded, was that over the length of the downturn, the owners of the atomistic enterprise would reduce their production relatively little in comparison to the reduction of the market price. Conversely, and for the same reasons, the owners would increase their production relatively slightly in comparison to the increase in the market price during the upswing of business activity. Thus in aggregate, the market price of a good would vary frequently and incrementally but significantly and pro-cyclically over the cycle of business fluctuations, while its market production would vary frequently and pro-cyclically but relatively little.

With regard to the behavior of prices and production in the administered sector, Means argued that administered prices were relatively insensitive to changes in aggregate demand over the cycle of business fluctuations, while production was sensitive and reacted in a pro-cyclical manner. Specifically, he argued that during the decline of business activity, administered prices either declined relatively little in comparison to declines in production, declined not at all, or behaved perversely and increased, while during the upswing, they increased relatively little, increased not at all, or behaved perversely and declined. Such behavior, he felt, could also be explained by reference to the economic behavior of the corporate enterprise. The managers of the corporate enterprise administered the price for the length of the pricing period, even though
many transactions occurred and the volume of sales associated with each transaction varied greatly. Since both the downturn and the upturn of business activity covered a number of pricing periods, they had the option of altering their prices at discrete points over the cycle of business activity in the light of existing and future economic conditions, as noted above. Assuming that management decided to maintain its current target rate of return and standard flow rate of output over the fluctuation of business activity, for example, the administered prices of the corporate enterprise would alter from one pricing period to the next depending on the change in input costs. Thus, if non-labor input costs declined during the downswing, the corporation would reduce its price accordingly. If management administratively reduced wage rates, it would also reduce its prices at the same time. Finally, if a new union wage contract resulted in higher standard labor costs per unit of output, then the corporate enterprise would increase its prices accordingly, in spite of the decline in production – i.e. perverse pricing would occur. With particular regard to perverse pricing, Means argued that it would be more likely to occur if management, adopting a short-term pricing policy, altered the standard flow rate of output from one pricing period to the next in order to reduce the difference between the actual and the predetermined target rate of return for each pricing period as opposed to over the whole cycle of business activity. In contrast to their administered price policy which kept the magnitude of price change small, both absolutely and relative to changes in production, management’s production policy permitted the flow rate of output to vary directly and sharply with every variation in aggregate demand (Means, 1933, 1934cm, 1935a, 1939a, 1947a, 1952am).

If the market sector dominated the economy, then variations in aggregate demand over the cycle of business activity would work themselves out primarily through price adjustments and secondarily through output adjustments, hence through variations in the level of employment. On the other hand, if the administered sector dominated the economy, the coordination of economic activity would not be worked out through price adjustments so as to ensure full employment. Rather, it would be largely in the hands of the managers of the corporate enterprises whose business policy consisted of administering their prices

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10 Means, following John M. Blair, referred to this pricing policy as "full cost pricing," however, both were mistaken in this regard (see chapter 4). Means also attributed perverse pricing to other causes, such as the risk of entry, expectations of inflation, or the costs of maintaining idle capacity. Although he always recognized the existence of perverse prices since they always appeared in the price data he worked with, it was Blair's work that made Means realize their theoretical and practical importance (see p. 67) (Means, 1939a, 1939b, 1983, 1988a).
to the market while letting production, and hence employment, adjust accordingly. Thus, as noted above, while administered prices do assist in organizing economic activity, they cannot coordinate it to maintain full employment in the face of variations in aggregate demand. However, in the modern corporate economy both the market and administered sectors exist and are interdependent, thus preventing the coordination of economic activity solely through price adjustments. If a balanced (although not necessarily a fully employed) economy with a balanced structure of market and administered prices suffered a decline in aggregate demand, the immediate result would be an unbalancing of both the economy and the price structure. On the one hand, prices in the market sector would decline or deflate, thus maintaining production and employment, while production and employment in the administered sector would decline in the face of relatively stable administered prices. Because of this asymmetrical response, the level of economic activity would decline further due to the decline in demand caused by the existence of unemployed workers combined with relatively stable administered prices, resulting in a still further deflation in market prices and hence unbalancing of the price structure, and decline in production in the administered sector. An increase in aggregate demand at this point would, conversely, reflate market prices, thus bringing the price structure back into balance, and increase production in the administered sector. Thus with the existence of administered prices, the coordination of economic activity so as to maintain a fully employed, balanced economy with a balanced price structure was completely undermined. Instead of business fluctuations being solely the “dance-of-prices,” administered prices made it both a price and a production and employment phenomenon (Means, 1935a, 1939b, 1939–40, 1947, 1964, 1972m, 1978am).

