10 Josef Steindl and the stagnation thesis

Before leaving Oxford, Kalecki suggested to Steindl that he examine the puzzle as to why capitalism ceased to function in the inter-war period. Steindl took up the suggestion and after completing Small and Big Business (1945b) turned his attention to the puzzle. In particular, he sought to contribute to the mature economy controversy initiated by Alvin Hansen through a concrete examination of the rise, decline, and eventual stagnation of capital accumulation in the American economy from 1869 to 1939. Believing that the explanation of economic stagnation required the articulation of a long-term theory of growth, Steindl developed Kalecki’s theory of investment into a theory of growth centered on the propensity of entrepreneurs to invest, where this propensity was a function of past savings, relative indebtedness, and the degree of capacity utilization. Furthermore, he argued that the degree of capacity utilization was dependent on the magnitude of net profit margins vis-à-vis the given level of investment. Steindl therefore began his investigation by examining the forces which determined the net profit margin. The outcome of this work was a microanalysis of the net profit margin, which was completed by 1947. He then turned his attention to developing his theory of growth based on this microanalysis, which was completed in 1949. The completed manuscript was sent to the printers in January 1950, but the printing of Maturity and Stagnation in American Capitalism was delayed until 1952. The importance of the microanalysis in Maturity and Stagnation was that it developed Kalecki’s microanalysis and thus contributed to the development of the mark up prices doctrine (Young and Lee, 1993; Oxford Institute of Statistics, 1945, 1947, 1948, 1949, 1950; Steindl, 1952, 1984, 1990a).1

1 Its importance is also found in its congruence with Andrews’ analysis of the movement of the normal cost market process and Downie’s analysis of the competitive process.
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Central to Steindl's analysis was the distinction between corporate and non-corporate business enterprise. Drawing on his previous sketch in Small and Big Business as well as Kalecki's work, Steindl characterized the enterprise as a technique of production defined in terms of the labor and raw material inputs, the degree of capital intensity, and the product produced. Further, each technique embodied particular production economies depending on its scale of production, and these were encapsulated in the degree of capital intensity, with the greater degree of capital intensity implying that more production economies embodied in the technique. Finally, the costs of the enterprise were categorized into direct and overhead costs. Average direct costs were assumed constant, while average total costs declined with respect to increases in capacity utilization. Given this general characterization of the business enterprise, Steindl then discussed four of its features that directly connected the enterprise to external market activities: the degree of capacity utilization, cost differentials, investment decisions, and prices. He noted that each technique of production had a "practical" full capacity, that the entrepreneur chose a planned degree of capacity utilization on which pricing and investment decisions were based, that the planned degree of capacity utilization (PDCU) was less than full capacity utilization, and that planned excess capacity was held to deal with seasonal and unexpected variations in sales and with a secular increase in sales. Steindl also noted, that at the same PDCU, enterprises with greater degrees of capital intensity had lower average total costs due to the economies of scale associated with the more capital-intensive production techniques. Finally, drawing upon his discussion in Small and Big Business, Steindl assumed that entrepreneurs had a basic urge to increase the productive capacity of their enterprises, that is to accumulate capital, and therefore argued that they based their investment decisions on the level of retained profits (past savings), the degree of capacity utilization, the gearing ratio, and the rate of profit. In particular, the partial accelerator impact of capacity utilization on investment combined with the rigidity of outside savings, propelled the entrepreneur to adjust his capacity-expansion investment decisions in an effort to restore the PDCU and to maintain a financially sound gearing ratio.

2 Steindl defined practical capacity as the "output achieved with normal length of working time, with sufficient shut-downs to allow for repairs and maintenance, and without disturbance of the smooth running of the production process" (Steindl, 1952, pp. 7-8). He also noted that if practical capacity was exceeded, the enterprise would incur extraordinary costs so that its marginal costs would rapidly increase.
Regarding prices, Steindl had to place the enterprise within a close community of enterprises, that is an industry. Within the industry, he argued, there were a number of enterprises, each with a specific but not necessarily equal share of industry sales, with a different degree of capital intensity and hence with different average total costs at planned degree of capacity utilization (PATC), and with its own view of an acceptable profit margin. The growth of a particular enterprise’s sales was, Steindl argued, mostly dependent on time and hence on the accumulation of goodwill:

