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 $23 \ \mathrm{June} \ 2016$

Online at https://mpra.ub.uni-muenchen.de/72426/ MPRA Paper No. 72426, posted 07 Jul 2016 15:13 UTC

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Introduction

This chapter is an endeavor to establish a heterodox theory of the business enterprise incorporating contributions made by various theoretical traditions in heterodox economics, in particular Marxian, Post Keynesian, and institutionalist economics. The rationale behind this project is that in spite of recurring failures of the neoclassical theory of the firm in explaining ever-changing capitalism, little has been done by heterodox economists to integrate heterodox approaches to the business enterprise, which would have offered a more comprehensive understanding of the business enterprise than if they remain disconnected.

The failure of the neoclassical theory of the firm is predicated on the ahistorical view of the business enterprise. The fundamental neoclassical doctrine is that the Marshallian representative firm engages in production, exchange, investment, and employment at the margin in the context of the Walrasian exchange economy. In this theoretical configuration the neoclassical firm is squarely defined as a profit maximizing rational entity whose activities follow the rule of the market that is assumed to be universal and normal (and hence ahistorical). That is, "in the beginning there were markets" (Williamson 1975: 20) and there emerged firms in

¹ This paper is an early draft of the chapter to be published in the *Routledge Handbook of Heterodox Economics*, edited by Tae-Hee Jo, Lynne Chester, and Carlo D'Ippoliti, 2017.

order to economize the use of scarce resources. Such an unquestionable neoclassical premise is theological rather than historical.

Major controversies in economics in the twentieth century, such as the 'empty boxes' debate (1920s), the marginalist controversy (1940s-50s), the administered price controversy (1930s, 1960s-70s), and the capital controversy (1950s-70s) challenged the conventional explanation of capital accumulation, production, exchange, and distribution. Essentially, these issues are centered around how the business enterprise carries out productive activities under capitalism. Controversies, taken as a whole, suggest that not only is the neoclassical firm theory flawed, but also the entire neoclassical framework based upon the market price mechanism is problematic as the former is a core theoretical constituent of the latter. In a nutshell, heterodox economists argue on the theoretical ground that production does not take place, if firm's technology represented by a production function displays non-diminishing marginal returns, and, more fundamentally, if inputs are not scarce. That is to say, the upward sloping supply curve or the firm itself can only exist under perfectly competitive market structures. The transformation of the firm as the unit of production into the well-behaved supply curve means that the neoclassical firm is reduced to the empty box mechanically converting scarce inputs into scarce outputs—that is, its production process and other decision-making processes are removed, and therefore the business enterprise as a real organization is replaced by a rational individual. Furthermore, on the empirical ground that the real world business enterprises do not follow the marginalist principle in setting their prices and producing goods and services; and the law-like supply-demand mechanism is not found in most real world markets (Sraffa 1926; Robertson et al. 1930; Means 1962, 1972; Harcourt 1972; Shapiro 1976; Lee 1981, 1990-91). With these devastating critiques of the neoclassical theory of the firm, the only constructive suggestion would be, as Sraffa (1930:

93) suggests, the rejection of Marshall's theory and developing an alternative theory that is internally coherent and historically grounded.

Notwithstanding all the controversies, neoclassical defenders have preserved their basic doctrine with minor modifications, such as imperfect competition, incomplete information, bounded rationality, transaction costs, price rigidity, and the like. The gist of the Marshallian firm has remained dominant in economics textbooks since the late nineteenth century (see Lee 2010 for the survey of 112 economics textbooks from 1899 to 2002). Yet these 'more realistic' or *ad hoc* assumptions derived from selected reality have never questioned the root problem of the neoclassical theory of the firm.

Arguably, the above claim implies that the neoclassical theory of the firm refers to the Marshallian theory as well as all the variants incorporating those modified assumptions, but still subscribing to core neoclassical premises—*inter alia*, resource scarcity, optimizing firm behavior, and the supply-demand framework. Those variants, insofar as the theory of the firm is concerned, include, but not limited to, new institutional-transaction cost theory (Coase 1937; Williamson 1975, 1987), evolutionary theory (Nelson & Winter 1982), principal-agent theory (Jensen & Meckling 1976), and the contractual approach (Alchian & Demsetz 1972). It is quite obvious that the latter two theories are fully in line with neoclassical economics. The first two are welcomed by some heterodox economists because they are 'more realistic' than the standard neoclassical theory of the firm. However, it should be noted that these theories remain faithful to the above-mentioned neoclassical premises. For example, Williamson (1987: xii) notes that "[t]ransaction cost economics is akin to orthodoxy in its insistence that economizing is central to economic organization." And Nelson & Winter (1982: 18-19, original emphasis) remark that

[t]he models in this book are of "industries" ... in a market context characterized by product demand and input supply curves. In modeling these situations we often find it convenient to assume that "temporary equilibrium" is achieved. ... Together with market supply and demand conditions that are exogenous to the firms in question, these firm decisions determine market prices of inputs and outputs.

