WEITERE HAUPTARTIKEL

Josef Steindl and capitalist stagnation

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1. Josef Steindl 1912-1993

In 1952 the Austrian economist Josef Steindl published his best-known book, "Maturity and Stagnation in American Capitalism" (hereafter M&S). Steindl argued that the displacement of free competition by oligopoly, which had occurred in many branches of American manufacturing industry beginning in the 1890s, had increased profit margins and reduced the degree of capacity utilisation in the industries concerned. High and increasing levels of excess capacity had discouraged investment spending, reducing the rate of growth of effective demand and further reducing the level of capacity utilisation. The consequence was a lower rate of economic growth in the United States, which indicated a strong tendency towards stagnation. Steindl's argument had affinities with some elements of Marxism, and also with the Kaleckian variant of what would soon become known as Post Keynesian economics, but it seemed to have little relevance to the boom years of the 1950s.[1] Two decades later, M&S attracted renewed critical attention in the depressed 1970s, and more recently been it has been cited approvingly by some radical macroeconomists in the wake of the Global Financial Crisis of 2007/08.

Josef Steindl was born in Vienna on April 14, 1912. His father, Rudolf Steindl, was a clerk at the Austrian State Printing Office and his mother, Leopoldine, was a sister of the celebrated Art Nouveau painter Koloman Moser.[2] In 1929 he began his studies in economics at the Vienna Business School (today's University of Economics and Business Administration), writing a dissertation on the theory of monetary equilibrium and obtaining his doctorate in 1935. Steindl's most important teacher was the liberal economist Richard Strigl, a pupil of Eugen von Böhm-Bawerk, whom he recalled as "a kind man and good teacher who taught me everything I soon came to disbelieve. He taught me, however, what economics is about, which is perhaps more than some students are learning today."[3]

In 1935 Steindl began his professional career at the Austrian Institute of

Business Cycle Research (Österreichisches Institut für Konjunkturforschung), known today as WIFO, the Austrian Institute of Economic Research (Österreichisches Institut für Wirtschaftsforschung). WIFO was founded in 1927 by Friedrich von Hayek and Ludwig von Mises, in opposition to the mediocre and anti-Semitic conservatives who dominated economics at the University of Vienna:

> "In analogy to the Vienna Secession in the arts – a movement of painters, sculptors and architects in opposition to the prevailing conservatism of the Vienna Künstlerhaus with its traditional orientation toward Historicism – one might speak of the Institut für Konjunkturforschung and its founders as a sort of 'Secession' in economics, formed in opposition to the internationally isolated and closed conservative circle at the University of Vienna." (Guger and Walterskirchen 2012, pp.136-137)

By 1935 Oskar Morgenstern was the director of WIFO and the young Gerhard Tintner was a staff member, introducing the new Keynesian macroeconomics to Josef Steindl and his colleagues. "As early as 1937", when Steindl published an incisive critique of Roy Harrod's "Trade Cycle" (1936), "he proved himself a well-informed contributor to the debate that was starting on Keynesian economics."[4]

Steindl's family was not politically active, and he himself claimed to have become a socialist only after his exile from Austria in 1938, and to have spent his "formative years" not in Vienna but in Oxford, when he was already in his late twenties and thirties.[5] But the story is a little more complicated than this, as he himself admitted:

> "I hated the various Fascist movements of the time, mainly for their militarism. I felt no particular social engagement; my upbringing had been apolitical and I had no links to left-wing movements. But I could not fail to be impressed by the surrounding unemployment and misery, the more so since it affected my own position. Unemployment has remained a very important concern of mine." (Steindl 1990, p. 97)

It is hard to believe that a highly intelligent young man with these beliefs, who was studying economics at university, could have had no interest in or knowledge of the socialist ideas that motivated so many of his contemporaries. I find it easier to accept Heinz Kurz's (1999, p. 677) claim that the young Steindl was "already acquainted with Marx's works, together with the writings of the Austro-Marxists Max Adler, Otto Bauer, Rudolf Hilferding and others".

At all events, his political consciousness was greatly stimulated by the events of 1938, when the Anschluss forced him into a twelve-year exile in the United Kingdom, first as a lecturer at Balliol College, Oxford and then as a researcher at the Oxford Institute of Statistics, which was "largely a congregation of European emigrants (Thomas Balogh, Fritz Burchardt, Michal Kalecki, Kurt Mandelbaum, E. F. Schumacher) with a minority of

British scholars (J. L. Nicholson, G. D. N. Worswick and the director, A. L. Bowley)". However, "the inspiration of the Institute and my guru was Kalecki".[6]

While at the Institute Steindl published his first short book, "Small and Big Business" (1945), and also wrote more than twenty journal articles, on the theory of the firm and the economics of war and peace. He returned to Austria in 1950 and resumed his employment at WIFO, where he spent the remainder of his professional life, entirely outside the university system:

