

Hein, Eckhard

**Article**

## Secular stagnation or stagnation policy? A post-Steindlian view

European Journal of Economics and Economic Policies: Intervention (EJEEP)

**Provided in Cooperation with:**

Edward Elgar Publishing

*Suggested Citation:* Hein, Eckhard (2016) : Secular stagnation or stagnation policy? A post-Steindlian view, European Journal of Economics and Economic Policies: Intervention (EJEEP), ISSN 2052-7772, Edward Elgar Publishing, Cheltenham, Vol. 13, Iss. 2, pp. 160-171, <https://doi.org/10.4337/ejeep.2016.02.02>

This Version is available at:

<https://hdl.handle.net/10419/277357>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

# Secular stagnation or stagnation policy? A post-Steindlian view\*

Eckhard Hein

Berlin School of Economics and Law and Institute for International Political Economy (IPE), Berlin, Germany

*The current debate on secular stagnation is suffering from some vagueness and several other shortcomings. The same is true for the economic policy implications. Therefore, I provide an alternative view on stagnation tendencies based on Josef Steindl's contributions. In particular Steindl's (1952) book can be viewed as a pioneering work in the area of stagnation in modern capitalism. I hold that this work is not prone to the problems detected in the current debate on secular stagnation: it does not rely on the dubious notion of an equilibrium real interest rate as the equilibrating force of saving and investment at full employment levels, in principle, with the adjustment process currently blocked by the unfeasibility of a very low or even negative equilibrium rate. On the contrary, Steindl's contribution is based on the notion that modern capitalist economies are facing aggregate demand constraints, and that saving adjusts to investment through changes in capacity utilisation and income growth in the long run. 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.*

**Keywords:** *secular stagnation, stagnation policy, distribution and growth, Steindl*

**JEL codes:** *B22, E11, E12, E65, O11*

## 1 INTRODUCTION

After the financial crisis and the Great Recession of 2008–2009, the EU and the euro area in particular, but also Japan and even the USA, have seen only weak recoveries. Therefore, the issue of long-run stagnation, or of 'secular stagnation' – that is, low or even negative growth over a prolonged period of time – seems to be on the agenda (again), for academic economists, economic policy advisers and policy-making institutions. Commonly, the start of the debate is associated with the contribution by Summers (2013) to the IMF Economic Forum and a follow-up paper, in which he argues that 'the trend in growth can be adversely affected over the longer term by what happens in the business cycle' (Summers 2014a: 66). The Great Recession might therefore have caused a 'secular stagnation' for years to come. This has triggered a debate on a tendency towards secular stagnation in developed capitalist economies, as has recently been documented by the contributions to the book edited by Teulings/Baldwin (2014a), for example. This debate has brought forward both demand- and supply-side arguments regarding the pros and cons of secular stagnation. However, as Teulings/Baldwin (2014b) point out, a 'fairly strong consensus' has emerged, according to which secular stagnation may be defined as a state of the economy in which negative real interest rates in the capital market are required in order to

\* Shortened and revised version of a paper presented at the 19th FMM conference in Berlin in October 2015. For a more extensive version see Hein (2016). I am grateful to Jan Prieue for helpful comments and to Luisa Bunesco for editing assistance. Remaining errors are mine, of course.

establish an equilibrium of saving and investment. This makes it much harder for central banks facing the zero lower bound for nominal interest rates under their control to achieve full employment with low inflation.

What 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, as Backhouse/Boianovsky (2015) have reminded us recently. Of course, tribute is usually paid to Hansen (1939), who discussed the tendencies towards secular stagnation against the background of the Great Depression in the USA of the 1930s and who identified three fundamental causes for stagnation: declining population growth, changes in the character of technological progress and the falling availability of new territory in the USA.<sup>1</sup> However, whereas Hansen (1939) had at least referred to the works of Smith, Ricardo and Malthus, in the modern contributions there are no longer any such references or discussions. Consequently, it comes as no big surprise that contributions by heterodox authors on stagnation tendencies in modern capitalism, such as those by Hobson (1902), Luxemburg (1913), Sweezy (1942), Keynes (1943 [1980]), Steindl (1952), Kalecki (1954, ch. 15; 1971, ch. 13) and Baran/Sweezy (1966), are completely ignored as well. The same holds true for modern interpretations and applications of these approaches.

This is a problem because the theoretical foundations of modern secular stagnation debates are vague and can be challenged on several grounds. First, as is clear from the consensus proclaimed by Teulings/Baldwin (2014b) mentioned above, at the very foundations, even of the presumably more Keynesian work by Summers (2014a; 2014b; 2015), Krugman (2014) and others, in principle we have an equilibrium real or natural rate of interest equalising saving and investment in the capital market at full employment output levels, which, however, may not be feasible. This constellation is vulnerable to critique from the ‘Cambridge controversies in the theory of capital’, questioning an interest rate-inverse and continuously downward-sloping capital demand curve in a more-than-one-good economy, as well as the Keynesian critique with respect to the causalities between and adjustments of saving and investment in a monetary production economy (Hein 2014). Second, most of the mainstream literature on secular stagnation 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 3 decades or so, do not seem to have an important role to play at all.