Whatever [the entrepreneurs] might do within a restricted period in the way of advertisement, price cuts, or by whatever method, he will not be able to increase his sales above a certain level; whereas with the lapse of time the mere existence of the firm will bring a gradual extension of goodwill; and advertisement and other methods of stimulating sales will only gradually bring results as time goes by. (Steindl, 1952, p. 10)

The same argument was extended to the growth of industry sales, with the reinforced conclusion that sales at the level of the enterprise or the industry in the short term and over the trade cycle were highly or virtually inelastic with regard to changes in the industry price. Consequently, any attempts by an individual enterprise to increase its share of market sales in the short term or over the trade cycle by reducing its price when production techniques, and hence costs, were given would result in

5 Steindl viewed the industry in terms of imperfect competition. That is, the industry consisted of many markets that were imperfectly related. Thus it was possible in his view to conceive of the representative good produced in the industry and hence talk about an industry price which would govern the dispersion of prices for the various markets. Consequently, it becomes possible to carry out analysis in terms of a single price and a single good, while at the same time referring to issues in the context of a single market.

6 As Steindl stated:

It can be argued that in the short run the demand for the products of an industry is very inelastic, because the possibilities of substitution for other products are very limited. The substitution of one consumer’s good for another, for example, rayon for silk, or rayon staple for wool, is a process which takes considerable time. The consumers are attached to the product of a particular industry in a much greater degree than to that of a firm. A whole series of traditions and prejudices has to be changed until a considerable shift of demand can occur, and propaganda continuing over a long period will often be necessary. In the case of producers’ goods a similar role will be played by technical traditions and inertia, and by quite objective technical difficulties, which make substitution again dependent on the lapse of time. The substitution may require changes in outlay and equipment which cannot be quickly effected and which must be decided on permanently. Just as in the case of the individual firm, the growth of the market of an industry is, therefore, dependent on time. We conclude that in the short run the demand for the products of an industry is in most cases probably very inelastic, whereas in the long run this is less likely to be the case. (Steindl, 1952, p. 16)
an industry price war with virtually no compensating increases in the degree of capacity utilization. In this context, the industry price had to be set by a cartel or price leader, and was then accepted by the other enterprises in the industry. The industry price set had two important properties, that it was rigid or stable in the short term and over the trade cycle and that it was set at a level which just keeps potential competitors out; or, in some other cases, it may be fixed at a level which is sufficient to squeeze out some existing competitors, whose markets the price leaders want to take. (Steindl, 1952, p. 17)

Given an industry price, Steindl argued that there would exist within an industry a spectrum of different-sized enterprises with correspondingly different PATCs and different net profit margins. There would consequently exist at any point in time a group of the smallest enterprises that operated at the margin of the industry and as a group earned no profits, and hence had, on average, zero net profit margins, whereas the larger lower-cost enterprises would have positive net profit margins. The questions that Steindl sought to answer were: What regulated the competitive pressure within the industry which was the very force that determined who were the marginal enterprises? How did net profit margins move over time? The framework used by Steindl to examine the questions involved analyzing the pattern of competition within an industry where there were many small enterprises and entry was easy, and where there were fewer and larger enterprises and entry was more difficult. To establish the basis of his analysis, he assumed that technical change was continuous, that enterprises invest only in their own industry, that increases in the entrepreneur's own capital were an important

5 Steindl did not provide any details as to how the cartel or price leader actually set their price, which became the industry price. However, in the last chapter of the book he described mark up pricing in the context of discussing the "iron law of wages" (Steindl, 1952, p. 236).

6 In stating both of these properties, Steindl made it quite clear that the concept of price elasticity of demand was particularly ill designed to explain both of them; consequently, he simply made no recourse to the concept in Maturity and Stagnation (Steindl, 1952, pp. 17, 67, 71).

7 Steindl argued that a spectrum of different size/cost enterprises in an industry was a permanent and universal characteristic of capitalism; and that it was due, in part, to the relative scarcity of big units of capital. Steindl defined the net profit margin as price minus PATC; the gross profit margin he defined as consisting of the net profit margin plus depreciation and the "salary" of the entrepreneur (Steindl, 1952, pp. 38–9).