> "Austrian academia initially ignored Josef Steindl; when he submitted Maturity and Stagnation (1952) as his professorial dissertation it took his colleagues a full year to decide not to accept it because it was written in English. It was only in 1970, when a new generation took over, that the University of Vienna conferred an honorary professorship on Josef Steindl, and in 1985 the University of Graz followed with an honorary doctorate." (Guger and Walterskirchen 2012, p. 138)

As his friend Tibor Scitovsky (1994, p. 465) noted, Steindl's work "failed to receive the attention and accolade it deserved. In that respect", Scitovsky wrote, "his work resembled that of his fellow Austrian, Josef Schumpeter". But the similarity stopped there. "The two Josefs' personalities could not have been more different: Schumpeter was an aggressive, flamboyant extrovert who sought and loved public exposure; Steindl was the very opposite."

In fact he "was a man of few words, especially when it came to private and personal matters",[7] but he was a prolific writer on a wide range of economic issues, including macroeconomic policy, industrial structure, technology policy, educational planning, the Austrian labour market and economic policy in the European Union.[8] His collected Economic Papers (Steindl 1990), published three years before his death, had six sections, on the firm, technology and education, growth and cycles, saving and economic policy, economics and economists, and stochastic processes. There is a substantial secondary literature on his contributions to several of these subject areas, including prices and pricing (Lee 1998; Bloch 2000a; Shapiro 1981); industrial concentration (Andrews 2005; Bloch 2000b, 2005; Hogeland 2005; Levine 2005; Mott 1992); stochastic processes (Corsi 2012); and growth, cycles and growth policy (Guger and Walterskirchen 2012; Jarsulic 2005; Shapiro 1988; Tichy 1994).

Josef Steindl retired from WIFO in 1978, but remained as a consultant and continued to publish prolifically. In the 1980s he was a popular teacher at the Trieste summer school established by heterodox economists in Italy.[9] He died on 7 March 1993 at his home in Vienna. On a personal note, I should report that he inadvertently contributed to one of the few serious disappointments of my own academic career. In early 1993 I was in Vienna on the final stage of a world tour interviewing Post Keynesians for what eventually became the book "Conversations with Post Keynesians", which included very fruitful discussions with Kurt Rothschild and Egon Matzner.[10] In that pre-electronic era I had written to Steindl requesting a meeting and he had replied, giving me his home phone number and telling me to ring him when I arrived in Vienna. I did so, many times, but there was no reply. I later learned that he was in hospital, and only recently discovered that he had been sent home no more than a week after I left Austria. Fortunately the biographical literature on Josef Steindl is substantial, including the text of one conversation (Lima 1995), a comprehensive bibliography (Guger 1993), a number of obituaries (Harcourt 1994a; Kregel 1993; Rothschild 1994; Sawyer 1993; Scitovsky 1993, 1994), and several subsequent appraisals of his career (Guger and Walterskirchen 2012; Harcourt 1994b; Kurz 1999; Mott 1994, 1997; Shapiro 1992 [2000], 2012). An updated bibliography can be found at Josef Steindl's homepage: www.josef-Steindl.at, and his unpublished manuscripts are available at the library of the University of Economics and Business Administration: https://viewer.wu.ac.at. But it would have been really good to talk to him in person, very close to the end of his distinguished and highly productive life.

2. "Maturity and Stagnation" (1952)

The 246 pages of M&S are divided into two parts, one dealing with microeconomic issues and the other with macroeconomics. The eight chapters of Part I, "Prices, costs and profit margins", occupy 106 pages, or approximately 40% of the book. Here Steindl draws on the research reported in his first book, "Small and Big Business: Economic Problems of the Size of Firms" (1945), to criticise the existing theories of imperfect competition and develop his own account of the determinants on the oligopolistic firm's "internal accumulation", by which he means investment financed from retained earnings rather than from external borrowing. He also presents a very considerable quantity of statistical data on US manufacturing industry for the period 1899-1939, concluding that the share of wages in value added had fallen considerably during this period, especially in the 1920s.

The 140 pages of the six chapters of Part II, "The accumulation of capital", account for the remaining 60% of the book. Steindl begins with a formal macroeconomic model of "internal accumulation in the economy as a whole", followed by chapters on the damaging consequences of unintended excess capacity and on the operation of the capital market. The largely empirical chapter XII reports on the accumulation of capital in the United States between 1869 and 1939, while chapter XIII sets out a formal mathematical model of investment, economic growth and the trade cycle, and the concluding chapter XIV provides a broadly favourable summary of

Karl Marx's views on the accumulation of capital. Fittingly, the final section of this final chapter bears the title "underconsumption and the crisis of capitalism" and is largely devoted to an assessment – again, a generally positive one – of Paul Sweezy's treatment of these important issues in the appendix to chapter X of his "Theory of Capitalist Development" (1942).

