

Osiatyński, Jerzy

Article

Kazimierz Łaski's Lectures in Macroeconomics under financial capitalism

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

Provided in Cooperation with:

Edward Elgar Publishing

Suggested Citation: Osiatyński, Jerzy (2019) : Kazimierz Łaski's Lectures in Macroeconomics under financial capitalism, European Journal of Economics and Economic Policies: Intervention (EJEEP), ISSN 2052-7772, Edward Elgar Publishing, Cheltenham, Vol. 16, Iss. 3, pp. 302-317, <https://doi.org/10.4337/ejeep.2019.0053>

This Version is available at:

<https://hdl.handle.net/10419/277453>

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/>

Kazimierz Łaski's *Lectures in Macroeconomics* under financial capitalism

Jerzy Osiatyński*

Institute of Economics, Polish Academy of Sciences, Warsaw, Poland

The paper summarizes the discussion among Łaski's inner circle regarding the relevance of Kaleckian treatment of money under financial capitalism. The context of that debate was the project of a joint textbook in macroeconomics, the building blocks of which would be Kalecki's theory, and which would take into account the present-day financialization. With Łaski's death the opportunity of doing the project was gone. Of the two closely interlinked questions under debate, the first dealt with permissible simplifications regarding determinants of money supply and interest rates, and the second with how to extend Kaleckian theory to link the real economy sector more tightly with its financial sector. The paper argues that for an introductory textbook in macroeconomics Kalecki's and Łaski's simplifications are legitimate. On the second issue the paper finds the introduction of two financial subsectors and the discussion of their interlinks with the real economy sector to be an important and possible way of investigating macroeconomic crises and instability within the Kaleckian macroeconomic framework. Another way would be the expansion and modification of Kalecki's investment decision function, which would continue to generate an automatic business cycle due to changes in fixed capital investment but also in combination with factors determining financial investment.

Keywords: Michał Kalecki, Kazimierz Łaski, financial capitalism, business cycle, money and interest

JEL codes: E11, E12, E32, E44

1 INTRODUCTION

Shortly before the present issue of the *European Journal of Economics and Economic Policies: Intervention*, devoted to re-examining the economics of Kazimierz Łaski, was published, Oxford University Press (OUP) brought out the English edition of Łaski's last book, that is, his *Lectures in Macroeconomics: A Capitalist Economy Without Unemployment* (Łaski 2019). The book appeared originally in Polish, in November 2015, a couple of weeks after Łaski passed away. The *Lectures*, closely linked with his 2009 *Myths and Reality in Economic Policy and in Teaching Economics* (in Polish), represent the fruit of the last years of his life: a systematic and detailed presentation of the theory of effective demand founded on Michał Kalecki's theory of business fluctuations and economic dynamics of the capitalist economy. The purpose of this paper is to account for the debate on the relevance of Łaski's *Lectures* in the environment of present-day financial capitalism.

* Email: Jerzy.Osiatynski@sejm.gov.pl. The author is grateful to the anonymous referee and to the editors of this special issue for their most useful comments and corrections. The usual caveat regarding responsibility of the author applies.

Received 21 November 2018, accepted 18 July 2019

In his Preface to the *Lectures*,¹ Łaski notes that they represent his contribution to an international textbook in English 'that a group of my colleagues and I are still developing.' Alongside Łaski, the group included Amit Bhaduri of the Jawaharlal Nehru University in New Delhi, Martin Riese of the Johannes Kepler University of Linz, and Herbert Walther of the Wirtschaftsuniversität in Vienna. Łaski, Riese, and Walther started to meet regularly, once every other week, from 2009. Bhaduri joined their meetings when in Europe, but participated in their discussions online. Most attention was given to the 2008 financial crisis, especially to its course in Greece, Spain, and Portugal, and the inability of mainstream economics to provide a satisfactory explanation for why the crisis happened and what were the ways out of it.

According to Riese and Walther,² the idea of writing a macroeconomics textbook together, the building blocks of which would be Kalecki's theory, appeared when Łaski's writing of the Polish edition of the *Lectures* was already well advanced. Walther arranged for its English translation, which was coming in installments, but its final chapters (8 to 10) were not ready before Łaski died. Except for a general presumption that their textbook was to provide an alternative to mainstream economics, taking into account the present-day changes in the *modus operandi* of the capitalist economy, and that the core of the project would be the Polish edition of *Lectures*, there was no discussion regarding the topics to be developed by its other co-authors, nor on what would require revision in the chapters already written by Łaski. Thus, notwithstanding some discussion of the issues elaborated in the *Lectures*, writing a combined textbook never took off and with Łaski's death the opportunity of doing a book together was gone.