Given the shortcomings in the current debate on secular stagnation, this paper will provide the foundations of an alternative view on stagnation tendencies based on the works of Josef Steindl, which is not exposed to the problems mentioned above. Steindl provides an approach which takes the ‘principle of effective demand’ seriously, also in long-run growth analysis, and which includes distribution conflict, power relationships and economic policies when it comes to the explanation of stagnation, that is, periods of low growth with persistent unemployment. In Section 2, the foundations of Steindl’s (1952) ‘maturity and stagnation’ approach will be outlined, providing the basic economic tendencies towards stagnation which are inherent to mature capitalism. Section 3 will then explicitly address the role of institutions, power relationships and economic policies, which, in principle, may reinforce, dampen or even reverse the basic tendencies towards stagnation. Therefore,

1. Gordon (2014) has pointed out that the term ‘secular stagnation’ had already been invented by Hansen (1934).

they have to be taken into account when it comes to explaining why stagnation in the 1950s and 1960s did not materialise, but why stagnation tendencies have become more prevalent again since the 1980s, in particular because of ‘stagnation policy’ and the rise of finance-dominated capitalism. The final Section 4 will then address the economic policy implications of a post-Steindlian view on stagnation tendencies.

## 2 FOUNDATIONS OF STEINDL’S ‘MATURITY AND STAGNATION’ APPROACH<sup>2</sup>

Steindl’s (1952) view on long-run growth and stagnation tendencies contained in his *Maturity and Stagnation in American Capitalism*, trying to explain inter-war US development, did not attract much attention when the book appeared in the early 1950s, the beginning of the ‘golden age’ of modern capitalism. But when the ‘golden age’ faltered in the 1970s, Steindl’s approach gained prominence and had a major impact on the post-Keynesian/Kaleckian theories of distribution and growth that have been proposed since then.

In contrast to Kalecki (1954), Steindl’s (1952, part I) important distinction is not between demand- and cost-determined prices, but, rather, between pricing in competitive industries and in oligopolistic industries. In the competitive industries, profit is treated as a differential rent accruing to the more productive firms in the industry, usually the bigger firms because technological progress is embodied in the capital stock. If the industry is hit by a negative demand shock, marginal firms will be squeezed out by downward price adjustments. Similarly, innovations will temporarily increase profits of the innovative firm, but then the diffusion of the innovation will reduce profits towards some normal level, and during the associated increase in output and the lowering of output prices marginal firms will again be squeezed out. These processes in competitive industries will increase the market shares of the most innovative and productive firms and will thus lead to ‘absolute concentration’ and a tendency towards oligopolistic industries.

In these oligopolistic industries, negative demand shocks or technological innovations will not cause prices to fall and marginal firms to be squeezed out, because these firms earn above-normal profits, owing to entry barriers given by the minimum capital to be advanced in order to start production in the respective industry, and also to strategic price-setting of incumbent firms. Prices remain rigid in these industries, and a decline in demand will mean lower rates of capacity utilisation. Because of downward price rigidities, labour saving technological progress will increase mark-ups or profit margins. Furthermore, other types of competition will be applied, in particular marketing efforts and product differentiation.

The tendencies towards oligopoly discovered at the microeconomic level will cause a tendency towards stagnation at the macroeconomic level (Steindl 1952, part II). In his new introduction, Steindl (1976: xv) neatly summarises his main arguments in *Maturity and Stagnation in American Capitalism* as follows:

1. Oligopoly brings about a maldistribution of funds by shifting profits to those industries which are reluctant to use them. ...
2. Oligopoly leads to a decline in the degree of utilisation, either by a tendency to increase mark-ups or by a rigidity of the mark-up in face of a decline in investment.

2. This section partly draws on Hein (2014: 227–234). For reinterpretations and reformulations of Steindlian distribution and growth models, see for example Dutt (1995; 2005), Flaschel/Skott (2006) and Hein (2016).

These two developments generate problems of effective demand for the economy as a whole, which will be self-reinforcing and thus may cause long-run stagnation. Because of excess capacity, oligopolies will be increasingly reluctant to invest in their industries, even if profits are constant or rising ('incomplete reinvestment' of retained profits), and firms in competitive industries will lack the internal funds required to expand and to compensate for the stagnative tendencies imposed on the economy by oligopolistic industries.