The point is that common to these neoclassical theories of the firm is the conviction that the market price mechanism ensures efficient allocation of scarce resources, given that markets are competitive and individuals are rational. It follows that the firm, either in the form of the 'nexus of contracts' or a 'hierarchical organization,' is secondary to the market mechanism. This position is, as argued and articulated in this chapter, incompatible with a heterodox theory of the business enterprise, which is grounded in the view that the business enterprise is a going concern exercising its agency through strategic decisions in the context of the monetary production economy.

There is no doubt that significant development in heterodox approaches to the business enterprise has been made. But still further development, articulation, and clarification are required due not only to the changes in the way the capitalist economy works, but also to the acceptance of the neoclassical firm by heterodox economists. If heterodox economics means an alternative to mainstream-neoclassical economics, as the present author understands, the current state is certainly unsatisfactory. With this concern in mind, this chapter aims to make a positive contribution to the heterodox approach to the business enterprise. By positive it is meant that compatible (but not all inclusive) heterodox accounts of the business enterprise are integrated in order to rejuvenate its radical insights into the evolving capitalist provisioning process, and to

offer a more comprehensive analysis of the business enterprise than a single heterodox approach would do. Critiques of the neoclassical theory of the firm will be kept to a minimum in this chapter, since substantive critiques have already been addressed from various heterodox perspectives (see, for example, Shapiro 1976; Dugger 1976; Eichner 1976; Lee 1981; Spread 2016).

This chapter is structured as follows. The first section begins with the monetary theory of production that is germane to the analysis of corporate capitalism whose reproduction is driven by business enterprise's production activities. In this context, the business enterprise is to be conceptualized as a gong concern, as opposed to an optimizing firm. In the second section Marx's schema of the circuit of capital is augmented by going enterprise's strategic decisions and actions in historical time. In particular, such key decisions and actions as a quantity decision, financing, investment, cost-accounting, pricing, production, sales, and competition are delineated in detail. The final section concludes the chapter.

The theoretical underpinning of the business enterprise

The monetary theory of production

Corporate capitalism as a system of provision is qualitatively and quantitatively distinct from the previous stage. Most neoclassical economists have paid little or no attention to this particular stage of capitalism insofar as their theory is concerned. The neoclassical theory of the firm remains in the era of a 'money economy' (as in Veblen), 'trading economy' (as in Means), or 'cooperative economy' (as in Keynes) in which the production of commodities is undertaken for

the sake of making more commodities through, allegedly, the unfettered market system. Heterodox thinkers, however, place the corporate enterprise in the context of a 'credit economy' (Veblen), 'engineering economy' (Means), or 'entrepreneur economy' (Keynes) in which the production of commodities is undertaken for the sake of making more money, and in which corporate business enterprises control not only market exchanges in terms of price and quantity but also the entire society in terms of the rules of conduct and prevailing culture (Veblen 1904: 50-51, 150-151; Means [1933] 1992: 10-15; Keynes 1979: 81-83). Undoubtedly, above cited heterodox thinkers and their followers, as well as Marx and Marxians recognize the importance of the corporate enterprise as a primary driving force of the capitalist provisioning process.

The monetary theory of production developed by Marxian, institutionalist, and Post Keynesian economists concerns how the capitalist system reproduces itself over historical time. The engine of a monetary production economy is a range of productive activities conducted by the business enterprise, while other going concerns, such as the state, households, market governance organizations, and trade unions contribute to the reproduction of the system in a direct or indirect way. In order for the economy as the monetized social provisioning process to continue, an array of basic and surplus goods needs to be produced and distributed on a continuous basis. Basic goods or the means of production are used in the production of surplus goods; and surplus goods or the produced means of consumption are distributed among social classes. Surplus goods are the basis of enterprise profits (and hence its reproduction) and of the reproduction of other agents and organizations constituting the economy. Thus the enterprise's strategic decision to produce surplus goods (that is, effective demand for surplus goods) induces the production of basic goods, the employment of labor power and other required means of production, and, consequently, the generation of income streams including wage incomes that