A distinguishing feature of Łaski's *Lectures in Macroeconomics* is not only that it offers a comprehensive presentation of Kalecki's theory of effective demand, but that it does so – in the opinion of an OUP reviewer – 'with an amazing clarity, taking the reader from the most basic issues to rather more difficult ones with a style and a pedagogical capacity I have not seen before in other expositions of Kalecki's theory.' Łaski was aware of the didactic quality of his *Lectures*; after all, they were a product of his life-long teaching experience. Nevertheless he had some doubts regarding the English publication of his textbook. More specifically, he was uncertain whether his criticism of exogenous money was satisfactory. He was especially concerned with the critical reaction of his close friend, Amit Bhaduri, who thought Kalecki did not properly integrate the 'real' with the financial sector of the economy. This, Bhaduri argued, was passable for Kalecki at times when financial capitalism was not yet at the centre of business decision-making, but required a far more complex approach at times when financial capitalism ruled. The debate on that issue among Łaski's inner circle is summarized in Section 2 of this paper. Section 3 discusses some issues related to the relevance of Łaski's *Lectures* and their policy recommendations, and thereby partly also of Kalecki's theory of business cycles and long-run development, in the context of present-day finance-dominated capitalism. Section 4 concludes.

2 ŁASKI'S PRESENTATION OF THE THEORY OF EFFECTIVE DEMAND AND MODERN FINANCE

Łaski was aware of the limitations of his treatment of the endogenous and demand-led nature of money and the independence of credit from savings, from the viewpoint of feedbacks

1. This and the next paragraph, as well as the final section of this paper, borrow from the concluding section of my 'Editor's introduction' to Łaski's *Lectures*.
2. Private email communication of Riese and Walther to Osiatyński, 26 March 2018.

between the ‘real’ and the financial sectors of the economy. Although similar treatments of the monetary circuit was used by many post-Keynesian economists, among them Marc Lavoie (1992: 149–169; 2014: ch. 4) whose ‘systematic account of the process of creation of purchasing power’ is an important point of reference for Łaski (2019: 127), he was uncertain whether his textbook could abstain from discussing those feedbacks. As soon as the English translation of chapter 7 of his *Lectures* – which dealt with endogenous money – was available, in late September 2015, he circulated it to Riese, Walther, and Bhaduri for comments. While Riese and Walther thought Łaski’s presentation was satisfactory for a textbook addressed to students interested in Kalecki’s theory, Bhaduri thought it should go much further towards integrating the real and the financial sectors.

Actually, Bhaduri, Łaski, and Riese’s concern with the impact of globalization on aggregate demand dates back at least to 2006 when they examined the wealth effect generated by the boom in the stock market. They demonstrated that it leads to an expansion of output and employment mainly through a debt-financed rise in private consumption, which is subsequently followed by consumption contraction due to the rising cost of debt servicing and falling creditworthiness. Therefore, they concluded: ‘even in the medium run, the growth rates of the wealth in the stock market and of the real economy may move in opposite directions’ (Bhaduri et al. 2006: 412).³

The growing importance of financialization and its impact on the dynamics of a capitalist economy attracted rising attention from many post-Keynesian economists, including Thomas I. Palley, Mark Blyth, Eckhard Hein, Engelbert Stockhammer, and Malcolm Sawyer. In his paper, Bhaduri (2014) pointed out that, next to elevating the importance of external markets, globalization made trade in financial assets overwhelm trade in goods and services as well as foreign investment in physical assets. Since trade in financial assets was made possible by multinational banks and shadow banking institutions which were outside the central banks’ regulations and supervision and which provided credit to the private sector, this added to Minskyan economic instability.⁴ At the same time, the private sector generated additional incomes and profits, which – Bhaduri argued – had to be taken into account in demand-driven macroeconomic modeling.

In July 2015 Bhaduri circulated among the Łaski Study Group his ‘Three lectures on effective demand under financialization,’⁵ which started a new round of discussion among the group members and friends. Although the English translation of Łaski’s chapter 7 on money was not yet available to them, they were aware that developing a model of a demand-driven economy with one of its sectors representing the banking and financial sector might require the rewriting of that chapter and the revising of other chapters from Łaski’s textbook. Bhaduri’s ‘Lectures’ might have been a natural starting point for that work. His first lecture explains how aggregate demand is determined. The second explains unemployment as a function of aggregate demand falling short of the volume of output necessary to maintain full employment. In scope and method these chapters do not differ much from the line of argument in Łaski’s *Lectures in Macroeconomics*, nor from Bhaduri’s (1990) book (as evidenced among other places by the many references to it in Łaski’s *Lectures*). While in Bhaduri’s first two lectures money is treated as a general medium of exchange, its function as a store of value being largely put aside, the latter

3. See also Bhaduri (2011). Consequences of financialization for aggregate demand and its management were at the time explored also by other post-Keynesian and post-Kaleckian economists; for an account of those studies see, for example, Arestis/Sawyer (2016).

