

# POST KEYNESIAN PRICE THEORY



Frederic S. Lee

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This book sets out the foundation of Post Keynesian price theory by developing an empirically grounded pricing model and production schema. The administered, normal cost, and mark up price doctrines are explained in parts I–III of the book, as many of their theoretical arguments are important for developing the subsequent foundation. The work of Gardiner Means, Philip Andrews, and Michal Kalecki is discussed, as well as that of the developers of the doctrines such as Edwin Nourse, Paolo Sylos Labini, Harry Edwards, Josef Steindl, and Alfred Eichner. Drawing upon the arguments and formal modeling offered by the doctrines in conjunction with empirical evidence from 100 studies on pricing and production, an empirically grounded pricing model and production schema are developed; it is then argued that the model and the schema together constitute the foundation for Post Keynesian price theory.

FREDERIC S. LEE is a Reader in Economics at De Montfort University. He has taught and researched at numerous institutions in both the United States and England. He received the Helen Potter Award in Social Economics in 1988.



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FREDERIC S. LEE

*De Montfort University*



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# Introduction

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## Poverty of Post Keynesian price theory

If one is going to write a book on Post Keynesian price theory, it would, from the reader's viewpoint, be nice to know what "Post Keynesian economics" is. However, this is the wrong way of looking at it. Post Keynesian economics is not a set creed which can be looked up in some dictionary of economic terms; nor can it be defined as simply as anything which is anti-neoclassical economics, for coherence does count. At the present time, Post Keynesian economics is rather what Post Keynesian economists say it is. Thus, whereas it would appear that Post Keynesian economics is in a state of anarchy, it is in fact not so, because Post Keynesian economists have a common reference point – that of engaging in work which

moves the Keynesian analysis forward to encompass more realistic analyses of pricing, distribution, investment and dynamic growth paths, both long-run steady state and short-period disequilibrium, than are to be found within *The General Theory*; and the work of those post-Keynesian economists like yourself [Gardiner Means] can be distinguished from that of the pre-Keynesians who still posit 19th Century institutional arrangements and market processes. (Eichner, 1978*am*, p. 2)

Surveyors of Post Keynesian economics have consequently concentrated on the contributions of specific individuals, the "paradigms" of ideas on which they draw, and their attempts to move the Keynesian analysis forward. Hence, when they cast their net widely, Post Keynesian economists include such individuals as Piero Sraffa, Joan Robinson, Paul Davidson, Piero Garegnani, Michal Kalecki, and Nicholas Kaldor and the paradigms of ideas which they draw upon have been identified as classical political economy, Marxism, Sraffian economics, Institutionalism, and Keynesian economics. On the other hand, when they draw their net rather narrowly then we have Post Keynesian economics vs.

Sraffian economics vs. Kaleckian economics. There have also been attempts to define a Post Keynesian theoretical core in terms of Keynes, Kalecki, and classical political economy so as to give it the appearance of coherence. But such endeavors have, ironically, actually undermined the name Post Keynesian economics; for if Marx, Kalecki, Sraffa, and Keynes are thought to provide the theoretical core of the Post Keynesian research program, then Post Classical economics would seem the more appropriate nomenclature.<sup>1</sup> Moreover, and germane to this book, these attempts at establishing a coherent theoretical core would likewise fail if the price-theoretic foundations of the Post Keynesian research program were not entirely found in the works of Marx, Kalecki, Sraffa, and Keynes (Eichner and Kregel, 1975; Sawyer, 1982b, 1991; Groenewegen, 1986; Reynolds, 1987, 1989; Hamouda and Harcourt, 1988; Arestis, 1990; Dow, 1991; Arestis and Chick, 1992; Lavoie, 1992a, and 1992b; Henry, 1993; Chick, 1995).

In surveys of Post Keynesian economics, attention was paid to its price-theoretic foundations; however, the discussion was usually restricted to the Kaleckian price tradition, to the Sraffian approach to prices, or to an integration of the two (see table IA.1, p. 11).<sup>2</sup> This restricted vision of Post Keynesian price theory followed largely from the strongly held view that macroeconomics determined its own price-theoretic foundations. Consequently, Post Keynesians have devoted relatively little energy towards articulating a consistent and realistic non-neoclassical theory of prices and little research effort has been made on such price-related themes and issues as the nature of the underlying schema of production, the nature of the business enterprise, costs, pricing, the organization of markets, structure of consumption, and the nature of competitive activities, power, co-ordination of economic activity, innovation, and technical change. As a result, there exists no well grounded cohesive and consistent body of economic analysis that can be referred to as Post Keynesian price theory.<sup>3</sup>

When considering macroeconomic or microeconomic issues, Post Keynesians have utilized three distinct pricing or price-setting procedures – mark up, normal cost, and target rate of return pricing procedures – in conjunction with three distinct production models –

<sup>1</sup> This suggestion has been made rather forcefully by Eichner (1985), Lavoie (1990*u*, 1992b), and Henry (1993).