are used to purchase surplus goods. Thus the analytical building blocks of the monetary theory of production are the surplus approach (à la classical-Marxian, Sraffian-Post Keynesian, institutionalist) and the theory of effective demand (à la Keynes and Kaleckian-Post Keynesian). In this framework, the reproduction of the system as a whole is tied up with the reproduction of business enterprises through the production of the surplus goods. Of course, the reproduction of the system and of participating agents in historical time (or under fundamental uncertainty) is not guaranteed or predetermined. A necessary, but not sufficient, condition for reproduction is agency qua the capability of making goal-oriented strategic decisions *and* of controlling the business enterprise itself and other going concerns in a larger social context. Therefore, the monetary theory of production should be historically-socially grounded by incorporating strategic decisions at the enterprise level, which is absent in a conventional macro, aggregate, or structural account of the monetary production economy (Sraffa 1960; Dillard 1980; Lee & Jo 2011; Spread 2016).

The business enterprise as a going concern

An appropriate concept of the business enterprise in the context of the monetary production would be *a going concern*. As articulated initially by institutionalists and also received widely in practice (for example, accounting practices), the going concern means that the business enterprise is established and structured with the expectation of continuing its business over long time horizons (Veblen 1904: 137; Commons [1924] 1974: 145; Jo & Henry 2015: 28-29). This concept pertains in particular to the account of strategic decisions in socio-historical contexts. By strategic decisions it is meant that the going concern strives to achieve a specific goal depending

upon the list of priorities at a point in time. For example, survival would be the highest priority during recessions and crises, while expansion is preferred to other goals in good times. With regard to the latter, increasing investment with the expectation of expanding market sales may result in the bankruptcy of the going concern. Not that such a decision is made poorly, but the economy we find in the real world is full of paradoxes (Kalecki 1937: 96). If decisions and actions are understood in the historical context (or 'radical uncertainty' as in Post Keynesianism or the 'evolutionary process' as in institutionalism), they are neither optimal nor rational. Therefore, a going concern does not maximize profits or minimize costs, but strives to earn profits or reduce costs (Lee 1990-91: 259-260; Moss 1981: 199).²

With a going concern as a real acting organization, the analytical focus is placed on administration or control. To remain ongoing its sequential activities embedded in the historical process of provisioning must be administered. Prices and quantity produced, for instance, are administered by the going concern. In particular, as shall be examined in detail later, administered prices do not clear markets, but contribute to the continuation of a going concern by generating the flow of profits.

With regard to administration, an essential analytical feature of a going concern is its division into a going plant and a going business. A going plant refers to production activities ranging from the procurement of inputs to the production of outputs taking place at the plant

² Optimization is a theoretical construct that bears no resemblance to real world actions. It should be made clear that optimization does not leave room for strategic decisions since actors should follow the market rule (that is, marginal revenue = marginal cost) set by the structure of the market. Optimization is, therefore, incompatible with a going concern that pursues multiple goals by undertaking strategic decisions in historical time. If we are concerned with the actual historical process, such logically-connected neoclassical concepts as scarcity, optimization, equilibrium, and market-clearing should be discarded. However many heterodox economists of past and present, including J.M. Keynes, (the early works of) Joan Robinson and Michał Kalecki, rely on profit maximization in their account of the enterprise behavior (Chilosi 1989; Marcuzzo & Sanfilippo 2007; Lavoie 2014: 124). If we are concerned with building an alternative to the Marshallian firm, a better starting point should be, among others, T.B. Veblen, G.C. Means, D.H. MacGregor, and P.W.S. Andrews (Lee 1981).

level, while a going business involves all the administrative, decision-making processes both at the plant and enterprise levels. That is, within a going concern, production is organized by administration through internal working rules, such as costing, accounting, and pricing practices, while market exchanges are organized by market governance organizations along with external rules of regulation set by the state (Veblen 1904: 157-158; Commons [1924] 1974: 160; Lee 2013: 468). Such an organizational division corresponds to the basic structure of the corporate enterprise—that is, the separation of ownership from control (Means [1933] 1992; Galbraith 1967; Berle & Means 1968).

Obviously, whether it is small or big, a business enterprise is a going concern insofar as it is structured so that it strives to achieve a goal in a systematic manner. The continuation of the business enterprise enables it to be valued based upon its physical assets as well as intangible assets, 'goodwill,' or 'putative earning capacity' (Veblen 1904: 138-139, 155; Commons [1924] 1974: 160; Lee 1990-91: 256-257). The increasing importance of goodwill over physical assets has become an essential characteristic of modern corporate enterprises (see Serfati 2008). The capitalization and valuation of a going concern based upon goodwill implies that the business enterprise cannot be separated from its surrounding social environment. A going enterprise is thus an 'embedded' agent, and that the administration of a going concern itself is not sufficient for it to continue over extended periods of time. What is required, among other things, is the control over other going concerns in the course of production, competition, and exchange.