8 Steindl identified the former industry type as competitive and the latter as oligopolistic. Oligopolistic industries, he suggested, were characterized as having very high four-enterprise concentration ratios and/or minimum capital requirements (Steindl, 1952, p. 72).
inducement to invest, and that the growth rate of the industry was given. Steindl also assumed that enterprises could affect their own growth rates through their sales effort, in that the sales effort would be positive if the enterprise wanted to grow faster than the industry growth rate (Steindl, 1987, 1990a).9

Starting with the case of the small-enterprise, easy-entry competitive industry, Steindl assumed that an industry price was given. Since the PATC differed among the enterprises in the industry according to their size, their net profit margins would differ as well, with the marginal enterprises having a zero net profit margin. Given that industry sales are growing, the marginal enterprises whose PATC equaled the industry price would be unable to grow; consequently, the increase in industry sales would be taken up by the larger enterprises in the industry or by the entry of new enterprises. The scenario which Steindl argued happened historically was that the progressive enterprises in the industry found that their actual capacity utilization was greater than their PDCU. With an increase in their net profit margins, and the consequent flow of greater amounts of profits into the enterprises, resulting in an increase in their rates of profit,10 the progressive entrepreneurs would, in light of their “investment function,” undertake investment in new larger-scale techniques of production which brought with them new scale economies.11 The new techniques would restore production in the progressive enterprises to their PDCU and at the same time reduce their PATC. If the industry price remained unchanged, the progressive enterprises would find that sales had not increased sufficiently to ensure that the new techniques operated at the PDCU. This would inspire the entrepreneurs to engage in sales effort with the result that the industry price would fall, in line with costs, the consequence being that the existing marginal enterprises would be driven from the industry and their sales acquired by the progressive enterprises.

This competitive process would continue, Steindl argued, as long as actual capacity utilization was greater than planned, the price–net profit

9 Steindl defined sales effort as a sacrifice, in the form of reduced prices, or increased PATC, or increased selling costs, that is undertaken by an enterprise for the purpose of increasing its sales. He also noted that the efficiency of the different forms of sales effort varied with different market circumstances. Finally, Steindl noted the theoretical possibility that a progressive enterprise could increase its selling cost and finance this cost by a corresponding price increase, but only up to the point where selling methods ceased to be superior to price cutting as a way to increase sales (Steindl, 1952, pp. 42, 55–66).
10 See pp. 155–8 for Steindl’s discussion of the relationship between the net profit margin and the rate of profit.
11 Steindl defined “progressive enterprises” as those enterprises which took the lead introducing technical innovations (Steindl, 1952, p. 45).
margin at PDCU generated excessive profits, and the rate of profit on new investment was expected to increase so that the progressive entrepreneurs would be continually propelled to invest in larger-scale capital-intensive techniques of production. As the process of lowering PATC and increasing sales efforts resulted in continual declining industry price, there would be a continual exit of marginal enterprises from the industry and an increase in the size of the progressive enterprises. The process would continue in the long term until the net profit margin had adjusted to the declines in PATC and increased sales effort, so that it was just sufficient to provide investment funds to enable the progressive enterprises to accommodate its portion of the growth of industry sales, taking into account the progressive increases in the degree of capital intensity and any changes in the gearing ratio. Thus, as long as the industry remained competitive, the level of net profit margins and prices would be limited by growth and technical requirements, net profit margins would remain relatively stable (as would the wage share) over time, the rate of profit for the progressive enterprises would continually increase, and the actual degree of capacity utilization would be continually gravitating towards PDCU for each enterprise.