M&S is not an easy book to read. There is neither an introductory nor a concluding chapter, and no paragraphs or sub-sections either at the beginning or the end of each chapter in which the arguments are summarised and their relationship to what has come before and what is to follow is made clear. Steindl's attempts to provide summaries of his arguments usually come in the middle of each chapter, and they are not always very helpful. Even the two-page index leaves a lot to be desired. The first index reference to "maturity", for example, is to the penultimate page of chapter XIII, even though the concept of maturity is central to many of the earlier chapters. Fortunately here, at long last, he does provide a clear summary of the underlying analysis of the book as a whole, which is worth quoting at some length:

> "The theory is that already towards the end of the last century – in the 1890s – the American economy had undergone a transition which gave considerable weight to the oligopolistic pattern in the total economy. This transition had raised profit margins at that time … As a consequence there should have been a fall in utilisation below the previous level. We might regard the big depression in the middle of the [eighteen-] nineties as the signal of these difficulties arising from an increase in profit margins, and consequent fall in effective demand in relation to capacity. The decline in the average long-run level of ultilisation would then be the explanation for the falling off in the rate of growth of capital." (Steindl 1952, pp. 191-192)

Alternatively put, the root of the problem was the redistribution of profits from competitive to oligopolistic firms, since

> "… a certain marginal volume of profits calls forth less additional investment than it does in a competitive industry. This hypothesis is justified by the consideration that oligopolistic industries have to be much more afraid of excess capacity than others, as they cannot as easily hope to make room for themselves at the expense of competitors. The shift in profits to oligopolistic industries may thus equally well explain the primary decline in the growth of capital." (ibid., p. 192)

Steindl concluded that he had provided an endogenous account of the decline in the rate of economic growth that emphasised "the development of certain essential features of capitalism", and did not rely on "temporary and accidental" phenomena, unlike Alvin Hansen's well-known exogenous explanation of stagnation.[11]

The book was reviewed in three major journals, on both sides of the Atlantic. In the Economic Journal the reviewer was the German-born economist William Fellner, then based at Yale University and soon to become the author of an influential book on the theory of oligopoly, "Competition among the Few" (1960). Fellner's principal objection to M&S was, however, primarily empirical rather than theoretical. "Steindl's interpretation of the data that he presented was often tenuous", Fellner (1955, p. 133) complained, especially with respect to the alleged long-term decline in the wage share in the United States. The evidence concerning the supposed fall in the rate of profit was also "quite inconclusive".[12] Fellner (1955, p. 135) concluded that much of Steindl's theoretical analysis was "legitimately controversial … challenging and thought-provoking. But uncritical reading of the book can be very misleading."

In the Review of Economics and Statistics the reviewer was none other than Alvin Hansen, who began an extended and broadly favourable review by distinguishing three types of stagnation theory. The first relied upon exogenous factors (stressed by Hansen himself, and perhaps also by Roy Harrod), while the second derived a tendency to stagnation from frundamental changes in social institutions (Joseph Schumpeter). Only the third approach explained stagnation in terms of endogenous factors inherent in the development of capitalism; this was Steindl's original contribution. Hansen (1954, p. 411) provided a long and accurate summary of M&S, objecting only that the data used by Steindl were simply not adequate to provide strong support for his theoretical analysis. He returned to this theme at the end of the review, after a lengthy restatement of his own views on the causes of stagnation. "Reverting again to Mr. Steindl, it may well be that his hypothesis might be a useful point of departure for further research into the 1929-33 depression … We need much more study of the interwar period" (ibid., p. 414).

The reviewer chosen by the American Economic Review was Daniel Hamberg of the University of Maryland, who was himself working on a book on the theory of growth and business cycles.[13] His unusually long (four-page) review was largely favourable. "This is a most interesting and provocative book", he began. "To all those interested in the topic of capitalist economic development it is strongly recommended."[14] Hamberg (1954, p. 414) noted Steindl's antecedents in the work of Marx, Joan Robinson, Keirstead, Domar "and most of all, Kalecki", and stressed his "praiseworthy effort to test and buttress the theoretical argument, where possible, by drawing on empirical data". Hamberg summarised Steindl's theoretical analysis at some length and declared himself in broad agreement with it.

However, there was one aspect of Steindl's argument that was open to criticism. His "effort to develop a strictly endogenous theory of investment" forced him to ignore the introduction of new products, a decision "reflecting the persistent failure of 'macro' economists, particularly those with a mathematical or econometric bent, to subject the behaviour of innovational investment to economic analysis".[15] Thus he left open one fundamentally important question: whether the large firm, with its increased monopoly power, has speeded up the pace of technical progress or instead retarded the rate of innovation. "This issue strikes the reviewer", Hamberg (1954, p. 418) concluded, "as one of the central, and still unanswered, questions of mature capitalism." As we shall see in the next section, Steindl took this criticism very seriously indeed.