<sup>2</sup> John King's interview survey of Post Keynesian economists (1995) carried out in 1992 revealed the same partiality for Kalecki.

<sup>3</sup> One interesting consequence of this is that Post Keynesian ideology and economic policy covers a wide range of political viewpoints – see Chernomas (1982), Arestis (1990), Dow (1991), Arestis and Sawyer (1993).

the Austrian production model, the Burchardt production model, and the circular production model – in their writings. However, most of them prefer mark up pricing procedures based on constant average direct costs and Austrian or Burchardt production models (see table IA.2, pp. 12–16). Yet, the empirical evidence shows (see part IV) that production is a circular process and that all three pricing procedures are used by business enterprises in industrial market economies, while some evidence suggests that enterprise size (as measured by sales) and degree of diversification plays an important role in determining which pricing procedure is used. Moreover, the empirical evidence (see Lee, 1986) on average direct costs and average direct labor costs shows that they cannot, as a general theoretical principle, be assumed constant. Consequently, in emphasizing a single pricing procedure in conjunction with constant average direct costs and Austrian and Burchardt production models in their research, Post Keynesians have clearly violated economic reality and undermined their defining characteristic of moving the Keynesian analysis forward to encompass more realistic analyses.

Compounding this is the habit of Post Keynesians to employ a chosen pricing procedure as a stylized fact without realizing that it has a number of inherent and associated properties which often makes it inconsistent with the research being done, and to ignore the theoretical contributions of other economists. The habit persists for two reasons: (1) because Post Keynesians are largely unaware of the vast number of empirical investigations on, or related to, pricing procedures, pricing objectives, prices, and mark ups for profit; and (2) because Post Keynesians have largely rejected or ignored the contributions of economists who happen to have resided outside of Cambridge (UK), to have political beliefs not consistent with those Cambridge economists, or to have carried out their work without giving slavish praise to Keynes and Kalecki. What passes for Post Keynesian price theory is not grounded in empirical reality and, moreover, is a stunted theoretical artifact which would benefit from the ideas coming from the works of Gardiner Means and Philip Andrews (see Eichner, 1978*am*, 1978*bm*, 1978). Post Keynesian price theory has no real existence beyond the idiosyncratic writings of various Post Keynesian economists, its various renditions are theoretically incompatible to a lesser or greater degree, and it has not been entirely freed from neoclassical concepts and terminology. My objective in this book is to move Post Keynesian analysis forward towards a more comprehensive, coherent, realistic – and, indeed, believable – non-neoclassical theory of prices by setting out its non-neoclassical pricing foundation by developing an empirically grounded

pricing model in conjunction with an empirically grounded production schema.<sup>4</sup>

## Methodology

The methodology used to develop the pricing foundation of Post Keynesian price theory is derived from the grounded theory approach articulated by Barney Glaser and Anselm Strauss. The approach is a qualitative research method which inductively derives a theory or analytical story from a given set of comparable qualitative data and is therefore specific to the data. From an extensive and detailed collection of comparable qualitative data, the researcher isolates a range of specific categories or analytical concepts and their associative properties, and identifies the relationships between the concepts. With the concepts and relationships empirically grounded in detail, the researcher then develops a descriptive, narrative, and analytical story about the data's core concept(s) in which the secondary concepts and relationships are integrated.<sup>5</sup> An essential property of the story is that it explains why and how the sequence of events in the story take place. In constructing the empirically grounded theory, the researcher does not try to simplify, but endeavors to capture the complexity of the data by empirically establishing many different secondary concepts and relationships and weaving them together with the core concept(s), thereby ensuring that the theory is conceptually dense as well as having broad explanatory power. The establishment of the central analytical story brings to light secondary concepts and relationships which need further empirical grounding as well as suggesting purely analytical concepts and relationships which need empirical grounding if they are to be integrated into the theory. The researcher's immersion with the data is pre-dated with familiarity of but not dogmatically committed to the relevant theoretical literature that assists in approaching the data, establishing concepts, and developing the theory. Once the theory is developed, the researcher can then "test" it on additional data as well as hypothesize about potential situations. In this latter case, the hypothesized situation is subject to the same empirical grounding as the theory was (Glaser and Strauss, 1967; Glaser, 1978; Charmaz, 1983; Strauss, 1987; Strauss and Corbin, 1990).