Administered prices and inflation

Means identified three types of inflation involving administered prices—monetary inflation with administered prices, reflation, and administrative inflation. The first type, he argued, was similar to the classical inflation analyzed by neoclassical economists. That is, in a fully employed, balanced economy with its associated balanced structure of market and administered prices, an increase in aggregate demand brought about through increasing the money supply would result in a rise in prices comparable to the end result of a classical monetary inflation. However, instead of all prices increasing simultaneously and proportionately, Means argued that the immediate result of an increase in aggregate demand was an unbalanced rise in prices in which market prices
increased relative to administered prices. The unbalanced rise in prices would continue until the average of market and administered prices was high enough to raise the demand for money to the level of the increased supply. At this point a readjustment between market and administered prices would take place, with the former declining and the latter increasing until the price structure was in balance again. On the other hand, reflation, as noted previously, pertains to the rise of market prices during the upswing of business activity, in spite of the existence of idle labor and other economic resources, so as to restore the initial balance of the structure of market and administered prices (Means, 1962, 1974, 1975a).

In testimony before the Senate Subcommittee on Antitrust and Monopoly, Means argued that most of the rise in the general level of prices of the past two years (1955–7) was due to the rise in prices in the administered sector of the economy. Since he attributed the unplanned increase in these prices to the power of the corporate managers to administer their prices to the market and not to any expansionary forces in the market, Means denoted this decidedly non-traditional "spontaneous" inflation as administrative inflation:

the area of discretion implicit in administered prices could lead to creeping inflation without an initial impetus from fiscal and monetary expansion while fiscal and monetary expansion might serve to maintain employment only at successively higher price levels. I suggest that we could properly call this type of inflation administrative inflation, in contrast to the traditional monetary inflation which arises from too much money chasing too few goods. (Means, 1957, p. 84)

Thus, for Means, administrative inflation occurred when price increases in the administered sector took place even though no change in demand occurred or was expected, and hence dominated the general rise in the price level since the prices in the market sector remained relatively stable because of the absence of demand pressures. Because he attributed administrative inflation to corporate pricing power, Means sought to explain it primarily in terms of administrative actions by corporate management.11

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11 Means differentiated his notion of administrative inflation from the hypothesis that most economists have substituted in its place – namely that the higher the degree of concentration, the greater the price rise:

The two hypotheses are not at all the same. If the second hypothesis were valid, the first would necessarily follow. But the second could be far from true when the first was true. For example, if prices rose little in the two or three most concentrated groups but went up in the next most concentrated groups and not at all in the less concentrated groups, the first thesis would be supported, the second would not. Or, stating it another way, to say, "The bulk of the rise in the wholesale price index came where there was substantial
Means recognized that if labor increased wage rates faster than productivity gains the result would be higher administered prices since the use of target rate of return pricing procedures enabled corporate management to pass along the higher costs in the form of price increases. However, he felt that the historical record showed that labor's contribution to administrative inflation was relatively small in that their quest for higher wage rates was largely a belated attempt to catch up with the increases in the cost of living brought about by management's unilateral action to raise prices. Means argued that administrative inflation was thus primarily due to corporate management increasing its mark up for profit and adopting perverse, or current period, pricing procedures. Since the management of the corporate enterprise finances much of its capital investment internally -- i.e. through the retention of profits -- any increase in the cost of investment goods or in the taxes on corporate revenue or profits would necessitate increasing the mark up for profit and an increase in the target rate of return. In addition, management might also use its pricing power to increase the mark up for profit to reduce the rate of capacity utilization at which the corporate enterprise would just break even. Both of these administrative actions would result in management increasing its prices even if demand was not increasing or expected to increase.\footnote{Means also argued that management's misuse of the target rate of return pricing procedures, such as using labor costs or capital costs per man-hour instead of per unit of output, resulted in creeping inflation because it effectively increased the mark up for profit and increased the target rate of return (Means, 1975b, 1975c, 1988a).}

As noted in the section on business fluctuations (pp. 59–60), perverse pricing occurred during the downturn of business activity when management adopted the pricing practice of revising its standard flow rate of output from one pricing period to the next. Because management was not as quick to make downward price adjustments as in making upward ones, Means concluded that perverse pricing would lead to a relatively permanent increase in administered prices and hence in the general price level over the cycle of business activity (Means, 1959b, 1962, 1971\textit{m}, 1974, 1975b, 1975c).

Because administrative inflation caused the structure of market and administered prices to become unbalanced, Means argued that it would probably push the economy into a recession or a prolonged stagnation if not counteracted by an expansion of the money supply. That is, assuming a balanced economy with its associated balanced price structure, an increase in administered prices brought about by, for example, corporate management increasing their mark up for profit would unbalance the

\footnote{"Where there was substantial pricing power, prices went up most" (Means, 1963\textit{m}).}
price structure and increase the general price level. As a result, Means argued, the real purchasing power of the money stock held by consumers and business enterprises would decline, hence reducing the real level of aggregate demand below the level required for the economy to remain in balance. Consequently, if the money supply was not increased so as to restore the real purchasing power of the money stock held and to raise market prices and restore the price balance, a decline in economic activity and employment would result, although somewhat mediated by the subsequent fall in market prices (Means, 1962, 1975c).13

The doctrine of administered prices and the visible hand of coordination

In conceiving of the corporate economy as a continuous monetary flow of economic activity that was coordinated by market and administered prices, by administrative coordination, and by rules and goals, Means sought to dispel the notion that the American economy operated as a cybernetic mechanism which automatically tended to eliminate underutilization of all economic resources, including labor, productive plant, and natural resources. Given the existence of administered prices combined with the investment behavior of business enterprises and the distribution of consumer income and savings, he argued that "a serious deficiency of buying is unlikely to be corrected by any of the economic forces inherent in the modern [corporate] economy in such a way as to bring about and maintain reasonably full use of resources" (Means, 1939m, p. 23). He also felt that if unused resources did exist, it was not due to the lack of consumer wants to be filled. Thus he concluded that the under-utilization of economic resources was a problem of social organization which could be corrected only through social or government making of industrial policy (Means, 1939a, 1939b).