In a nutshell, the going concern is a suitable concept of the business enterprise, which is an alternative to the neoclassical firm—a rational, optimizing, representative, equilibrium firm operating in the asocial-ahistorical model world. The following section explores strategic going concern activities that constitute a heterodox theory of the business enterprise.

Strategic enterprise decisions and actions in the monetary production economy

The schema of enterprise activities

Let us start with Marx's schema of the circuit of commodity capital in the abstract and structural form at the level of the economic system as a whole (Marx 1990).

$$M \to C \to P \to C' \to M'$$
 (Schema 1)

For the sake of explaining concrete strategic decisions and actions of a corporate going concern beyond Marx's 'structural' schema, let us assume that the manufacturing going enterprise produces a single good or a product line at the plant with multiple plant segments for a given accounting period consisting of multiple production periods. With this time-oriented production structure of a going concern, we are able to delineate sequential productive activities along with the structure of costs of production. Marx's schema can be rewritten in money terms since all decisions and transactions are denominated in state money.

$$M_{t-1} \xrightarrow{S_1} M_t \xrightarrow{S_2} ETC_b \xrightarrow{S_3} P \xrightarrow{S_4} TR_b \xrightarrow{S_5} S_6$$
$$M_{t-1} \xrightarrow{B_t} [DC+OC] \qquad [p=EATC_b(1+\gamma)] \quad [A \oplus L: \mathbf{K} \to q_b] \qquad [pq_a] \qquad [TR_a - ETC_b - T - D - B'_t] \quad (Schema 2)$$

where M_{t-1} is retained earnings from the previous accounting period; M_t is working capital and $M_t - M_{t-1} = B_t \ge 0$, that is, working capital is financed internally (bank loans, $B_t = 0$) and/or

externally $(B_t > 0)$; M'_t is the portion of gross profits $(TR_a - ETC_b)$ retained after paying the corporate income tax (T), dividends (D), and debts $(B'_t = B_t + iB_t)$ if $B_t > 0$, and i is a rate of interest on bank loans; ETC_b is enterprise total costs at the budgeted output level for an accounting period and $M_t \ge ETC_b$, and ETC_b is the sum of direct costs (DC) and overhead costs (OC); $EATC_b$ is enterprise average total costs; p is the administered price; γ is a profit mark-up; Pis the circuit of production, where **K** is an array of fixed investment goods, **A** is an array of material or intermediate inputs that are combined (\bigoplus) to **L**, an array of labor inputs; ':' means 'given' for an accounting period; $TR_b = pq_b$ is total expected revenue at the budged of output q_b ; and $TR_a = pq_a$ is total actual revenue at the actual quantity demanded q_a .

As illustrated above each stage in the circuit of capital is connected through arrows which indicate sequential actions over calendar time—that is, financing and investment (s_1), costaccounting (s_2), pricing (s_3), production (s_4), sales and competition (s_5), and saving (s_6). These actions incur bank loans (B_i), cost items (*DC* and *OC*), price (p), budgeted output (q_b), actual quantity sold (q_a), dividends (D), corporate tax (T), debt payments (B'_t), and retained earnings (M'_t). The Marx's circuit of capital thus becomes concretized when it is represented by the schema of enterprise activities consisting of technologically specific structures (that is, ETC_b , P, TR_b , M_i , M'_t), as well as institutionally specific causal mechanisms (s_1 through s_6) along with internal and external working rules set by enterprise administrators and market regulators. While both schemata demonstrate that a going economy (Schema 1) or a going enterprise (Schema 2) is centered on the production of commodities in a continuous and sequential manner, Schema 2 displays more clearly that production requires a range of supporting administrative activities. This implies that going concern activities are structured and enduring, as well as open-ended due to agency represented by and embedded in causal mechanisms. For example, a product price is determined and administered by the business enterprise following its costing and pricing rules so that the enterprise remains ongoing, rather than the determination of the product price resting on market supply and demand schedules in the neoclassical exchange economy. Let us elaborate on essential enterprise decisions that put the business enterprise into operation.