Serious attention was also paid to M&S by the two most prominent American Marxist economists of the 1950s, Paul Baran and Paul Sweezy, who were already engaged in a substantial project on the contradictions of post-competitive capitalism in the United States. As we have seen, Steindl made favourable references to Sweezy in M&S. Sweezy himself had left academia to become an independent scholar, while Baran – supposedly the only tenured Marxian economist employed in any American university in the McCarthy era – taught at Stanford University; ironically it would be Stanford that provided Steindl with his only postwar university appointment, in the form of a visiting professorship in 1974/75, ten years after Baran's untimely death. There are several approving references to Steindl in "The Political Economy of Growth", including an acknowledgement by Baran that he had borrowed "some sentences" from M&S on excess capacity,[16] and a statement of strong agreement with his analysis of the growth of monopoly and oligopoly in United States industry. "It is the adoption and most interesting exploration of this approach" in M&S, Baran (1957 [1973], p. 193n) maintained, "that renders his book singularly valuable and important. In much of what follows I have drawn heavily on Steindl's work."

Seven years later, in their influential co-authored book on "Monopoly Capital" (1966 [1968], p. 66), Baran and Sweezy repeated this favourable assessment: "anyone familiar with the work of Kalecki and Steindl will readily recognise that the authors of the present work owe a great deal to them". There is an acknowledgement of Steindl's analysis of endogenous investment,[17] and a more critical note on his treatment of technological progress, which (they agree) determines the form rather than the volume of investment spending. "It is one of Steindl's great merits to have seen this relationship clearly", they argue, citing M&S p. 133, "but he made the mistake of formulating it as a general proposition applicable to all stages of capitalism", instead on confining it to the monopoly stage as Paolo Sylos Labini had done.[18] Nonetheless, Baran and Sweezy (1966 [1968], p. 235) noted with regret that Steindl's "powerful treatise", which was "aimed at solving a problem which every serious analyst should have considered a standing challenge to his sense of scientific responsibility, was virtually ignored and to this day has not received a fraction of the attention it richly deserves".

3. "Maturity and Stagnation" (1976)

Ten years later Sweezy was able to put this right, using his Monthly Review Press to publish a reprint of M&S, with a brief but incisive new introduction by the author mainly written in 1973, but with a short postscript dated June 1976.[19] He began by noting that the first edition of the book had "appeared at a time which could not have been less propitious for its success", with full employment and rising living standards making any discussion of stagnation appear totally irrelevant.[20] Drawing on earlier work by Kalecki, Steindl attributed the postwar prosperity largely to increased government expenditure, above all on armaments.

But he also engaged in an important piece of self-criticism, possibly inspired by Daniel Hamberg. In chapter X, he conceded, "I denied that innovations stimulate investment", on the grounds that there was usually a long interval between a scientific invention and its actual exploitation in production. "There lay my error: those ideas (e.g., new products) which are sufficiently advanced, which can be exploited without too much delay and risk, and which somehow appeal to the businessman's mind are scarce indeed, and their emergence in each case is a powerful inducement to invest."[21]

Written three years later, Steindl's "postscript" acknowledged that "the scene has changed once again", and "the cheerful extroverted era of economic growth has apparently come to an end". He gave three reasons for this: the reduction in international tension between the superpowers that had reduced the rate of growth of military spending; rising social tension within the main capitalist powers as a consequence of sustained full employment; and the emergence of energy and raw material shortages, leading to rising primary product prices. For these reasons "the arguments against full employment have got the upper hand in the councils of the powers, and thus we witness stagnation not as an incomprehensible fate, as in the 1930s, but stagnation as a policy".[22]

None of the major journals showed any interest in the reissue of M&S. In a brief review in the Business History Review, Stewart L. Long (1978, p. 406) of California State University, Fullerton, summarised the analysis of M&S but regretted that "it is really a work of economic theory only incidentally concerned with possible corroborating historical evidence", with nothing more recent than "selected pre-World War II statistics". The only other review that I have been able to trace was also brief. In the Southern Economic Journal, Benjamin P. Klotz (1979, p. 1321) of Temple University noted that Steindl's analysis in the first edition of M&S had lost force when the continuing growth of industrial concentration after 1945 had not in fact been accompanied by economic stagnation. The neglect of the book had been unfortunate, Klotz suggested, "because the growth of a relatively fixed-price oligopoly sector, at the expense of the flexible-price competitive sector, changes the pattern of economic fluctuations, as recent disequilibrium analysis has shown". He agreed with Steindl's new (1976) argument that "stagnation results from conscious economic policy to fight inflation", but was unconvinced by other aspects of the introduction to the new edition of the book.