The competitive process noted above could have a different ending if the process of creating larger enterprises resulted in the existence of relatively large "marginal enterprises" which had positive net profit margins and financial resilience and hence greater staying power. In this case, the increased sales effort by the progressive enterprises would, if successful in eliminating the marginal enterprises, be so costly that success would result in a decline in the rate of profit, unless it was offset by significant cost reductions achieved by the introduction of new technology. Consequently, the net profit margin at the PDCU would be more than sufficient to provide investment funds for growth, taking into account increases in the degree of capital intensity. Thus the progressive enterprises would have to reduce investment so as to prevent the emergence of unwanted excess capacity. Moreover, the entrepreneurs of the progressive enterprises would not, Steindl argued, find it easy to redirect their surplus investment funds to other industries, since cross-entry into other similar industries would not appear any more attractive than its own, while entry into competitive industries would take a significant amount of money and time to acquire the customer goodwill necessary for entry to be a financial success. The level of the net profit margin, and hence also the rate of profit, would thus not, in the long term, be shaped and limited by the growth and technical requirements of the industry or of the economy as a whole; rather, Steindl concluded that a significant degree of arbitrariness in the long-term determination of the new profit
margins existed in oligopolistic industries dominated by few relatively large business enterprises. As a result, the net profit margin and the rate of profit would increase while the wage share would decline over time as more industries became oligopolistic (Levine, 1975; Shapiro, 1988; Norton, 1983a).

Steindl argued that over time the industrial structure of a capitalist economy would alter as the competitive process resulted in the emergence of big enterprises and oligopolistic industries. Since the net profit margins in the oligopolistic industries could provide more investment funds than were needed to expand capacity in line with the growth of sales, the progressive entrepreneurs would reduce their investment expenditures. Consequently, the progressive emergence of oligopolistic industries had a damping effect on aggregate economic activity and hence on the degree of capacity utilization throughout the economy. The reaction of the entrepreneurs in the competitive industries to a reduction in the growth of sales would be to cut prices by reducing their net profit margins, while the enterprises in the oligopolistic industries reduce their investment expenditures but maintain their new profit margins. As long as the positive stimulus of price reductions outweighed the depressing impact of investment expenditure reductions, the capitalist economy would continue to grow, albeit at a slower rate. However, the secular trend towards more oligopolistic industries would, in Steindl's view, mean that the capitalist process would decline and eventually stagnate. Thus the competitive process, which had created impressive growth in the early stages of capitalism, also produced, as an inherent consequence of its own action, economic stagnation at a latter stage. Steindl later acknowledged that the above scenario implied that it was not legitimate to assume the industry growth as given. He also acknowledged that his theory did not deal adequately with the disruptive effects of a new entrant to the industry who uses a new technology or produces a new product (Steindl, 1976, 1979, 1987, 1990a; see also Shapiro, 1981).

**Developments in the stagnation thesis**

The subsequent developments of the Kalecki–Steindl stagnation thesis were undertaken by economists who had no direct association with Kalecki and Steindl, but were attracted to the message of the thesis.

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12 Steindl dismissed the effectiveness of the classical assumption of the tendency toward a uniform rate of profit as the long-term determinant of the structure of prices and net profit margins in the economy on the grounds that the long-term mobility of capital did not hold (Steindl, 1952, pp. 67-8).
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Coming from the Alvin Hansen school of economic stagnation, Sylos-Labini developed similar arguments for stagnation based on increasing profit margins and grounded on the normal cost prices doctrine. He began his analysis by stating that the economy could be divided into two sectors – one in which all the industries were competitive and a second in which the industries were oligopolistic and hence imperfectly competitive. When faced with cost-reducing innovations, enterprises in the competitive sector would respond with matching price reductions whereas the enterprises in the oligopolistic sector would respond by partially offsetting wage increases, by widening their profit margins, and by some price reductions. Since cost-reducing innovations also contributed to progressive industrial concentration and hence to the continual spread of oligopolistic industries, the fruits of technical progress, Sylos-Labini argued, were distributed by rising consumer and enterprise money incomes. Consequently, the absorption of the workers made redundant by technical progress depended primarily on the expansion of effective demand to create the investment opportunities on which large enterprises could spend their “extra profits” and entice consumers to spend their “extra income.” However, Sylos-Labini argued, there existed no inherent mechanism within an oligopolistic capitalist economy that would always ensure that effective demand expanded sufficiently, so that economic stagnation and growing unemployment was the general tendency of an oligopolized capitalist economy, unless an external stimulus was forthcoming from growing public expenditure (Sylos-Labini, 1962; Roncaglia, 1994).

The most ardent admirers and developers of the thesis, however, were the Marxists of the monopoly capital school, especially Paul Baran and

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13 The stagnation thesis was a recurring theme in Robinson’s analysis of economic growth. However, her discussion of it was restricted to identifying the “effect of a rise in thriftiness” and then to suggesting that whatever might cause it to rise, such as the growth in monopoly, would be counteracted by other powerful forces, such as trade unions. In short, economic stagnation was a theoretical possibility, but not very likely (Robinson, 1952, 1956, 1957, 1960, and 1962; see also Asimakopoulos, 1969).