<sup>4</sup> Since the development of a non-neoclassical pricing foundation is the book's objective, there will be little criticism aimed directly at neoclassical price theory.

<sup>5</sup> When constructing the story, the researcher generally finds that even the best empirically grounded concepts need better specific grounding, which requires both a finer analysis of the data and the introduction of additional comparable data.

## **Theoretical milieu of Post Keynesian price theory**

The development of a pricing foundation for Post Keynesian price theory will take place in two stages. The first involves delineating the broad theoretical milieu from which a Post Keynesian theory might be extracted, while the second draws upon a part of the milieu to develop a grounded pricing foundation on which to develop a Post Keynesian theory of prices. As noted above, over the last 25 years much has been written on various aspects of Post Keynesian price theory, and yet there has been little movement to a core set of ideas and arguments.<sup>6</sup> This is not because Post Keynesians are theoretical individualists. Rather it is because they are unaware that the ideas they are working with can be located in three different but largely compatible price doctrines whose own development over time has been away from neoclassical price theory and towards a non-neoclassical theory of prices. The theoretical milieu of Post Keynesian price theory consists of ideas, arguments, statements, and explanations which make up the three price doctrines associated with Post Keynesian economics – the administered, the normal cost, and the mark up price doctrines. The beginnings of the doctrines date from the 1930s and the economic disaster of the Great Depression. Clearly, the initiators and developers of the doctrines were influenced by ideas which pre-date the 1930s – Michal Kalecki's and Josef Steindl's familiarity with Marxism via Rosa Luxemburg and Mikhail Tugan-Baranovsky (see Sawyer, 1985 and Steindl, 1952) and Philip Andrews' connection with Alfred Marshall through David MacGregor (see Lee, 1989) being the best known examples. However, those ideas, whether formulated in 1776, 1860, or 1890, had little direct impact upon the development of the doctrines, for a variety of reasons. The capitalist economy that was the focus of attention of Adam Smith, David Ricardo, Karl Marx, John Stuart Mill, and Alfred Marshall was quite different from the corporate capitalist economy of post-1900 America and Great Britain which was the focus of attention of Gardiner Means, Andrews, Kalecki, and Steindl. Means, in particular, did not find the ideas and arguments of Smith through Marshall very helpful in developing the administered price doctrine.<sup>7</sup> A second reason is that the dominant body of theory which Means, Andrews, and others reacted against was neoclassical price theory, as articulated and developed from 1920 onwards. The post-1940

<sup>6</sup> There have been attempts by Alfred Eichner (1991) and Mark Lavoie (1992b) to establish a core set of ideas, but they have not been successful.

<sup>7</sup> Means reiterated this point many times in his writings. Moreover, there were relatively few references to pre-1930 in the books, articles, and unpublished material that were seminal in the development of the doctrines.

developments in the doctrines were often carried out in opposition to the rise to dominance of marginalism in the 1930s.<sup>8</sup> Another reason is that although some of the ideas and arguments found in the doctrines have ancient roots, they were actually derived from contemporary publications – the multi-industry pricing model of Alfred Eichner derived from Sraffa (1960) who, in turn, drew upon the surplus models found in Ricardo and Marx is a well-known example. Finally, many of the developments in the doctrines were derived from contemporary research. Consequently, the doctrines which make up the theoretical milieu will be considered as something which emerged in the 1930s and developed from then onwards.

To establish that each of the doctrines developed over time towards the same sort of non-neoclassical theory of prices, the grounded theory (or “grounded hagiography,” to use Warren Young’s (1987) phrase) approach will be used. A hagiographer is one who deals with “ancient” and “sacred” personalities, documents and texts; thus in the context of this book, the grounded hagiography approach will involve the use of the ancient and sacred personalities, documents, and texts as a way to reveal a coherent body of ideas that forms the theoretical core of the three doctrines and the evolution of the doctrines towards a common non-neoclassical theory of prices. In particular, this means that in addition to published works, recourse will be made to biographical data, to unpublished personal letters, lectures, and papers, to oral histories and interviews, and to notes, memoranda, and letters located in the files of private and public institutions. Biographical data, for example, contributes to understanding the circumstances that led an economist to initiate work on a particular idea (or theory) and the process by which he or she developed, elaborated, and refined it; while unpublished personal letters and lectures, and oral histories provide a personalized view of the development of the doctrines, especially with regard to what degree the economists saw their work as opposed to and different from neoclassical economics.