Beginning in 1979, Steindl wrote a series of journal articles on these issues. The first and longest appeared in the Cambridge Journal of Economics. Here he provides something which, astonishingly, is missing from M&S: a definition of "stagnation", which he views as equivalent to "stunted growth".[23] Again he emphasises the cumulative nature of the processes that are at work in an oligopolistic economy with rigid profit mark-ups: an initial exogenous decline in the growth rate leads to reduced capacity utilisation, which induces a fall in investment and thus a further decline in growth.

But why did the growth rate decline after two post-war decades of strong growth and full employment? Steindl (1979 [1990] 118-119, 119-126) first provides a one-page summary of his interpretation and then elaborates on the arguments in the final two sections of the paper. Five factors were involved, he believed. First, the relaxation of tension between the two superpowers had reduced government expenditure on armaments. Second, a rising standard of living had led to an increase in the saving ratio. Third, the profitable investment opportunities in Europe for the adoption of more advanced American production technology had largely become exhausted. Fourth, there was the "traumatic entry of the environmental and energy problems" of the early 1970s.[24] Finally, business opposition to full employment had intensified, having become a permanent feature of capitalist politics rather than merely generating (as Kalecki had suggested) a political business cycle.

Steindl was just a little ambivalent on this fifth and final point. As I objected at the time, he did "not endorse the view that wage militancy, declining effort levels and the consequent profit squeeze were fundamental to the crises of the 1970s, since 'it is not so much objective circumstances which have changed as political attitudes'".[25] And yet there was strong evidence that "objective circumstances" had indeed changed in the late 1960s and early 1970s, with organised labour placing severe pressure on both the rate of profit and the profit share towards the end of the long boom.[26] Nine years later, in a paper written in 1988 (after the profit squeeze had ended and organised labour had been severely weakened) but only published posthumously in 2005, he seems to have changed his mind on this critical issue. He now asserted

> "… not only that distribution is the element which accounts for the difference in [capitalist] behaviour in [the] short and long run, but also that the continuation of the growth process depends essentially on the action of certain

> correctives to the tendency of technical progress which tends to shift income towards profits; correctives, either in the form of aggressive competition or in the form of pressure from labour (in an open economy) will be necessary in order to prevent the appearance of continuing overcapacity, which would frustrate the further accumulation. Thus distribution turns out to be a most important element in the explanation of the normal growth process." (Steindl 2005, p. 172; stress added)

"Objective factors", on this account, are every bit as important as "political attitudes".

A lot more could be said about Steindl's later writings on growth and instability, his relationship to Kalecki, and his expectations concerning the future of the capitalist world economy (some of the relevant secondary literature includes Bernstein 2005; Chaloupek 1994; Cowling 2005; Flaschel and Skott 2006; Guger, Marterbauer and Walterskirchen 2006; Norton 1986, 1988; Semmler 1984; and Toporowski 2005, 2016). Space constraints require me to confine the discussion of this literature to three major reformulations of Steindl's insights, all published after his death, by Amitava Dutt (1995), Marc Lavoie (2014) and Eckhard Hein (2016).

Dutt reformulated Steindl's model to avoid some technical difficulties that had arisen from his use of mixed difference-differential equations and to allow for a precise analysis of sources of significant cyclical instability (which is not easy to incorporate in any formal treatment of macroeconomic stagnation defined, as it was by Steindl, as "stunted growth"). It is a highly technical paper, with a good verbal discussion of the principal results:

> "Our dynamic analysis of the previous section clearly shows the two potential sources of instability in the economy verbally discussed by Steindl (1952), but not formally analyzed because of his focus on the limiting values of the variables to the neglect of the underlying dynamics. The first source (which we earlier called 'financial') has to do with a divergence between the firms' desired gearing ratio and the actual gearing ratio (see Steindl, 1952, pp. 112-121): a high (low) ratio of own capital to total capital may lead firms to increase (reduce) investment, which may further increase (reduce) the ratio of own capital to total capital as a consequence of their dividend policy. The second source (which we earlier called 'real') has to do with a divergence between the actual rate of capacity accumulation and the desired rate of capacity accumulation, which according to Steindl (1952, pp. 135, 137), may result in a downward or upward spiral in which a higher (lower) degree of capacity utilization results in a higher (lower) rate of investment which in turn leads to a higher (lower) rate of capacity utilization." (Dutt 1995, pp. 28-29; original italics)

Dutt's own conclusions are as follows:

> "First, financial sources of instability can destabilize the economy even if the real side of the economy is stable … Second, if the real side is stable, financial instability can occur if the economy has a low rate of growth … or if animal spirits are very weak… sufficiently strong animal spirits will in fact remove financial instability. Third, if instability arises from the real side of the economy … financial factors cannot stabilize the economy." (ibid., pp. 30-31)

Finally, under certain clearly defined conditions, a rise in monopoly power, as measured by the profit mark-up in price formation, will indeed have a retarding effect on the long-run equilibrium rate of growth.[27] As Dutt (2005) has more recently noted, Steindl's model can be further extended to take account of other omitted issues, including the labour market, government fiscal policy and the open economy.