Any fall in investment and aggregate demand will therefore be self-reinforcing, and cause lower rates of capacity utilisation and a further decline in investment and aggregate demand for the economy as a whole, as in Harrod's (1939) instability process (Steindl 1979; 1985). Recall that Harrod's 'warranted rate of growth' ( $g_w$ ) is given by the overall propensity to save ( $s$ ), the normal or target rate of utilisation of productive capacities ( $u_n$ ) and by the capital-potential output ratio ( $v$ ), which is considered to be technologically determined and to be independent of growth and the profit rate:  $g_w = \frac{su_n}{v}$  (Hein 2014, ch. 2). As Steindl (1985) explains, lower growth of aggregate demand, falling short of Harrod's 'warranted rate', that is,  $g < g_w$ , would require a lower propensity to save, and thus lower profit margins and profit rates, in order to avoid the rate of capacity utilisation falling below the normal or target rate and hence causing a further slowdown in growth. In other words, it would require redistribution from corporations to households, or from gross profits to wages, assuming the propensity to save out of wages to fall short of the propensity to save out of gross profit. However, this does not happen because of the price rigidity in oligopolistic industries. In the case of the dominance of oligopolies, a fall in the rate of capacity utilisation can only be prevented by an increase of 'external' sources of demand, hence in the government deficit or the export surpluses, as Steindl (1985) points out.

Steindl (1976: xv) acknowledges that the 'maldistribution of funds' argument *per se* is not a strong reason for lower private investment and growth, in the face of multi-branch activities of larger firms, which could invade competitive industries and invest there. However, low rates of capacity utilisation on a broader scale as a deterrent to investment are considered to be the important argument for the maturity and stagnation hypothesis. Another argument, which Steindl addresses in his other publications (Steindl 1964; 1979; 1985), does not relate to oligopoly in particular but to big business in general and says 'that the preference for safety increases with size, and that profit is bartered for safety, with a resulting reluctance to go into debt and a consequent weakening of the incentive to invest' (Steindl 1976: xv). This could be interpreted as a decline in 'animal spirits', the 'spontaneous urge to action rather than inaction' (Keynes 1936 [1973]: 161), with the increasing size of the firm.

What is missing in Steindl's (1952) book is a role for technological progress and innovations when it comes to the explanation of long-run trends of capital accumulation and growth. They are absent from his approach because Steindl held that these are difficult to model and have thus to be treated as exogenous variables. However, in his later publications, Steindl changed his mind, in particular under the impression of Kalecki's work, and argued: 'When I wrote *Maturity and Stagnation*, I wanted to deny all influences of innovations on the accumulation of capital. I think now that this was foolish and I subscribe to Kalecki's view that innovations are capable of generating a trend' (Steindl 1979: 7). Consequently, Steindl (1964; 1976; 1979; 1989) admits that the exhaustion of a long technological wave can contribute to the explanation of stagnation. However, technological change would have to be integrated into a theory of demand-led growth, which is difficult to achieve. Thus, Steindl does not go beyond Kalecki's (1971: 174) notion of considering technological change and innovations as 'semi-autonomous', and thus only partially based on past experience, accumulation and those factors that can be endogenised in a model (Steindl 1981).

### 3 WHY STAGNATION DID NOT MATERIALISE IN THE 1950s AND 1960s BUT HAS BECOME MORE LIKELY SINCE THE 1980s: THE ROLE OF INSTITUTIONS, POWER RELATIONSHIPS AND ECONOMIC POLICIES<sup>3</sup>

Following Steindl's (1979) explanations on why his postulated tendencies towards stagnation did not materialise during the golden age of mature capitalism from the 1950s until the mid 1970s, we find four reasons for high growth in the post-World War II period:

- Public spending increased tremendously after World War II, financed to a great extent by taxes on profits. This increased capacity utilisation and fed back positively on firms' decisions to invest in capital stock.
- Technological competition between East and West, the 'competition of the systems', had a strong impact on expenditures on R&D and education by the governments, which spilled over to the private sector, boosting investment and productivity growth.
- The post-war tensions triggered close cooperation of the Western countries under the leadership of the USA. This included the world financial system of Bretton Woods with fixed but adjustable exchange rates, the Marshall Plan and American lending to Western European countries, which stabilised and provided the conditions for an increase in international trade. A higher level of international trade kept profit margins within limits and contributed to stabilising wage shares and thus consumption demand.
- European countries benefited from technological backwardness with respect to the USA and could make use of technological knowledge which had been generated and applied in the USA, thus making use of the 'catching-up' factor in economic growth.