Each of the three doctrines will consequently be discussed in terms of the “ancient and sacred economist(s)” whose work forms their core, the historical developments which lead to the sacred economist’s work on the core, and the subsequent theoretical developments which deepened and expanded the core. Identifying the origins and core

<sup>8</sup> The oppositional nature of developments in the price doctrines to marginalism or more general neoclassical price theory is evident in the marginalist controversy of the 1940s and early 1950s and in the administered price controversy of the 1930s and the 1960s and 1970s (Lee, 1984b; Lee and Irving-Lessmann, 1992).



economists for the administered prices and normal cost prices doctrines is unproblematical – Gardiner Means and his work on the modern corporation and the inflexibility of industrial prices for the former, and Philip Andrews, the Oxford Economists' Research Group, and full cost pricing for the latter. However, the origin of and the core economist for the mark up prices doctrine is more problematical because of its close links with marginalism. To clarify this, let us first consider the issue of theoretical development. For the purpose of this book, "theoretical development" is defined as those developments which remove marginalist concepts and ideas from the doctrine, develop the doctrine's non-marginalist ideas and concepts, and introduce into the doctrine novel non-marginalist ideas and concepts. Thus, over time the core doctrines, which already have significant non-neoclassical content and thus in various degrees lie outside of marginalism, will be shown to have grown and moved further down the path away from marginalism and towards a non-neoclassical theory of prices. A result of this definition of theoretical development is that the marginalist–neoclassically-based "contributions" to the doctrines are completely ignored. But this definition creates problems when used as a way to identify the origins and the core economist of the mark up prices doctrine.

By most accounts, Michal Kalecki's microanalysis constitutes the theoretical core of the mark up prices doctrine. Yet, all those economists who have studied Kalecki's 1936–43 writings agree that the price-theoretic foundation on which he rested many of his arguments was marginalist in content (see, for example, Basile and Salvadori, 1984–5; Kriesler, 1987; Carson, 1990, 1993*m*; Osiatynski, 1991, p. 498). There has also been considerable debate over whether Kalecki toned down or eliminated the marginalist content in his later writings. Thus, it would appear quite problematical to associate Kalecki and his marginalist microanalysis with the non-neoclassical mark up prices doctrine. However, there is a way around this problem. The microanalysis which Kalecki developed from 1929 to 1945, although saddled with a marginalist pricing core, can be considered as the origin of the doctrine largely because it directly influenced subsequent economists whose writings contributed significantly to its development. By the early 1940s, Kalecki had developed his microanalysis to the point where other economists could draw upon it for their own work and thereby extend and develop it. Consequently over the next 35 years, various economists made contributions to the doctrine, with the result that by the early 1980s it had lost most of its marginalist attributes.

## Organization of the book

As noted above, each of the three doctrines will be discussed in terms of the “ancient and sacred economist(s)” whose work forms the core of the doctrine, the historical developments which lead to the sacred economist’s work on the core, and the subsequent theoretical developments which deepened and expanded the core. This means that when dealing with the doctrine of administered prices (part I), the sacred and ancient economist is Gardiner Means and his work on administered prices constitutes the doctrine’s core, while his work on the modern corporation and price inflexibility forms the historical development leading up to his work on administered prices and the work of Rufus Tucker, Edwin Nourse, Abraham Kaplan, and Alfred Chandler both deepened and expanded the core. Similarly, the sacred and ancient economist for the doctrine of normal cost prices (part II) is Philip Andrews and his theory of competitive oligopoly constitutes the doctrine’s core, while Robert Hall’s and Charles Hitch’s work on full cost pricing forms the historical development leading up to Andrews’ theory and the work of Harry Edwards, Paolo Sylos-Labini, Wilford Eiteman, John Williams, Jack Downie, Romney Robinson, and George Richardson expanded and developed his theory. On the other hand, there is no single sacred and ancient economist whose work constitutes the core of the mark up doctrine (part III). The origin of the doctrine is found in the micro-analysis Kalecki developed from 1929 to 1945. During the war years, economists linked with Oxford and Cambridge, such as Fritz Burchardt, Steindl, Kaldor, and Tibor Barna, further developed the microanalysis. The post-war developments by various economists, including Kalecki, Piero Sraffa, Geoffrey Harcourt, Peter Riach, Kaldor, Joan Robinson, Adrian Wood, Alfred Eichner, Steindl, and Paul Baran and Paul Sweezy, concentrated on the representation of production, pricing and the degree of monopoly, investment decisions, and economic stagnation and monopoly capitalism.<sup>9</sup>

Although I have distinguished between the three doctrines and will be treating them separately and in spite of the different terminology associated with each doctrine especially with regard to costs, they are in fact quite similar. For example, Sylos-Labini made contributions to both the normal cost and mark up prices doctrines, while Eichner drew heavily on