Quantity decision

A going enterprise in the monetary production economy engages in production activities with the expectation of expanding capital ($TR_b - ETC_b > 0$) or, at least, of surviving and continuing its business ($TR_b = ETC_b$). It is obvious that the expected is seldom equal to the actual—that is, the total actual revenue (TR_a) is determined by actual market sales that fluctuate along the business cycles. Due to radical uncertainty in the actual sales and revenue the going enterprise has to set the budgeted output level (q_b) that becomes the reference point in the course of financing/investment (s_1), costing (s_2), pricing (s_3), and production (s_4). Specifically, q_b corresponding to expected sales is determined, given the array of productive capacity embodying currently available production techniques (or the number of plants and plant segments employing K in s_4). Thus the quantity decision is central to the entire schema of enterprise activities to the extent that it is the basis of other decisions. That q_b is normally less than full productive capacity implies that the adjustment of quantity produced to market sales is done by opening up or closing down plant segments already installed. While the quantity adjustment occurs over production periods, a change in productive capacity through investment takes more than one accounting

period, that is, typically a calendar year (Lee 1998: 202-203, 2013: 470). This observed reality entails two important implications. First, a quantity decision is separated from a price decision. Second, the full utilization of productive capacity at the enterprise level is neither desirable nor consistent with going concern activities under fundamental uncertainty.

Financing and investment

Investment demand for **K** across accounting periods is made possible by using working capital financed internally and externally. There is a body of empirical evidence supporting the importance of internal finance over external finance. Essentially, retained earnings are directly bound up with the administered stability of a going enterprise under inherently unstable capitalism (Andrews 1949: 229-250; Eichner 1976: 189-223; Harcourt & Kenyon 1976; Moss 1981: 32-37; Jo 2015). Empirical studies show that internal finance is a safer and cheaper means of investment, while external finance is mainly used to invest in financial assets (Gezici 2007; Kliman & Williams 2015). These findings are also consistent with macro-level data that non-financial corporations in advanced economies rely chiefly on retained earnings in financing fixed investment (see, for example, Corbett & Jenkinson 1997). The upshot is that the main source of fixed investment is the strategically generated internal means of finance, which enables a going concern to continue and/or expand its business over time. Moreover, investment decisions are not much affected by the changes in the rates of interest; instead, what the management of a going enterprise concerns most is earnings from investments.³ This position is at odds with

³ It should not be inferred here that interest rates have no impact on investment-financing decisions. The long-term interest rate is, on the one hand, taken into account in making investment decisions on **K**. Yet, it is rather stable over time. Thus it could be assumed fixed and, hence, has little to do with the variability in investment. On the

widely-received theoretical positions. Neoclassical economists posit that the 'efficient' financial market determines the optimal amount of loanable funds. Keynes and most Post Keynesian macroeconomists lay emphasis on external financing on the ground that the level of investment is determined by the supply and demand prices of capital goods (see, for example, Keynes 1936: 248; Minsky 1986: 171-198). Common to both neoclassical and Post Keynesian accounts is the replacement of the going concern's capability of making strategic decisions with the Marshallian supply-demand framework in which resource scarcity and diminishing marginal returns are assumed (Jo 2015). Deliberate investment decisions at the going enterprise level suggest that the Marshallian supply-demand framework and the Marshallian firm therein be dropped (Jo 2016).

Cost-accounting and pricing

With available working capital (M_t) advanced, an array of inputs required to produce the predetermined budgeted level of output (q_b) is to be purchased. In order to make purchasing decisions in a systematic and continuous fashion, a range of costs items are identified and reckoned following cost-accounting procedures qua rules adopted by the going concern. Since a going concern continues, all the earnings and expenses have to be accurately calculated at the end of each accounting period. Corresponding to the organizational structure of a going concern (that is, a going plant and a going business), the division of enterprise total costs (*ETC*) into direct costs (*DC*) and overhead costs (*OC*) is necessary. *OC* are further divided into shop

other hand, the short-term interest rate affects investment for temporary or urgent purposes and short-term finance is readily available as long as the stability of the business is secured. All this implies that interest rates are not the main factor of investment; nor are they the "regulator of the capitalism economy" (Andrews 1949: 235-240; Kalecki 1990: 366).

expenses (*SE*) and enterprise expenses (*EE*).⁴ Typically, *SE* and *EE* are allocated equally over multiple production periods. The structure of enterprise total costs at the budgeted output level is represented by the following equation (Lee & Jo 2010).

$$ETC_b = DC_b + SE + EE \tag{(s_2)}$$

where DC_b consist of labor input costs and material input costs. Consequently, enterprise average total costs (or unit costs) are:

$$EATC_{b} = \frac{ETC_{b}}{q_{b}} = ADC_{b} + ASE + AEE \qquad (s'_{2})$$

Once all the cost items identified and calculated at the budgeted output level, a going concern is able to set the product price following a pricing procedure. It is widely observed that real world business enterprises undergo various pricing procedures—that is, the mark-up-oriented and costing-oriented pricing procedures, and their variants depending upon the way budgeted costs or mark-ups are determined by a going concern (Andrews 1949: 157-161; Kalecki 1954: 11-27; Eichner 1976: 55-107; Lee 1998; Gu & Lee 2012; Lavoie 2014: 156-175). The basic idea of pricing is represented by the following equation.