In other publications, Steindl also adds factors operating through lowering the propensity to save of households and thus stimulating consumption, and through improved internal finance conditions of firms facilitating investment. For example, Steindl (1976) mentions as a further growth-enhancing factor that big corporations spread their activities to several industries reducing impediments to the flow of funds between them, which favoured aggregate investment. In addition, the shortening of construction periods and the introduction of consumer credit on a larger scale were favourable for demand and growth. Steindl (1989) also adds the low indebtedness of corporations right after World War II as a factor which was favourable to investment in capital stock and to GDP growth, as well as the increasing bargaining power of workers and trade unions associated with full employment, which held mark-ups and profit shares in check and allowed real wages to grow in step with productivity, thus providing the required demand growth.

For the faltering of the post-World War II golden age and the re-emergence of stagnation tendencies starting in the mid 1970s, Steindl (1979) provides the following causes:

- The reduction of tensions between the superpowers, an increase in internal rivalries among the capitalist economies, a decay of US leadership and the collapse of the Bretton Woods international financial system indicated an absence of willingness and ability towards international co-operation leading to rising uncertainty.
- The fading-out of the catching-up potential of Europe towards the USA associated with abnormally high rates of productivity growth in Europe over the postwar period lowered the incentives to invest.

3. This section partly draws on Hein (2014: 227–234).

- Increasing environmental and energy problems led to a surge in energy prices, putting upward pressure on inflation rates and raising uncertainty with respect to future technological development.

Further factors contributing to the re-emergence of stagnation are related to the effects of demand and capacity utilisation on investment and to the propensity to save of households (Steindl 1979):

- Supposed tendencies towards increasing capital productivity reduced the required amounts of net investment to increase productive capacities.
- And a trend towards an increasing marginal propensity to save from disposable household income in prospering economies weakened aggregate demand, capacity utilisation, investment and growth.

However, the most important factor that explains the re-emergence of stagnation tendencies, according to Steindl (1979), is ‘stagnation policy’ in the major capitalist economies, which he had already briefly mentioned 3 years earlier: ‘... thus we witness stagnation not as an incomprehensible fate, as in the 1930s, but stagnation as policy’ (Steindl 1976: xvii). In this context, Steindl (1979) refers to Kalecki’s (1971, ch. 12) ‘Political aspects of full employment’, in which Kalecki argues that, although governments might know how to maintain full employment in a capitalist economy, they will not do so, because of capitalists’ opposition:

The reasons for the opposition of the ‘industrial leaders’ to full employment achieved by Government spending may be subdivided into three categories: (i) the dislike of Government interference in the problem of employment as such; (ii) the dislike of the direction of Government spending (public investment and subsidising consumption); (iii) dislike of the social and political changes resulting from the *maintenance* of full employment. (Kalecki 1971: 139, emphasis in the original)

Whereas in Kalecki (1971: 144), the opposition of the capitalist class towards full employment policies gave rise to a ‘political business cycle’, Steindl (1979: 9) argues that business opposition towards full employment policies generates a ‘political trend’ causing or contributing to stagnation. In the course of the 1970s, governments, facing full employment and increasing rates of inflation, moved away from targeting full employment by means of active demand management towards targeting price stability by means of restrictive monetary policies and containing public deficits and debt.

In his latest contributions, Steindl relates stagnation tendencies and stagnation policy to an increasing dominance of the financial sector in modern capitalist economies. In Bhaduri/Steindl (1985), stagnation policies are associated with ‘The rise of monetarism as a social doctrine’, because monetarism is inherently linked with restrictive fiscal and monetary policies, which are supported by banks and the financial sector (or the rentiers). The application of monetarist policies thus indicates a shift of powers from industry to banks, or from the non-financial sector of the economy to the financial sector, which occurred in the course of national and international financial liberalisation and rapidly increasing financial activity in the 1970s and early 1980s (collapse of the Bretton Woods international financial system, rise of the eurodollar market, emergence of oil-exporting countries as a class or ‘international rentiers’, emergence of international commercial banks). In Steindl (1989), it is stressed that, starting in the 1980s, the tendencies towards weak investment and stagnation have then been amplified by a shift of the interest of corporations and their managers from production towards finance and an increasing role of financial investment in comparison to real investment.

The macroeconomics of the dominance of finance, or ‘financialisation’, starting in the early 1980s in the US and the UK and somewhat later in other countries, have been analysed extensively in the Kaleckian/Steindlian tradition, as recently reviewed by Hein (2012a; 2014, ch. 10) and Hein/van Treeck (2010). The major findings have been that, on the one hand, confirming Steindl’s latest hypotheses, the increasing dominance of finance has depressed the economy. The major channels have been, first, the redistribution of income at the expense of the labour income share and the low-income households, which have depressed income-financed consumption demand. Second, the increasing dominance of finance and rising shareholder value orientation of management have lowered investment in the capital stock. Management of non-financial corporations has increasingly favoured short-run profit maximisation by means of financial investment instead of real investment in the capital stock of the firm generating profits in the long run. And increasing dividend payments and share buybacks have eroded internal means of finance, partly even increasing the indebtedness of non-financial business, and thus further depressed investment in the capital stock.