<sup>9</sup> Absence from my discussion of the mark up prices doctrine are references to Abba Lerner’s degree of monopoly power, Roy Harrod’s discussion of the variations in the price elasticity of demand over the trade cycle, and Keynes’ notion of the constant degree of competition, because they did not contribute to the doctrine’s development.

the administered prices doctrine when making his contribution to the mark up prices doctrine. More significantly, many aspects of Andrews' theory of competitive oligopoly and Steindl's analysis of the business enterprise and economic stagnation are similar, especially regarding enterprise growth, prices, and profits over time. In fact, the common elements of both doctrines were widely known to British economists for the first post-war decade, as evident in Jack Downie's largely independent work on the competitive process. Finally, Romney Robinson's work on non-market clearing prices was assisted by his acquaintance with administered prices (R. Robinson, 1989*p*). Thus, the reader should not be surprised that similar arguments reappear frequently throughout the discussion of the three doctrines. It is precisely the tediously familiar arguments of the three doctrines which enable them to be brought together and form the theoretical milieu from which the pricing foundation for a Post Keynesian theory of prices can be developed.

The three price doctrines contain numerous theoretical arguments, insights, and empirical data that would be useful for developing a Post Keynesian theory of prices and even a Post Keynesian analysis of the business enterprise. However, to attempt to draw from the doctrines a coherent, empirically grounded non-neoclassical theory of prices would ultimately be unsuccessful as it would require theoretical arguments that are not part of the doctrines and an empirical grounding of theory which is beyond the scope of this book. Instead, drawing upon the data, arguments, formal modeling, and insights offered by the doctrines, the purpose of part IV is to put together an empirically grounded pricing foundation on which to develop a Post Keynesian theory of prices. This more limited but foundation-building endeavor is intended to illustrate the importance of each of the doctrines to Post Keynesians, to show the process by which a theory is empirically grounded, and to demonstrate the importance of having a grounded theory. Chapter 11 will examine and empirically ground the analytical costing, pricing, and price components of the pricing foundation. Over 100 empirical studies on costing, pricing, and prices will be used to establish the appropriate analytical delineation of the costing and pricing procedures and price policies of the business enterprise and price-setting market institutions and to delineate the properties of the prices based on the pricing procedures. Then drawing on the formal and mathematical methods associated with the mark up prices doctrine, the enterprise and market pricing equation which can be derived from the pricing procedures will be formalized and mathematized. Chapter 12 continues the development of the pricing foundation by first considering the characterization and representation of the production schema underlying the pricing model

and its corresponding quantity model.<sup>10</sup> Following this, the pricing model will be set out and its features and properties delineated. Drawing on the production schema and the pricing model, the third section of the chapter will outline and discuss the pricing foundation, and the last section will discuss the implications of the pricing foundation for the development of a well grounded Post Keynesian theory of prices.

Before starting, it is necessary to define some terms in order to facilitate the subsequent discussion. “Costing” refers to the procedures a business enterprise employs to determine the costs that will be used in setting the selling price of a good before actual production takes place and hence the actual costs of production are known. The procedures are based on normal or standard volume of output or capacity utilization and can range from determining average direct costs to determining the normal or standard average total costs. “Pricing” refers to the procedures the business enterprise uses to set the price of a good before it is produced and placed on the market. That is, starting with the costs determined by its costing procedures, the business enterprise then adds a costing margin to costs or marks up the costs to set the price. Finally, the “price” is the enterprise’s actual selling price which is determined via its pricing procedures and therefore is set before production and exchange takes place.

The pricing procedures that will be the focal point of this book include mark up, normal cost, and target rate of return pricing. “Mark up” pricing procedures consist of marking up average direct costs based on normal output to set the price, with the mark up being sufficient to cover overhead costs and produce a profit. “Normal cost” pricing procedures consist of marking up average direct costs based on normal output to cover overhead costs, which gives normal average total costs, and then marking up normal average total costs to set the price, with the mark up producing a desired margin for profit. Finally “target rate of return” pricing procedures consist of marking up normal or standard average total costs by a certain percentage that will generate a volume of profits at normal or standard capacity utilization which will produce a specific rate of return with respect to the value of the enterprise’s capital assets determined at historical costs.

<sup>10</sup> A production schema depicts the principal flows of produced goods in the technically required sequence. On the other hand, a quantity model refers to a precise system of production equations where the level of final demand determines the level of output, intermediate inputs, and labor inputs. A pricing model refers to a precise system of pricing equations where the level of wage rates and profit mark ups determine prices. Linked together, the production schema and the two models form the price–quantity monetary production model of the economy as a whole (Leontief, 1951; Lowe, 1976; Pasinetti, 1977).