14 Although many of his arguments corresponded quite closely to many of Steindl’s, Sylos-Labini was not influenced by Maturity and Stagnation. A principal but subtle theoretical difference which separated them was that Sylos-Labini worked with the concept of a competitive uniform rate of profit whereas Steindl was not concerned very much with the concept or about the determination of relative prices (Roncaglia, 1994).

15 Sylos-Labini noted that enterprise investment incentives in a competitive economy were also generated by a fall in the prices of direct and overhead inputs and in the interest rate for investment borrowing. But, under oligopoly, price reductions were not frequent and most enterprises financed their investment with retained earnings. He also noted that if enterprises did not spend their extra profits on capital investments, they would probably devote them to financial investments and this would weaken effective demand.
Paul Sweezy. Although a Marxist theory of monopoly capitalism was first broached at the turn of the century, none of the theorists examined the impact of the large corporate enterprise on the operation of a capitalist economy with any degree of thoroughness. After this initial phase the theory remained in a rather dormant state until it was revived in the 1950s and early 1960s and eventually tied to the Kalecki–Steindl stagnation thesis by Baran and Sweezy. Central to the Marxist arguments in the 1950s and early 1960s was the view that the emergence of large corporate enterprises since 1900 had gradually altered the nature of competition under capitalism, with the result that there was a gradual reduction in the profitability of competitive industries, widening profit margins in the oligopolistic and monopolistic industries, and leading to a decline of investment opportunities due to increase in the introduction of capital-saving technology. These changes would lead to the eventual stagnation of the capitalist economy, unless some way was found to increase investment to match the potential profits generated by the widening of profit margins. While broadly compatible with the Kalecki–Steindl stagnation thesis, the arguments of the monopoly capital school were not as “tight” and incisive as those of Kalecki and Steindl. However, the Marxists did succeed in explicitly locating the question of economic stagnation in the characteristics and complex behavior of the large business enterprise, in raising the question of what form the utilization of the potential profits would have to take if stagnation was to be avoided, and in showing the need to delineate the relationship between the large business enterprise and the state (Howard and King, 1992; Sawyer, 1988; Gillman, 1957, 1965; Baran, 1957; Sweezy, 1972, 1991; Semmler, 1984; Foster and Szajfer, 1984b).

The arguments of the monopoly capital school were integrated with the Kalecki–Steindl stagnation thesis by Baran and Sweezy in their book *Monopoly Capital* (1966). In their synthesis, the austere business enterprise of Kalecki and Steindl comes alive with characteristics and a sense of self-importance and destiny. The large corporate enterprise of mid-twentieth-century America, Baran and Sweezy argued, was controlled and directed by management whose goal was growth, that is the accumulation of capital, funded through profits. Those who made up management were drawn from the middle and upper-middle classes and identified with the enterprise to the extent that its goal was their

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Sweezy also argues that the early theorists also did not consider whether the rise of the large business enterprise and its consequent monopolization of markets affected the theoretical concepts and arguments they were using. Sweezy felt that it was illegitimate to use theoretical concepts fashioned to examine competitive capitalism to examine monopoly capitalism.
goal. Consequently, management ceased to be composed of individual business leaders but was now a team dedicated to the advancement of the enterprise. Because the corporate enterprise dominated many markets and was able to control prices and production, management was capable of generating enough profits to finance all its planned investment and to maintain a moderately steady dividend policy to satisfy all stockholders. Freed from “outside” stockholder meddling and from financial dependence on banks and other financial institutions, the corporate enterprise became an island of power which the management could direct as it deemed appropriate.