⁴ SE refer to the costs of supervising the production, managing and running the enterprise (e.g., salaries of foremen, supporting staff, and supervisors, costs of materials needed to maintain those staffs and supervisors, depreciation costs); EE refer to the costs of running multiple plant segments and the costs of sales and advertisement, and the like.

$$p = EATC_{b}(1+\gamma) \tag{S}_{3}$$

where a profit mark-up (γ) set by the pricing administrator, which ensures a profit margin earned when a unit of output is sold. Well-known and widely-used variants of pricing procedures are:

Direct cost pricing:
$$p = ADC_b(1+\theta)$$

Total cost pricing: $p = ADC_b(1+\beta)(1+\rho)(1+\gamma)$
Target rate of return pricing: $p = EATC_b(1+\frac{\lambda\Phi}{q_b \times EATC_b})$

where θ is a mark-up for overhead costs and profits; β and ρ are, respectively, mark-ups for *SE* and *EE*; and λ is a target rate of return on the value of enterprise's capital assets (Φ). The first two pricing procedures are costing-oriented in the sense that given a customarily determined profit mark-up, a particular costing procedure is selected. The last is mark-up-oriented in the sense that a particular mark-up is determined given a costing procedure. The difference between two groups lies in customary working rules and a particular objective to be achieved by a going concern. For example, the target rate of return pricing becomes the primary procedure to set the price if the business enterprise aims to generate retained earnings that are required to implement a planned investment project.

All the empirically grounded pricing procedures demonstrate that product prices are strategically determined and administered before outputs are produced and traded in the market, that prices vary as different cost-accounting systems, pricing procedures, and/or mark-ups are chosen by the price administrator, that prices are stable for multiple production periods irrespective of changes in actual costs and market demand, and that prices do not clear markets but are designed to reproduce business enterprises (Means [1933] 1992; Andrews 1949; Eichner 1976; Lee 1998). It comes as no surprise that a substantial body of empirical evidence lends support to the above argument that prices are administered and made to be stable for the sake of reproducing the business enterprise over historical time (see, for example, Fabiani *et al.* 2007).

Production process

One significant implication of the schema of enterprise activities running from s_2 to s_3 is that price decisions are separated from quantity decisions. There is thus no structural relationship between price and quantity, no law of demand and supply, and no profit-maximizing firm. Administered prices rely mainly upon production-managerial techniques, administrative conventions or rules, and organizational structures of a going concern. The amount of quantity produced is set at the budgeted level and remains fixed for multiple production periods. Then the question comes down to how production is undertaken by the business enterprise.

Like other activities, production is conceptualized as a sequential process in calendar time—that is, an accounting period consisting of f production periods. What is also required is the specification of the unit of production. Insofar as a manufacturing corporate enterprise is concerned, the unit of production is the going plant in which multiple plant segments (PS) are installed along with an array of fixed investment goods (**K**), of employed skilled labor (**L**), and of material inputs (**A**).⁵ At the plant segment level for a single production period, the schema of production corresponding to the cost structure of the going enterprise can be delineated like below:

⁵ The rationale for using vectors is that inputs and investment goods are heterogeneous and, hence, they cannot be aggregated into a whole sum in quantity.

$$PS: \mathbf{a}_{\mathbf{d}} \oplus \frac{1}{f} \mathbf{a}_{\mathbf{s}} \oplus \frac{1}{f} \mathbf{a}_{\mathbf{e}} \oplus \mathbf{l}_{\mathbf{d}} \oplus \frac{1}{f} \mathbf{l}_{\mathbf{s}} \oplus \frac{1}{f} \mathbf{l}_{\mathbf{e}} : \mathbf{k}_{\mathbf{d}}, \mathbf{k}_{\mathbf{s}}, \mathbf{k}_{\mathbf{e}} \to q \qquad (s_{4}')$$

where $\mathbf{a}_d = \mathbf{A}_d/q$ is a vector of direct intermediate input production coefficients for a production period, and its *i*-th element \mathbf{a}_{di} is the amount of *i*-th direct intermediate input (\mathbf{A}_d) used to produce one unit of output *q* per production period. $\mathbf{a}_s = \mathbf{A}_s/q$ and $\mathbf{a}_e = \mathbf{A}_e/q$ are, respectively, vectors of shop and enterprise intermediate input production coefficients that are equally divided into *f* production periods. $\mathbf{l}_d = \mathbf{L}_d/q$ is a vector of direct labor input production coefficients. $\mathbf{l}_s = \mathbf{L}_s/q$ and $\mathbf{l}_e = \mathbf{L}_e/q$ are, respectively, vectors of shop and enterprise labor input production coefficients that are equally divided into *f* production periods. \mathbf{k}_d , \mathbf{k}_s , and \mathbf{k}_e are vectors of fixed investment goods associated with production, shop, and enterprise activities. To simplify,