# Appendix

Table IA.1 *Surveys of Post Keynesian economics, 1975–96*

| Author(s)                        | Attention given to price issues <sup>a</sup> | Types of price-theoretic foundations discussed |         |       |                     | Other price issues discussed |      |         |
|----------------------------------|--|--|---------|-------|---------------------|------------------------------|------|---------|
|                                  |  | Classical/Sraffa                               | Kalecki | Other |                     | Mark-up <sup>c</sup>         | Firm | Pricing |
| Eichner/Kregel (1975)            | Much   |  | ×       |       |                     | ×                            |      | ×       |
| Shapiro (1977)                   | Much   |  | ×       |       |                     | ×                            | ×    |         |
| Davidson (1980)                  | None   |  |         |       |                     |                              |      |         |
| Crotty (1980)                    | Some   |  | ×       |       |                     | ×                            |      |         |
| Tarshis (1980)                   | Much   |  |         |       | Marginalism         | ×                            |      |         |
| Yellen (1980)                    | Some   |  | ×       |       |                     |                              |      |         |
| Harcourt (1982)                  | Much   |  | ×       |       |                     | ×                            |      |         |
| Dow (1985)                       | Some   | ×  | ×       |       | Keynes              |                              |      |         |
| Groenewegen (1986)               | Much   | ×  | ×       |       |                     |                              |      |         |
| Hamouda/Harcourt (1988)          | Much   | ×  | ×       |       | Kaldor              | ×                            |      |         |
| Dow (1988)                       | Some   |  | ×       |       | Behavioral approach |                              |      |         |
|                                  |  |  |         |       | H–H <sup>b</sup>    |                              |      |         |
| Sawyer (1990, 1992a, 1993)       | Much   |  | ×       |       | Means               | ×                            | ×    | ×       |
| Ludlow-Wiechers (1990 <i>u</i> ) | Much   | ×  |         |       |                     |                              |      |         |
| Arestis (1990)                   | Little                                       |  |         |       | Eichner             | ×                            | ×    |         |
| Dow (1991)                       | Some   | ×  | ×       |       | Eichner             | ×                            |      | ×       |
| Lavoie (1992a)                   | Some   | ×  |         |       |                     |                              | ×    | ×       |
| Arestis (1992, 1996)             | Some   | ×  | ×       |       | Eichner             | ×                            | ×    | ×       |
|                                  |  |  |         |       | Wood                |                              |      |         |
| Arestis/Sawyer (1993)            | Some   | ×  | ×       |       | H–H <sup>b</sup>    | ×                            | ×    | ×       |
| Henry (1993)                     | Little                                       | ×  |         |       | Eichner             |                              |      |         |

*Notes:* <sup>a</sup> Comments in this column are relative to the length of the survey. <sup>b</sup> H–H refers to Hall and Hitch.

<sup>c</sup> Entries in this column means that the surveys dealt with the determination of the mark up.

Table IA.2 Pricing procedures and production models utilized by Post Keynesians, 1971–96

| Author(s)                            | MUP | NCP | TRRP | LBP | LMBP | Shape of<br>ADC/AVC                        | Production models<br>APM    BPM    CPM | Economists<br>referred to                       |
|--------------------------------------|-----|-----|------|-----|------|--|--|---|
| Eichner<br>(1973, 1976, 1983, 1991)  |     |     | ×    |     |      | AVC<br>constant                            | ×                                      | Kalecki<br>Andrews<br>Sylos-Labini<br>Weintraub |
| Kregel<br>(1973)                     | ×   |     |      |     | ×    | ADC<br>constant                            | ×                                      | Kalecki   |
| Harris<br>(1974)                     | ×   | ×   |      | ×   |      | ADLC <sup>a</sup><br>constant              | ×                                      | Kalecki<br>Weintraub<br>Harcourt                |
| Asimakopulos/Burbidge<br>(1974)      | ×   |     |      | ×   |      | ADLC<br>constant                           | ×                                      | Kalecki   |
| Asimakopulos<br>(1975a, 1975b, 1977) | ×   |     |      | ×   |      | ADLC<br>constant                           | ×                                      | Kalecki   |
| Harcourt/Kenyon<br>(1976)            | ×   |     |      |     | ×    | ADC<br>increases due to<br>vintage capital |  |   |
| Rowthorn<br>(1977, 1981)             | ×   | ×   |      | ×   |      | ADLC<br>constant                           | ×                                      | Kalecki   |
| Weintraub<br>(1978, 1979, 1981)      | ×   |     |      | ×   |      |  | ×                                      | Kalecki   |