However, on the other hand, going beyond Steindl’s contributions, it has been argued that the expansion and development of the financial sector and the increasing dominance of finance have also stimulated the economy in the short and medium run. First, regarding consumption, financialisation has generated an increasing potential for wealth-based and debt-financed consumption. In several countries stock-market and housing-price booms have each increased notional wealth against which households were willing to borrow. Changing financial norms, new financial instruments (credit card debt, home equity lending), deterioration of creditworthiness standards, triggered by securitisation of mortgage debt, credit card debt, etc., and ‘originate and distribute’ strategies of commercial banks, made increasing credit available to low-income, low-wealth households in particular. This potentially allowed for consumption to rise faster than the median income, thus stabilising aggregate demand and growth. But it also generated increasing debt-income ratios of private households. Second, the liberalisation of international capital markets and capital accounts has allowed several countries to run persistent and rising current-account deficits, and a corresponding set of countries to have their demand and growth driven by rising net exports, generating increasing current-account surpluses. Therefore, rising current-account imbalances, at the global but also at the regional levels, in particular within the euro area, have been generated, as well as increasing problems of foreign indebtedness, speculative capital movements, exchange-rate volatilities and related potentials for currency crises.

Thus, against the background of finance-dominated capitalism, two extreme but complementary growth regimes have developed, as has been analysed using different terminologies by Horn et al. (2009), UNCTAD (2009), Hein (2012a, ch. 6; 2014, ch. 10), Hein/Mundt (2012), Stockhammer (2012; 2015), van Treeck/Sturn (2012) and Hein/Dodig (2015), among others. The ‘debt-led private demand boom’ regimes, as in the USA, the UK, Spain and other countries, relied on credit-financed private demand, and private consumption in particular, as the main drivers of demand and growth, accepting increasing current-account deficits. The ‘export-led mercantilist’ regimes, as in Germany, China, Japan and other smaller and more open economies, saw their demand and growth being driven by rising net exports generating rising current-account surpluses.

Each regime can be conceived of as a ‘profits without investment’ regime, because dynamic capital stock growth is either substituted by credit-financed consumption demand or net export growth. Since productivity growth, and thus ‘natural’ or potential growth, are to a large extent embodied in capital stock growth and also driven by real wage growth, dampened investment in capital stock and stagnant real wage growth each



contributed to low labour productivity growth and thus lower potential growth in finance-dominated capitalism (Hein 2012a, ch. 4; 2012b). Furthermore, the ‘debt-led consumption’ regime and the ‘export-led mercantilist’ regime have suffered from internal contradictions, with respect to household debt in the first regime and to foreign debt of the corresponding current-account deficit countries in the second regime. These finally undermined the sustainability of these regimes and the related current-account imbalances, and led to the financial and economic crisis of 2007–2009. As is well known, this crisis was triggered by over-indebtedness problems of private households in the leading ‘debt-led private demand boom’ economy, the USA. This crisis quickly spread to the ‘export-led mercantilist economies’. First, their export markets collapsed (foreign trade channel). Second, their capital exports into risky and now collapsing financial markets in the current-account deficit countries were devalued (financial contagion channel). Furthermore, an uncertainty and expectations channel took effect as well. The crisis neither led to a collapse of the world economy nor to a prolonged depression at the global level, due to appropriate fiscal and monetary stabilisation policies for the financial and non-financial sectors of the economy. However, more than 7 years after the beginning of the crisis, the impression is that the world economy as a whole is facing slower growth, and stagnation has become the rule of the game again in certain regions, in particular in those that have turned towards stagnation policy again, such as the euro area.

From the Steindlian perspective we can thus conclude that the main constraint a capitalist economy is facing in the long run is sustainable demand generation. Stagnation is thus mainly caused by those factors slowing down sustainable demand growth – that is, demand growth which is not driven by ever-rising debt–income ratios of any macroeconomic sector. Any lack of sustainable demand growth will feed back negatively on potential or ‘natural’ growth, to the extent that technological progress is demand-driven (through capital-embodied technology, for example). Reversing stagnation policy is thus the main objective when it comes to fighting stagnation tendencies in mature, finance-dominated capitalist economies.

#### 4 ECONOMIC POLICY IMPLICATIONS

From Steindl’s analysis of stagnation policy and the increasing dominance of finance capital as major causes for stagnation tendencies, it follows that anti-stagnation policies would have to focus on the following areas:<sup>4</sup>

- stabilising and raising public autonomous expenditure growth, as well as discretionary anti-cyclical fiscal policies, in order to stabilise effective demand growth, prevent deflation with its negative effects on private demand, and improve the general climate for private sector investment and consumption;
- raising growth-enhancing public investment and focusing on infrastructure, technology, education and R&D expenditures, in order to stimulate private investment and R&D outlays;
- stabilising and raising the wage share by full employment policies improving workers’ bargaining power, by low-interest-rate policies reducing overhead costs, and by the re-regulation of the financial sector reducing the power and income claims of rentiers and shareholders;

4. See also Guger et al. (2006) for an excellent review of Steindlian economic policy implications in general, as well as an outline of Steindlian policy alternatives for the EU in order to boost aggregate demand, employment and growth, instead of continuing with stagnation policies.