$$PS: \mathbf{a} \oplus \mathbf{l}: \mathbf{k} \to q \tag{s''_{4}}$$

where **a**, **l**, and **k** include all types of differentiated inputs and fixed investment goods at the plant segment level. Assuming that the total number of plant segments is *m*, the plant's maximum level of output produced per production period is q_{max} .

Plant:
$$\sum_{i=1}^{m} \mathbf{a}_i \oplus \mathbf{l}_i : \mathbf{k}_i \rightarrow \sum_{i=1}^{m} q_i = q_{\max}$$
 (s_4^*)

Or to generalize the production schema at the enterprise level for an accounting period with the budgeted output (q_b) strategically chosen by the management $(q \le q_b < f \times q_{max})$, we get the schema of production as part of the schema of enterprise activities.

$$\mathbf{A} \oplus \mathbf{L} : \mathbf{K} \to \boldsymbol{q}_{\boldsymbol{h}} \tag{S}_{\boldsymbol{\lambda}}$$

This rather complicated (but not as complex as reality) production schema delineates that production is a sequential process taking place at the plant level, given technical conditions in terms of the use of differentiated inputs and fixed investment goods, organizational structures, and working rules adopted by the going enterprise. All types of differentiated inputs are socially created (in particular, the joint stock of knowledge and skills), technically connected to each other, and jointly utilized in the process of production. Each plant segment, plant, and going enterprise is distinctive. This particular property implies that linear aggregation of inputs, outputs, and production at different levels into a single homogeneous variable should thus be avoided. The chosen budgeted output q_b is less than full production capacity (that is, $f \times q_{\text{max}} - q_b$ > 0). That is, the going enterprise holds reserved capacity in the form of unused plant segments. Indeed, q_b is subject to change across production periods in response to the observed changes in market sales. To increase (or decrease) quantity produced, unused plant segments are opened up (or closed down). The quantity adjustment occurs while the administered price remains unchanged. This means that the enterprise activities do not generate the upward sloping supply curve, and that profit maximization or cost minimization is not possible. Without optimizing behavior, such concepts as relatively scarce resources, marginal products, and production functions with variable input proportions have no meaning. In a nutshell, the account of

production from the heterodox perspective is incompatible with the neoclassical production theory (Means [1933] 1992; 1962; Andrews 1949; Eichner 1976; Robinson 1980; Lee 1998, 2013).

Sales, competition, and reproduction

Foregoing discussions on the enterprise decision-making processes with regard to costs, price, and production indicate that strategic decisions are necessary, but not sufficient, for the reproduction of the going enterprise. What is also required for the stability and reproduction of the going enterprise is the control of the market. A range of means of control is put into practice to ensure that the market for a product exists and generates profits on a continuous basis. The market is in this regard created and controlled by the business enterprise by way of creating a good or service and of administering price, quantity, sales, and competition at the market level, rather than the business enterprise takes the market structure and mechanism as given (Galbraith 1967; Fligstein 1990).

The heterodox theory of the business enterprise delineated here thus extends to market exchanges and competition. In Schema 2 illustrated above s_5 is a process in which the actual revenue (pq_a) is realized at the predetermined administered price. The actual revenue is thus partly controlled through enterprise price administration. And it is also partly controlled, as noted earlier, through sales promotion and, more importantly, establishing goodwill that involves sellers and buyers. But the impact of goodwill on the actual revenue depends upon, among others, price differentials. Obviously, without goodwill or social networks in general, it is not likely that enterprises in the market set the same price because each enterprise goes through a

unique decision-making process with differentiated productive and managerial technology that is embodied in costing, pricing, and production processes. The reality is that a stable 'common' price within a narrow range is found in most product markets. The underlying rational is that the price of a product is made to be stable not only because individual enterprises set the price following a particular pricing procedure, but also because going enterprises in the market view the stable market price as mutually beneficial to the extent that ruinous price wars are avoided and the variations in cash flows are reduced. The latter necessitates such goodwill organizations as trade associations, cartels, and price leadership. In other words, collective market control is not contradictory to market competition. Rather control and competition are two sides of enterprise activities that lend support to the survival and reproduction over time (Veblen 1923; Means [1933] 1992; Pribram 1935; Meyer 1986). This approach to competition capturing the importance of deliberate 'association' between business enterprises breaks with the conventional view that economic activities are organized only by the principles of 'separation' in the market and 'command' within the enterprise (Lopes & Caldas 2015), or that the degree of market concentration determines market prices through profit mark-ups (Lee 2012).