|                                |   |   |   |   |   |                  |   |   |  |
|--------------------------------|---|---|---|---|---|------------------|---|---|--|
| Sylos-Labini<br>(1979, 1983–4) | × |   |   | × | × | ADC<br>constant  |   |   | Kalecki<br>Weintraub                       |
| Grant<br>(1979)                | × |   |   | × | × | ADC<br>constant  | × |   | Kalecki                                    |
| Dixon<br>(1979–80, 1981)       | × |   |   | × |   |                  |   | × | Kalecki                                    |
| Ros<br>(1980)                  |   | × |   |   | × |                  |   |   | Hall–Hitch<br>Andrews                      |
| Mitchell<br>(1981)             | × |   |   | × |   |                  |   |   | Weintraub                                  |
| Jarsulic<br>(1981)             | × |   |   | × |   | ADLC<br>constant | × |   | Kalecki                                    |
| Levine<br>(1981)               | × |   |   |   | × | ADC<br>constant  |   | × |  |
| Ong<br>(1981)                  | × |   |   |   | × |                  |   |   | Steindl                                    |
| Watanabe<br>(1982–3)           |   |   | × | × |   |                  |   | × | Weintraub                                  |
| Lianos<br>(1983–4)             | × |   |   | × |   | ADLC<br>constant | × |   | Weintraub                                  |
| Minsky/Ferri<br>(1984)         | × |   |   | × |   |                  | × |   | Kalecki<br>Weintraub                       |
| Seccareccia<br>(1984)          | × |   |   | × |   |                  |   | × | Kalecki<br>Steindl<br>Weintraub<br>Eichner |





|  |   |   |                     |   |  |
|--|---|---|---------------------|---|--|
| Agliardi<br>(1988)                             | × |   | ADC/AVC<br>constant |   | Kalecki<br>Eichner   |
| Deprez<br>(1990 <i>u</i> )                     | × | × | ADLC<br>constant    | × | Kalecki  |
| Sawyer<br>(1990, 1990 <i>u</i> , 1995)         | × | × | AVC<br>constant     | × | Kalecki<br>Eichner<br>Harcourt<br>Wood<br>Hall–Hitch           |
| Dalziel<br>(1990)                              | × | × |                     |   |  |
| Bloch<br>(1990)                                | × | × |                     |   | Kalecki  |
| Toporowski<br>(1990 <i>u</i> , 1993 <i>u</i> ) | × |   | AVC<br>constant     |   | Kalecki<br>Steindl   |
| Thompson<br>(1992)                             | × | × | ADC<br>constant     | × | Kalecki<br>Hall–Hitch<br>Eichner<br>Steindl                    |
| Canterberry<br>(1992)                          | × | × |                     |   | Eichner<br>Levine<br>Marris<br>Penrose<br>Ong, Wood<br>Shapiro |

Table IA.2 (cont.)

|                                       |                             |      |                                   |                  |                               |   |
|---------------------------------------|-----------------------------|------|-----------------------------------|------------------|-------------------------------|---|
| Glick/Ochoa<br>(1992)                 | ×                           |      |                                   |                  |                               | Eichner                                   |
| Bober<br>(1992)                       | ×                           |      |                                   | AVC<br>constant  | ×                             | Kalecki<br>Eichner                        |
| Slattery/Slattery<br>(1993 <i>u</i> ) | ×                           | ×    |                                   | ADLC<br>constant | ×                             | Kalecki                                   |
| Park<br>(1993 <i>u</i> , 1995)        | ×                           | ×    |                                   | ADLC<br>constant | ×                             | Kalecki<br>Steindl<br>Eichner<br>Harcourt |
| Mott/Slattery<br>(1994)               | ×                           | ×    |                                   | ADLC<br>constant | ×                             | Kalecki<br>Eichner                        |
| Acharyya<br>(1994)                    | ×                           | ×    |                                   | ADLC<br>constant | ×                             | Kalecki                                   |
| Amadeo<br>(1994)                      | ×                           |      | ×                                 | ADC<br>constant  |                               | Kalecki                                   |
| King/Rimmer<br>(1994 <i>u</i> )       | ×                           | ×    |                                   | ADLC<br>constant | ×                             | Kalecki<br>Steindl                        |
| Sen/Vaidya<br>(1995)                  | ×                           |      | ×                                 |                  |                               | Eichner<br>Weintraub                      |
| <i>Notes:</i>                         |                             |      |                                   |                  |                               |   |
| ADC                                   | Average direct costs.       | BPM  | Burchardt production model.       | MUP              | Mark up pricing.              |   |
| ADLC                                  | Average direct labor costs. | CPM  | Circular production model.        | NCP              | Normal cost pricing.          |   |
| APM                                   | Austrian production model.  | LBP  | Labor-based pricing.              | TRRP             | Target rate of return pricing |   |
| AVC                                   | Average variable costs.     | LMBP | Labor and material-based pricing. |                  |                               |   |