- lowering households' propensity to save by means of redistributing income, both pre-tax via higher wage shares and a more compressed wage structure and post-tax by progressive taxation and social transfers, as well as by removing uncertainty triggering precautionary saving; and
- improving international economic and monetary policy coordination in order to avoid severe current-account imbalances, 'beggar thy neighbour' strategies, on the one hand, and rising indebtedness in foreign currencies, on the other hand.

Several of these Steindlian elements can be found in economic policy proposals based on the analysis of the contradictions immanent to finance-dominated capitalism and the recent financial and economic crises outlined in the previous section. Since the two extreme types of development under financialisation, the 'debt-led private demand boom' type and the 'export-led mercantilist' type, have proven to be unsustainable, ILO (2012), Stockhammer/Onaran (2012; 2013) and Lavoie/Stockhammer (2013a; 2013b), among others, have argued that a sustainable recovery strategy after the crises can only focus on a 'wage-led' or 'mass income-led' type of development and hence on the redistribution of income from profits to wages and from the top to the bottom. Hein (2011; 2012a, ch. 7), Hein/Mundt (2012) and Hein/Truger (2012–2013) have argued that the focus of such a strategy is too narrow, because, on the one hand, the potential for redistribution given the current power relationships is over-estimated, as are the potential demand and growth effects of such redistributions, if they are feasible at all in isolation. Therefore, they have suggested that a wage-led recovery strategy would have to be embedded in a Global Keynesian New Deal, which more broadly should address the main characteristics of finance-dominated capitalism and the main causes for the severity of the crisis: the inefficient regulation of financial markets, the increasing inequality in the distribution of income and the rising imbalances at the global and at the regional levels. The three main pillars of the policy package of a Global Keynesian New Deal are as follows. First, it includes the re-regulation of the financial sector in order to increase transparency, to raise incentives to focus on long-term growth instead of short-term profit and to prevent or contain future financial excesses and financial crises. Second, it focuses on the re-orientation of macroeconomic policies towards stimulating and stabilising domestic demand, in particular in current-account surplus countries. This includes monetary policies targeting low long-term interest rates, fiscal policies stabilising aggregate demand at non-inflationary full employment levels in the short and long run applying a 'functional finance' approach, and wage or incomes policies stabilising income distribution and inflation at some target rate. And third, it has to include the reconstruction of international macroeconomic and monetary policy coordination and a new world financial order so as to prevent export-led mercantilist and hence 'beggar thy neighbour' strategies. UNCTAD (2009) and Palley (2012, ch. 9; 2013, ch. 12), among others, have made similar suggestions. The roles of technology and innovation policies, which have been of the utmost importance for Steindl, have not been explicitly addressed in the approaches mentioned so far. However, Mazzucato (2013) and Mazzucato/Penna (2015) have recently stressed the role of the government and of state investment bank finance for innovation and technological development. These contributions nicely complement the more general suggestions mentioned above.

## REFERENCES

- Backhouse, R.E., Boianovsky, M. (2015): Secular stagnation: the history of a macroeconomic heresy, version 1, preliminary draft of paper prepared for the Blanqui Lecture (Meetings of the European Society for the History of Economic Thought, Rome, 14 May).