In his authoritative graduate text "Post-Keynesian Economics: New Foundations" Marc Lavoie (2014) notes the importance of a number of "macro-paradoxes", in which the behaviour of economic aggregates is very different from the behaviour of their component parts. Keynes's "paradox of thrift" is probably the best-known: any individual can increase his/her saving, but if all agents attempt to do so, with no change in aggregate investment expenditure, then output and income will fall and aggregate saving will remain unchanged. Lavoie notes that a "paradox of debt" was set out by Steindl in chapter 9 of M&S:

> "To reduce the weight of indebtedness, firms may decide to cut their investment expenditures and hence the amounts they borrow. However, if all companies are pursuing this scheme, cutting back on borrowing and investment may not put matters right, for the slowdown in capital accumulation reduces the overall profitability of businesses and hence the accumulation of retained earnings. In the end, the actual leverage ratio may rise, moving in a direction that is the opposite of what is intended by the entrepreneurs." (Lavoie 2014, p. 19; see also Toporowski 2005)

Much later in the book Lavoie formalises this important insight, setting out a mathematical model of debt dynamics which allows him to contrast Steindl's thinking with the ideas of Hyman Minsky. According to Minsky's financial instability hypothesis, faster growth and higher levels of economic activity generate higher debt ratios; this is what Lavoie terms the "Minsky regime". By contrast, in the "Steindl regime" higher economic activity generates lower debt ratios.[28] This is soon extended to a comparison of the cyclical behaviour of economies in "a debt-burdened Minsky regime" and a "debt-led Steindl regime".[29]

Lavoie is making an important methodological point here, in addition to the formal analysis. The Post Keynesian "paradoxes" that he discusses early on in the book demonstrate the need for "holism" rather than "atomicism" in macroeconomic theorising (this is the sub-title of section 1.3.3 on ibid., p. 16). Neither Steindl nor Lavoie use the term, but both are profoundly critical of what I have elsewhere described as the "microfoundations delusion":[30] the notion that macroeconomics can (indeed, must) be reduced to microeconomics. Steindl's "paradox of debt" is sufficient (though not at all necessary) to destroy this delusion. Indeed, Lavoie (2014, p. 390, citing M&S, p. 12) identifies a second paradox in M&S, this time concerning intended and actual rates of capacity utilisation: firms try to create what they regard as an appropriate level of utilisation, but the aggregate effect of their behaviour may well be such as to frustrate their own intentions.

Finally, and most closely related to the Global Financial Crisis of 2007/08, is the neo-Steindl model set out recently by Eckhard Hein (2016), which includes some clear theoretical principles derived from the Post Keynesian tradition. The first is endogenous money:

> "The pace of accumulation and growth in our model is determined by firms' decisions to invest, independently of saving, because firms have access to finance for production purposes endogenously created by the financial sector 'out of nothing' at a given rate of interest." (Hein 2016, p. 20)

The second principle is the Kaldorian class-based analysis of saving behaviour:

> "When it comes to consumption and saving decisions, Steindl's, 1952, model distinguishes between firms, retaining profits which are saved by definition, and households receiving incomes in terms of wages, dividends and interests, which are partly consumed and partly saved. However, in his later work, Steindl … follows Kalecki's worker-capitalist-distinction rather than the firm-household classification. Here, we apply the latter distinction and distinguish between firms, workers' and capitalists'/rentiers' households. In order to simplify the analysis, we assume a classical saving hypothesis, i. e. workers do not save." (ibid., p. 21)

Finally, the treatment of investment in Hein's model draws heavily on both Kalecki and Steindl, emphasising the role of expected demand and internal sources of finance.

> "The latter determinant is given by retained profits, as a difference between total profits and profits distributed to rentiers in terms of interest and dividends, normalised by the capital stock, and hence by the rate of profit, the rentiers rate of return and the outside finance-capital ratio. Of course, the argument for including internal means of finance into the investment function is provided by Kalecki's … 'principle of increasing risk'." (ibid., p. 22)

Hein establishes quite complicated analytical solutions for the equilibrium rates of capacity utilisation, capital accumulation and profit. He sets out the conditions under which his Steindlian model economy would display periods of low capacity utilisation, low growth and a low profit rate, and so enter into a period of stagnation. This will occur under the following conditions: a fall in autonomous investment growth (or autonomous consumption, government expenditures, or exports) and/or a fall in "animal spirits" of firms; a fall in the rate of productivity-enhancing innovations driving investment; a rise in the target rate of capacity utilisation of firms; a rise in the rentiers' propensity to save (or if the workers' propensity to save should rise above zero; and a rise in the profit share. Finally, there is a complicated set of purely financial conditions that will generate stagnation:

> "a rise in the rentiers' rate of return, hence the interest rate and/or the dividend rate, and/or the outside finance-capital ratio, hence the debt- and/or the rentiers' equity-capital ratio, if the economy is in the 'normal case' and in a 'debt-burdened' regime, or a fall in the rentiers' rate of return and/or the outside finance-capital ratio if the economy is in the 'puzzling case' and in a 'debt-led regime'." (ibid, p. 28)

Hein (2016, pp. 39-40) distinguishes three types of growth regime: "debt-led consumption boom" and "export-led mercantilist" regimes, neither of which are sustainable in the long-run or generalisable to the world as a whole, and the Steindl-type "wage-led or mass-income led" regime, which is both sustainable and potentially global in scope, and hence is much more desirable than the other two. Finally, he draws some clear policy implications:

> "First, the Steindlian policy stance contradicts those approaches which exclusively focus on promoting potential growth through supply side measures. The Steindlian approach does not ignore the supply side; on the contrary, it carefully takes into account supply and demand side determinants of growth, but it acknowledges the endogeneity of many of the supply side determinants of potential growth. Second, the Steindlian approach encompasses those policy suggestions aimed at lifting actual output growth towards a presumably given potential growth rate through low interest rate policies, expansionary fiscal policies and the stimulation of private investment and consumption. However, the Steindlian view takes into account the required changes in power relationships, institutions, and distribution of wealth and income, both nationally and internationally, as well as the feedback effects on potential growth. These policy implications are thus much broader and richer." (ibid. pp. 40-41)

4. Conclusion: "Maturity and Stagnation" in 2018

In the aftermath of the Global Financial Crisis, mainstream macroeconomists began to reconsider the question of economic stagnation, pretty well for the first time since the 1930s.[31] However, as Hein (2016, p. 4) points out, "the theoretical foundations of modern secular stagnation debates are vague and can be challenged on several grounds". The alleged role of the equilibrium real or natural rate of interest that supposedly equalises saving and investment at full employment output levels is vulnerable to criticism both from the Cambridge controversies in the theory of capital, casting severe doubt on the existence of a downward-sloping capital demand curve, and also from the Keynesian critique of the assumed causal relationship between saving and investment in a monetary production economy. As Hein observes, the supposed neoclassical equilibrium in which "a dog called savings wag[s] his tail labelled investment",[32] and the equilibrating variable is the real rate of interest, is open to the powerful Keynesian challenge that in a monetary production economy "a dog called investment wags his tail called saving". In such an economy, saving adjusts to investment, initially financed independently of aggregate saving through a developed financial sector generating money and credit out of nothing.[33]

And there are additional grounds for objecting to the mainstream stagnation literature, which

> "seems to assume that the natural or potential rate of growth is more or less independent of aggregate demand dynamics, thus ignoring potential feedback and endogeneity channels. And third, in the modern discussion on secular stagnation, changes in institutions and power relationships between social classes, as witnessed in the rise of finance-dominated capitalism over the last three decades or so, do not seem to have an important role to play at all. Therefore, some of the policy recommendations on how to deal with secular stagnation proposed in the recent literature can also be considered to be highly problematic or at least incomplete." (ibid., p. 5)

However, Hein continues, Steindl's work provides the foundations of "an alternative view on stagnation tendencies … which is not exposed to the problems mentioned above", since

> "it does not rely on a dubious notion of an equilibrium real interest rate equilibrating saving and investment at full employments levels, in principle. Rather, it is based on the notion that modern capitalist economies face aggregate demand constraints in the long run, and that saving adjusts to investment also in a growth context. It allows for potential growth to become endogenous to actual demand-driven growth. And it seriously considers the role of institutions, power relationships and economic policies for long-run growth – and for stagnation." (ibid., p. 13)

Not that any of the mainstream stagnationists have given Steindl any credit for any of these ideas. As Hein (2016, p. 4) remarks, "[w]hat is puzzling in the current debate on secular stagnation is the almost complete absence of any references to the history of economic thought on this issue". Actually this is an exaggeration, as there is some discussion of Alvin Hansen's ideas by all three participants in the previously-cited session on stagnation at the 2015 meetings of the American Economic Association.[34] But none of them refers either to Steindl or to any of the Post Keynesian arguments developed by Dutt, Lavoie or Hein. Neither do the authors of a recent empirical study that reveals a clear negative relationship between industrial concentration and business investment.[35]