## **Part I**

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# **The doctrine of administered prices**



# **1 The origin of the doctrine of administered prices: from the modern corporation to industrial prices**

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Gardiner Means was born on June 8, 1896 in Windham, Connecticut, and spent his pre-college days growing up in Massachusetts and Maine. He entered Harvard in 1914 and majored in chemistry, and with the outbreak of war in 1917 he enlisted in the army. In 1919 he joined the Near East Relief, and after completing his stint, Means entered Lowell Textile School in September 1920, a decision prompted by his experience of hand-weaving in Turkey. After two years of studying wool manufacturing, he left in March 1922 to set up a textile enterprise making a high-quality (and high-priced) woven blanket of his own design that was quite different to any made by other blanket manufacturers. Through the running of his business enterprise, Means became well acquainted with the Boston wool market and the textile machinery market, and quickly came to the conclusion that American industrial life was very different than what he had experienced in the oriental bazaar in Harput. In particular, Means found that while the prices of cotton and wool varied continuously as in a bazaar, the prices of cotton and wool yarns did not. He thus deduced that the pricing process for the yarns was significantly different from the pricing process for cotton and wool. Means also found himself setting his price prior to any transaction in the market and then engaging in many sequential transactions at this price.<sup>1</sup> For one five-year period in the 1920s, he maintained the same price, even though his costs and sales varied, and sold many thousands of blankets. When Means did change his price in 1929, he did so more in response to a fall in the price of wool than to a decline in sales and the subsequent price was also administered to the market. In any event, Means felt that he was acting

<sup>1</sup> This kind of entrepreneurial acumen was not new to Means, for his uncles had introduced administered prices to the shoe business before 1900 and made a small fortune by advertising “The Means’ \$4.00 Shoe” with administered wholesale prices (Means, 1964*m*).

rationally in adopting such a price policy (Means, 1933, 1975d, 1983, 1986i; University of Lowell, n.d.u; Carter, 1934; Ware, 1988m; and Lee and Samuels, 1992a).

While still maintaining his textile enterprise, Means became interested in the causes of business depressions and unemployment and therefore decided to take some economic courses in the Harvard Graduate School to find out how the American economy operated. In February 1924, he entered Harvard as a graduate student in economics. The course he took from William Ripley on the corporation and industry undoubtedly met this goal. Between 1924 and 1927 Ripley's course dealt with railroads, trusts, and corporations. Moreover, he argued, both in his classes and, subsequently, in his best seller, *Main Street and Wall Street* (1927), that the dispersion of stock-ownership was permitting the senior level management and directors of the corporation to enrich themselves at the expense of the stockholders. In addition to Ripley's course, Means took a course titled "Valuation" and thus spent the 1926 Spring semester listening to James Bonbright, who commuted from Columbia University, lecture on public utility regulation. As for economic theory, Means took courses from Frank Taussig and Allyn Young. He was introduced to the writings of Smith, Ricardo, Mill, the Austrians, Marshall, and Edgeworth. In addition, he was also probably introduced to Walrasian general equilibrium at this time, as presented by Gustav Cassel in his book *The Theory of Social Economy* which first appeared in English in 1923. In spite of his excellent introduction to neoclassical economic theory, Means found it hard to take it seriously as a theory which could explain the operations of the American economy of the twentieth century (Blitch, 1983; Weintraub, 1983; Mason, 1982; Carlson, 1968; Means, 1960m, 1975d; Green, 1986p; Hon. 1987p; Law, 1986p; Lee, 1990b; Lee and Samuels, 1992a).

When Means went up to Harvard in 1924, Alfred Marshall's *Principles* (1920) formed the background theoretical core which all graduate students were supposed to know, and it remained so well into the 1930s, even after Edward Chamberlin's book *The Theory of Monopolistic Competition* (1st edn, 1933) was published. Moreover, it was common practice among the Harvard economists (as well as among nearly all economists influenced by Marshall) to teach that the economics of Smith, Ricardo, and Mill were substantially the same as the economics of Marshall, Edgeworth, and even Walras. This espousal of the "continuity thesis" (or the "non-marginal revolution thesis") bred the feeling among economists that they were following in the footsteps of the great figures in the field and that Marxian and Institutional economists were outside the fold. Students such as Means, came out of Harvard espousing the