In a going concern corporate economy without the benefit of govern-

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13 As a result of his work on the modern corporation, Means began questioning whether the striving for industrial profits could any longer be treated as a satisfactory incentive to action in the conduct of industry (Means, 1933). Thus it was not surprising to him that management's administrative adjustment of the mark up for profit or the target rate of return resulted in administrative inflation and upset the balance of the economy. In fact, in a pre-administrative inflation 1947 study of inflation, Means all but stated that management's administrative adjustment of the mark up for profit would have serious inflationary consequences:

if serious increases in sensitive prices begin to occur before or as soon as full employment is reached either as a result of arbitrary price action by management or as a result of arbitrary wage increases forced by labor, the inflationary problem is a serious one. (Means, 1947, p. 6, emphasis added)
Gardiner Means' doctrine of administered prices

ment involvement in the coordination of economic activity, Means noted, industrial policy was not made in the market but rather was primarily the result of the interaction of corporate enterprises' administered activities in the market with institutions outside the market who could directly or indirectly affect those activities. One such institution was the corporate community. That is, through interlocking directorates, inter-corporate minority stockholders, the activities of the larger financial corporations in the use which they make of their investment funds at their disposal, and the interrelationships resulting from the servicing of the large corporations, there existed, he argued, a corporate community in which corporate managers resided. Moreover, within the corporate community there also existed corporate interest groupings which consisted of a core corporate institution(s) and a number of satellite corporate enterprises. As a result of these community relationships, Means felt that "the controls exercised by this corporate community among the larger corporations are of major importance" (Means, 1939a, p. 163). He also felt that the influence of these controls extended beyond to the corporate community and affected the whole corporate economy, including the economic activities in the market sector. Means also noted that private economic interest groups, such as business associations, labor unions, farmer organizations, and consumer organizations affected the economic activities of all business enterprises, either through direct contact with the enterprises or through influencing government policy, public thinking, and legislation; while Federal, State and local government units affected the coordination and organization of economic activity by sanctioning (or not) particular rules and goals that governed market behavior and by direct participation in the development of industrial policies in regulated industries.

In this context, Means argued that the government could devise an industrial policy which relied solely on the market mechanism to create the full use of resources or one which relied on modifying the existing system of administrative policies and activities of the corporate enterprise in a way that, when combined with the market mechanism, their ensuing interaction would result in full employment. The first policy would require major structural changes, such as the breaking up of corporate enterprises and the consequent elimination of the corporate community, the elimination of any large-size private interest groups and governmental units, and the reintroduction of perfectly flexible prices, which he felt were politically unfeasible, economically impossible, and economically inefficient. Consequently, Means advocated the second policy approach because it was in the realm of possibility and sought to make the already highly efficient corporate economy work better. He believed
that the government policy-makers could develop a variety of coherent industrial policies, depending on the techniques they used, to affect financial flows, the rate of capital formation, and the operating policies of industry, especially with regard to the flow of production and the administering of prices. For example, he argued that if the government was to devise an industrial policy in which the key decisions regarding the operating policies of industry were cooperatively determined, as was the case with the codes of fair competition under the NRA, then it was necessary to establish a mechanism or technique that would distribute economic power among the various economic interest groups in a manner which would ensure that the policies were made correctly. Or the government, through the use of experts, could develop a series of national economic plans whose implementation would be left in the hands of elected officials. Similarly, when considering the problem of administrative inflation, he argued that the government should take an active role in affecting the administered price policies of corporate enterprises, such as by establishing price guidelines and a price advisory board, creating an index of administrative inflation, and urging corporate enterprises to adopt a longer-term horizon when administering their prices (Means, 1935a, 1940, 1975b; Lee, 1990a).

In 1932, Means argued that the rise of the modern corporation required economists to forge new concepts and create a new picture of economic relationships. His doctrine of administered prices was his attempt to do just that. In articulating the picture of economic relationships embodied in the doctrine, such as the target rate of return pricing, administered prices, administrative inflation, market power, and non-market control of economic activity, Means emphasized their human and institutional nature and hence their amenability to social action. Thus, since the corporate economy did not automatically tend to full employment, the implication of the doctrine of administered prices was that non-market government involvement in guiding economic activity was both necessary and desirable if the quality of human life was to be enhanced. Since the visible hand of coordination, whether it be advisory, in the form of codes of fair competition or creating regulatory boards, is both a necessary component as well as a necessary outcome of the doctrine, Means clearly developed a novel and non-neoclassical analysis of the modern corporate economy.