At the final stage of the schema of enterprise activities for an accounting period is the disbursement of gross profits to the government (T), to shareholders (D), to lenders (B'_t) , and to the enterprise itself (M'_t) . How each amount or ratio out of gross profits is determined is also important for the continuation and expansion of the going enterprise. Debt payments are directly linked to the amount of funds externally financed and the rate of interest. As discussed earlier, external financing is supplementary to (not a substitute for) internal financing. Corporate income tax rates are determined by the government. What remains is dividend payouts and retained earnings that *prima facie* bear an inverse relationship between them.

Conventionally, it has been widely received that either the division between retained earnings and dividend payments is unimportant with regard to the market value of the corporation or an optimal capital structure is achieved since stockholders and management optimize their respective behavior through efficient markets (Modigliani & Miller 1958). Empirical evidence runs counter to this position. As pointed out earlier, retained earnings have been dominant as a means of financing investment as they are critical to the survival of the enterprise under fundamental uncertainty. Moreover, the supply-demand framework can hardly be applied to real-world enterprise investment (Andrews 1949; Eichner 1976; Jo 2015). As for dividend payments, data indicate that corporate managers tend to stabilize the dividend payout ratio in response to a range of variability in terms of shareholders' liquidity preference and tax position, stock prices, and the like. Thus a particular dividend policy is selected by the corporation (Wood 1975: 40-52). A notable change observed in recent decades is that the dividend payout ratio is increasing along with the increase in stock buybacks.⁶ Consequently, the financialization thesis endorsed by many heterodox economists suggests that the portion of retained earnings used for fixed investment decline since dividends and stock buybacks are internally financed (Orhangazi 2008; Dallery 2009; Fung 2010; Lazonick 2013). This is a dilemma of the going enterprise—that is, neoliberal financialization has been driven by a mutual interest of both financial and non-financial business enterprises in the pursuit of ever-increasing monetary gains by replacing goods-making activities with money-making activities. As a result the very foundation of capitalism and of the going concern has become weakened as evidenced by increasing instability of financialized economies (Crotty 2003; Jo & Henry 2015).

⁶ In the US, for example, stock buybacks in dollar amounts have been greater than dividend payouts since 1997. The increase in stock buybacks may well be attributed to the manipulation of stock prices as well as the defense against hostile takeovers (Veblen 1904: 92-132; Fung 2010; Lazonick 2013).

Conclusion

This chapter has shown that it is possible to develop a heterodox theory of the business enterprise that is an alternative to and independent of the Marshallian firm. It is rendered possible by, firstly, understanding the business enterprise in the context of the monetary production economy articulated by Marxian, Post Keynesian, and institutional economics; secondly, conceptualizing the business enterprise as a going concern consisting of a going plant and a going business following the institutionalist account; and thirdly, explaining key decision-making processes taking place in historical time. Consequently, it is demonstrated that the going concern exercises its goal-oriented agency in the course of making strategic decisions, given (but not fixed) technical conditions, organizational structures, and working rules in order to continue its business over historical time. The schema of enterprise activities examined in this chapter also indicates that the going enterprise is not confined by the presumed rule of the market, but deliberately strives to control the market by means of administering price and quantity, creating goods and services, and/or making mutually rewarding social relationships (that is, goodwill) between going enterprises. Therefore, the heterodox theory of the business enterprise proposed in this chapter offers quite different, radical implications as to how the business enterprise operates in corporate capitalism.

An attempt to build such an integrative heterodox theory could be either promising or insufficient. Promising in that, once done successfully, it would offer more comprehensive insights into the business enterprise as we find in the real world than a single heterodox approach would do. This is what I aimed for in writing this chapter. At the same time, it should be

admitted that a judgment as to whether this has been done successfully or not lies in the eyes of the shrewd reader. One might argue that the present attempt is insufficient to the extent that it neglects some important aspects specific to a particular strand in heterodox economics—for example, theories of value and distribution that are integral parts of classical-Marxian, Post Keynesian, and institutional analyses of the monetary production economy. Perhaps a better and more comprehensive work could be done in the future, incorporating those theoretical issues as well as contributions made by other heterodox approaches, such as social, feminist, and ecological economics, that are not examined in this chapter.

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