Steindl himself just might have been surprised by all this. Back in 1984 (p. 247f) he had denounced the increasing gulf between economics and the real world: “General equilibrium theory certainly exemplifies the dangers of atrophy resulting from an isolation against outside stimulus and irritation, an economics withdrawn into itself and contemplating its own navel.” “Economists”, he wrote, “have tried to throw out all relevant material from the field of economics as if it were stones, and to leave nothing but the principle of rationality.” Steindl was sure that this was an empty principle, “an infertile kind of a-priorism”. And yet he ended the article on an optimistic note. “I think the chances of a new start are not bad, because the dominant economics has largely run its course … economics has reached rock bottom. The time for new fashions cannot be far away.”[36] Alas, the neglect of M&S by all the leading mainstream theorists of economic stagnation in 2018 suggests that on this question, at least, he was wrong.[37]

Endnotes

1 King (2002) 51, 145-6.
2 Guger, Walterskirchen (2012) 135.
3 Steindl (1984 [1990]) 241.
4 Guger, Walterskirchen (2012) 137; see Steindl (1937) and the critical commentaries by King (2008) and Rothschild (2012).
5 Steindl (1984 [1990]) 242.
6 Steindl (1984 [1990]) 245.
7 Guger, Walterskirchen (2012) 135.
8 Ibid. 143-147.
9 Kregel (1993); Roncaglia (1994).
10 King (1995).
11 Steindl (1952) 191; cf. Hansen (1939).
12 Fellner (1955) 133.
13 Hamberg (1956).
14 Hamberg (1954) 414.
15 Ibid. 417.
16 Baran (1957 [1973]) 147n.
17 Ibid. 95.
18 Ibid. 103 n1; the reference is to Sylos Labini (1962).
19 Steindl (1976) ix-xvi and xvi-xvii.
20 Ibid. ix.
21 Ibid. xii.
22 Ibid. xvii.
23 Steindl (1979 [1990]) 107, a term also used on p. 121 as the title of the final section of the article.
24 Ibid. 118.
25 King (1995) 469, citing Steindl (1979 [1990]) 124.
26 The classic reference, which Steindl ignores, is Glyn and Sutcliffe (1972).

[27] Dutt (1995) 33.
[28] Lavoie (2014) 443, where the technical proofs are found in equations 6.98-6.100 and illustrated in the four cases distinguished in Figure 6.33 on pp. 444-445.
[29] Equations 6.101-6.104 on pp. 446-447 and Figures 6.34 and 6.35 on pp. 448-449.
[30] King (2012).
[31] See Eichengreen (2015), Gordon (2015) and Summers (2015) for brief but authoritative surveys.
[32] Meade (1975) 62.
[33] Hein (2016) 11-12.
[34] See Eichengreen (2015) 68-69; Gordon (2015) 54; Summers (2015) 61.
[35] Gutiérrez and Philippon (2017).
[36] Steindl (1984 [1990]) 252.
[37] I am extremely grateful to Alois Guger for his helpful comments on a previous draft of this paper.

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Abstract

The eminent Austrian economist Josef Steindl (1912-1993) published his best-known book, "Maturity and Stagnation in American Capitalism", in 1952. In section 1 I provide a brief biographical account of Steindl and his career, in Austria and England. Section 2 summarises the argument of "Maturity and Stagnation" and gives some details of its (rather limited) initial critical reception. In section 3 I discuss the reaction to the 1976 reprint of the book, together with Steindl's own brief but incisive critical introduction to it. Finally, in section 4, I consider three more recent analytical reformulations of Steindl's arguments and their total neglect by those prominent mainstream economists who have revived interest in the economics of stagnation in the wake of the Global Financial Crisis of 2007/08.

Zusammenfassung

Der bedeutende österreichische Ökonom Josef Steindl (1912-1993) veröffentlichte sein bekanntestes Buch, "Maturity and Stagnation in American Capitalism", im Jahre 1952. Im ersten Kapitel biete ich eine Kurzbiografie Steindls und einen Abriss seiner beruflichen Karriere in Österreich und England. Kapitel 2 fasst die Argumentation in "Maturity and Stagnation" zusammen und umreißt die (wenig umfangreiche) kritische Rezeption dieses Werks. Im Kapitel 3 diskutiere ich die Reaktionen auf die Neuauflage dieses Buchs im Jahre 1976 und Steindls kurze, aber prägnante und kritische Einleitung desselben. Im Kapitel 4 schließlich setze ich mich mit drei rezenten Reformulierungen von Steindls Argumenten auseinander und ihrer völligen Vernachlässigung durch jene prominenten Mainstream-Ökonomen, die das Interesse an der Ökonomie der Stagnation im Gefolge der weltweiten Finanzkrise 2007/08 wiedererweckt haben.

Key words: Business cycles, Capitalism, Maturity, Oligopoly, Profit margins, Stagnation.

JEL classifications: B2, B3, E1, E2.