- Baran, P.A., Sweezy, P.M. (1966): *Monopoly Capital*, New York: Monthly Review Press.
- Bhaduri, A., Steindl, J. (1985): The rise of monetarism as a social doctrine, in: Arestis, P., Skouras, T. (eds), *Post-Keynesian Economic Theory*, Sussex: Wheatsheaf.
- Dutt, A.K. (1995): Internal finance and monopoly power in capitalist economies: a reformulation of Steindl's growth model, in: *Metroeconomica*, 46, 16–34.
- Dutt, A.K. (2005): Steindl's theory of maturity and stagnation and its relevance today, in: Mott, T., Shapiro, N. (eds), *Rethinking Capitalism: Essays on the Economics of Josef Steindl*, London and New York: Routledge, 55–78.
- Flaschel, P., Skott, P. (2006): Steindlian models of growth and stagnation, in: *Metroeconomica*, 57, 303–338.
- Gordon, R. (2014): The turtle's progress: secular stagnation meets the headwinds, in: Teulings, C., Baldwin, R. (eds), *Secular Stagnation: Facts, Causes and Cures – A VoxEU.org eBook*, London: Centre for Economic Policy Research (CEPR), 47–59.
- Guger, A., Marterbauer, M., Walterskirchen, E. (2006): Growth policy in the spirit of Steindl and Kalecki, in: *Metroeconomica*, 57, 428–442.
- Hansen, A.H. (1934): Capital goods and the restoration of purchasing power, in: *Proceedings of the Academy of Political Science*, 16(1), 11–19.
- Hansen, A.H. (1939): Economic progress and declining population growth, in: *American Economic Review*, 29(1), 1–15.
- Harrod, R.F. (1939): An essay in dynamic theory, in: *The Economic Journal*, 49, 14–33.
- Hein, E. (2011): Redistribution, global imbalances and the financial and economic crisis: the case for a Keynesian New Deal, in: *International Journal of Labour Research*, 3(1), 51–73.
- Hein, E. (2012a): *The Macroeconomics of Finance-dominated Capitalism – and its Crisis*, Cheltenham, UK and Northampton, MA: Edward Elgar.
- Hein, E. (2012b): 'Financialisation', distribution, capital accumulation and productivity growth in a post-Kaleckian model, in: *Journal of Post Keynesian Economics*, 34, 475–496.
- Hein, E. (2014): *Distribution and Growth after Keynes: A Post-Keynesian Guide*, Cheltenham, UK and Northampton, MA: Edward Elgar.
- Hein, E. (2016): Secular stagnation or stagnation policy? Steindl after Summers, in: *PSL Quarterly Review*, 69(276), 3–47.
- Hein, E., Dodig, N. (2015): Financialisation, distribution, growth and crises: long-run tendencies, in: Hein, E., Detzer, D., Dodig, N. (eds), *The Demise of Finance-dominated Capitalism: Explaining the Financial and Economic Crises*, Cheltenham, UK and Northampton, MA: Edward Elgar, 54–114.
- Hein, E., Mundt, M. (2012): Financialisation and the requirements and potentials for wage-led recovery: a review focussing on the G20, Conditions of Work and Employment Series No 37, Geneva: ILO.
- Hein, E., Truger, A. (2012–2013): Finance-dominated capitalism in crisis: the case for a global Keynesian New Deal, in: *Journal of Post Keynesian Economics*, 35, 183–210.
- Hein, E., van Treeck, T. (2010): 'Financialisation' in post-Keynesian models of distribution and growth: a systematic review, in: Setterfield, M. (ed.), *Handbook of Alternative Theories of Economic Growth*, Cheltenham, UK and Northampton, MA: Edward Elgar, 277–292.
- Hobson, J.A. (1902): *Imperialism: A Study*, New York: James Pott & Company.
- Horn, G., Joebges, H., Zwiener, R. (2009): From the financial crisis to the world economic crisis (II). Global imbalances: cause of the crisis and solution strategies for Germany, IMK Policy Brief, December, Duesseldorf: Macroeconomic Policy Institute (IMK) at Hans-Boeckler Foundation.
- ILO (2012): *Global Wage Report: Wages and Equitable Growth*, Geneva: ILO.
- Kalecki, M. (1954): *Theory of Economic Dynamics*, London: George Allen and Unwin.
- Kalecki, M. (1971): *Selected Essays on the Dynamics of the Capitalist Economy, 1933–70*, Cambridge, UK: Cambridge University Press.
- Keynes, J.M. (1936 [1973]): *The General Theory of Employment, Interest and Money*, in: *The Collected Writings of J.M. Keynes*, Vol. VII, London and Basingstoke, UK: Macmillan.
- Keynes, J.M. (1943 [1980]): The long-term problem of full employment, in: *The Collected Writings of J.M. Keynes*, Vol. XXVII, London: Macmillan, 320–325.