Although the corporate enterprise was an island of power, management could not fully control its destiny because of the existence of other large corporate enterprises. Adopting a conservative long-term view, management embraced a non-aggressive attitude vis-à-vis its competitors. In particular, to avoid costly price wars and to maintain orderly and profitable market operations, market prices were set, Baran and Sweezy argued, by an acknowledged price leader at a level that maximized profits for all. However, enterprises would compete for larger market shares as this would lead to declining costs and since management in their pursuit for profit and growth would not pass on the cost reductions through lowering prices, to widening profit margins. In choosing to widen its profit margins, the management of the corporate enterprise behaved rationally within the context of monopoly capitalism but, as Baran and Sweezy argued, this rational behavior pushes the economy towards stagnation. The pursuit of profits could not in fact be successful if the increased potential profits from the widening of profit margins were not realized. Since the management of the large corporation were not risk-takers, they would not increase their investment expenditures pari passu with the widening of profit margins; moreover, because they maintained a stable payout ratio for dividends, increasing capitalist consumption to match the increased profit margins was also not possible. However, management would undertake sales efforts to create demand for their products and to produce new wants and, hence, new products.

17 The widening of profit margins is the basis for Baran and Sweezy’s law of the rising surplus under monopoly capitalism (Baran and Sweezy, 1966, pp. 71-2).
18 Steindl also assumed a stable pay-out ratio for dividends. As Bruce Norton has noted, this assumption essentially assumes that capitalists cannot correct the tendency to stagnation by transferring increasing amounts of retained profits to consumption (Norton, 1983a, 1986, 1988, 1988c).
19 Sweezy (and Steindl – see Steindl, 1990a) later extended this point to argue that the limited sales growth of existing products, in part, drove the business enterprise “to move outside of and beyond its historical field of operation, to penetrate new industries and
addition, Baran and Sweezy argued, government expenditure on social consumption and on the military absorbed some of the potential profits from the widening of the profit margins. But even these possibilities were limited, thus leaving the tendency towards stagnation not completely checked. It was in this context that Baran and Sweezy argued that the large corporate enterprise and the state established a relationship in an attempt to stop the drift towards stagnation (Baran and Sweezy, 1966; Sweezy and Magdoff, 1972; Sweezy, 1979; Norton, 1983; Lebowitz, 1990).

Developments in the stagnation thesis continued after the publication of *Monopoly Capital*.20 Sweezy explicitly connected the thesis to labor force participation rates and unemployment rates, while Harry Braverman (1974) connected it to the deskilling of the labor process and the degradation and polarization of working conditions. In particular, Braverman argued that management’s drive for cost reductions within the context of expanding sales increasingly took the form of taking control of the labor process away from workers, leaving them only with unthinking working motions. Furthermore, with Harry Magdoff, Sweezy explicitly introduced the financial sector and financial enterprises into the thesis (and hence into the mark up prices doctrine) and argued that their presence in a stagnant economy promoted demand through their extension of consumer credit and their own purchases of investment goods. However, the positive effect on demand was counteracted since the financial assets promoted by the financial enterprises enabled industrial business enterprises to spend their surplus profits on financial investments rather than on plant, equipment, and research; and this move to making money as opposed to making goods further reinforced, Sweezy and Magdoff argued, the stagnation tendencies in the economy.21 Finally, David Levine (1975) argued that to assume entrepreneurs had a natural propensity to accumulate capital, as Steindl and Baran and Sweezy did, implied that capital accumulation was a self-sustaining process and that the widening of profit margins was a direct outcome of the process.22 But the widening profit margins created a barrier to the

new markets — in a word, to go conglomerate and multinational” (Sweezy and Magdoff, 1972, p. 100). Sweezy also noted that the move to being a multinational enterprise was assisted by the existence of an unused pool of managerial talent within the enterprise.

20 KeithCowling’s work on monopoly capitalism and stagnation is not considered because of its neoclassical foundations (see n. 12 in chapter 9, p. 172) (Cowling, 1982; Sawyer, 1988).

21 Steindl (1990a) has also put forward a similar argument.

22 The issue of whether basis of capital accumulation can be reduced to a self-sustaining activity based on the natural propensities of capitalists is questionable (see Norton, 1983; 1986; 1988; and 1988a).
accumulation process. Therefore, Levine argued, entrepreneurs would overcome the barrier and hence avoid economic stagnation through product innovation, which becomes, in his view, the representative form of competitive and investment activity under monopoly capitalism (Sweezy and Magdoff, 1972, 1988; Sweezy, 1991; Foster, 1994; Magdoff and Sweezy, 1987; Lebowitz, 1990).