- Krugman, P. (2014): Four observations on secular stagnation, in: Teulings, C., Baldwin, R. (eds), *Secular Stagnation: Facts, Causes and Cures – A VoxEU.org eBook*, London: Centre for Economic Policy Research (CEPR), 61–68.
- Lavoie, M., Stockhammer, E. (eds) (2013a): *Wage-led Growth: An Equitable Strategy for Economic Recovery*, Basingstoke, UK: Palgrave Macmillan.
- Lavoie, M., Stockhammer, E. (2013b): Wage-led growth: concept, theories and policies, in: Lavoie, M., Stockhammer, E. (eds), *Wage-led Growth: An Equitable Strategy for Economic Recovery*, Basingstoke, UK: Palgrave Macmillan, 13–39.
- Luxemburg, R. (1913): *Die Akkumulation des Kapitals: Ein Beitrag zur ökonomischen Erklärung des Imperialismus*, Berlin: Vorwärts. (English translation: *The Accumulation of Capital*, London: Routledge and Kegan Paul, 1951.)
- Mazzucato, M. (2013): *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*, London: Anthem Press.
- Mazzucato, M., Penna, C.C.R. (2015): Beyond market failures: the market creating and shaping roles of state investment banks, Working Paper No 831, Annandale-on-Hudson, NY: Levy Economics Institute of Bard College.
- Palley, T.I. (2012): *From Financial Crisis to Stagnation: The Destruction of Shared Prosperity and the Role of Economics*, Cambridge, UK: Cambridge University Press.
- Palley, T.I. (2013): *Financialization: The Economics of Finance Capital Domination*, Basingstoke, UK: Palgrave Macmillan.
- Steindl, J. (1952): *Maturity and Stagnation in American Capitalism*, Oxford: Blackwell. (2nd edn, New York and London: Monthly Review Press, 1976.)
- Steindl, J. (1964): On maturity in capitalist economies, in: *Problems of Economic Dynamics and Planning: Essays in Honour of Michal Kalecki*, Warsaw: PWN–Polish Scientific Publishers, 423–432.
- Steindl, J. (1976): Introduction, in: Steindl, J., *Maturity and Stagnation in American Capitalism*, 2nd edn, New York and London: Monthly Review Press, ix–xvii.
- Steindl, J. (1979): Stagnation theory and stagnation policy, in: *Cambridge Journal of Economics*, 3, 1–14 (reprinted in: Steindl, J., *Economic Papers, 1941–88*, Basingstoke, UK: Macmillan, 1990, 107–126; page numbers in the text refer to the original).
- Steindl, J. (1981): Ideas and concepts of long run growth, in: *Banca Nazionale del Lavoro Quarterly Review*, 34(136), 35–48 (reprinted in Steindl, J., *Economic Papers, 1941–88*, Basingstoke, UK: Macmillan, 1990, 127–138).
- Steindl, J. (1985): Distribution and growth, in: *Political Economy: Studies in the Surplus Approach*, 1, 53–68 (reprinted in Steindl, J., *Economic Papers, 1941–88*, Basingstoke, UK: Macmillan, 1990, 149–165).
- Steindl, J. (1989): From stagnation in the 30s to slow growth in the 70s, in: Berg, M. (ed.), *Political Economy in the Twentieth Century*, Oxford: Philip Allan (reprinted in Steindl, J., *Economic Papers, 1941–88*, Basingstoke, UK: Macmillan, 1990, 166–179).
- Stockhammer, E. (2012): Financialization, income distribution and the crisis, in: *Investigación Económica*, 71(279), 39–70.
- Stockhammer, E. (2015): Rising inequality as a cause of the present crisis, in: *Cambridge Journal of Economics*, 39, 935–958.
- Stockhammer, E., Onaran, Ö. (2012): Rethinking wage policy in the face of the Euro crisis: implications of the wage-led demand regime, in: *International Review of Applied Economics*, 26, 191–203.
- Stockhammer, E., Onaran, Ö. (2013): Wage-led growth: theory, evidence, policy, in: *Review of Keynesian Economics*, 1, 61–78.
- Summers, L.A. (2013): Remarks at IMF Economic Forum, 8 November, URL: <https://www.youtube.com/watch?v=KYpVzBbQIX0>.
- Summers, L.A. (2014a): U.S. economic prospects: secular stagnation, hysteresis, and the zero lower bound, in: *Business Economics*, 49(2), 65–73.
- Summers, L.A. (2014b): Reflections on the ‘New Secular Stagnation Hypothesis’, in: Teulings, C., Baldwin, R. (eds), *Secular Stagnation: Facts, Causes and Cures – A VoxEU.org eBook*, London: Centre for Economic Policy Research (CEPR), 27–38.

- Summers, L.A. (2015): Demand side secular stagnation, in: *American Economic Review: Papers and Proceedings*, 105(5), 60–65.
- Sweezy, P.M. (1942): *Theory of Capitalist Development*, New York: Oxford University Press.
- Teulings, C., Baldwin, R. (eds) (2014a): *Secular Stagnation: Facts, Causes and Cures – A VoxEU.org eBook*, London: Centre for Economic Policy Research (CEPR).
- Teulings, C., Baldwin, R. (2014b): Introduction, in: Teulings, C., Baldwin, R. (eds), *Secular Stagnation: Facts, Causes and Cures – A VoxEU.org eBook*, London: Centre for Economic Policy Research (CEPR), 1–23.
- UNCTAD (2009): *The Global Economic Crisis: Systemic Failures and Multilateral Remedies*, New York and Geneva: UNCTAD.
- Van Treeck, T., Storn, S. (2012): Income inequality as a cause of the Great Recession? A survey of current debates, *Conditions of Work and Employment Series No 39*, Geneva: ILO.