4. His paper was much discussed by Łaski’s Study Group.

5. The ‘Three lectures’ have not been published.

function is taken up in his final lecture. There, he brings in the 'Pigou effect' that might have been negligible enough to give rise to heavy criticism by Kalecki (1944 [1990]), but was sufficiently important under rentier financial capitalism of recent decades, for the following reasons:

The device of money helps individual agents of all sorts to cope however imperfectly with an unknown future basically through flexibility in the financial positions of individuals explaining institutions like the stock market which allows individual stock holder[s] to be flexible, while the underlying physical production system may be far less flexible in the short period. At the same time the social trust in money must be conditional because information about the future is incomplete and price levels may change. This explains why the social trust has to be reinforced by the monetary authority (money as a legal tender and final settlement of account). And yet, the incomplete information about contracts made in money for future receipts and payments induces individuals to look for more profitable or less risky contracts and insurances. This invariably leads to more sophisticated financial developments and credit instruments. They may (in the core financial sector) or may not be guaranteed by the monetary authority (the peripheral financial sector) and therefore, not necessarily supported by legally backed social trust. This is the twilight zone of modern finance and shadow banking coexisting with traditional deposit banking. This final lecture explores these developments and their [impact on] the theory of aggregate demand in contemporary capitalism. (Bhaduri 2015: 2)

Shortly after receiving Bhaduri's 'Three lectures on effective demand under financialization' Łaski wrote him that the Group had started discussion of his 'Lecture three' and asked for some clarifications.⁶ Responding to that query, Bhaduri wrote:

I am in the process of discovering the correct way of integrating real with financial sector. The basic is simple (as always!):

1. You take the liability-asset 3×3 matrix.
2. Treat the corresponding income flows from assets to sectors neglecting intra-sector transaction (like inside-outside money).
3. This gives only income from property, not from work, to sectors.
4. Assume all saving come from property income of households (mixed income from profit, wage, rent similar to Pasinetti 1962). So the distinction is between property income and work income, unlike wage and profit (Kalecki and post-Keynesians).
5. You get the $I - S$.
6. You see the asymmetry between an autonomous change in real and financial investment because saving of the real sector is partly held in financial securities issued by periphery which links the real to the peripheral sectors.⁷

Having received this explanation, Łaski wrote a *Note* which summarized the Group's discussion of Bhaduri's 'Lecture three' and circulated it to all involved.⁸ There is no evidence of the Group's further discussion of Bhaduri's 'Lecture three.' In the following months they apparently waited for the final version of that lecture. Meanwhile Łaski was proof-reading the Polish edition of his 'Lectures,' consulting a new collection of Kalecki's papers which he was doing with Osiatyński (Łaski/Osiatyński 2015a), and working with him on the volume of readings for their students at the Institute for Advanced Studies in Warsaw

6. Łaski's email communication to Bhaduri of 25 July 2015 was copied to Osiatyński among others.

7. Bhaduri's email communication to Łaski of 26 July 2015, copied to Osiatyński among others.

8. Copy emailed to Osiatyński.

(Łaski/Osiatyński 2015b). He also worked on his end-June 2015 presentation in Buenos Aires, for the Money and Banking Conference commemorating the 80th Anniversary of the Central Bank of Argentina (where he argued for returning fiscal policy to the role of policy-regulator of business cycle) (Toporowski 2015). Having returned from a holiday in France after his visit to Buenos Aires, Łaski learned he was terminally ill with cancer that was speedily progressing. In haste to handle his many research projects that were under way, as well as his other engagements, discussions of the Study Group naturally halted.

3 THE RELEVANCE OF KALECKI AND ŁASKI UNDER GLOBALIZED FINANCE CIRCULATION

What was the essence of Kalecki's approach to money and finance and their role in his theory of business cycle and economic dynamics which Łaski followed in his *Lectures*? Kalecki focused on money as a medium of financing expenditure, mainly of financing investment in fixed capital assets, rather than a store of wealth. He dismissed the Pigou real balance effect which makes aggregate demand depend on the real value of the stock of money. According to that effect, given the nominal stock of money when prices fall, the real value of money balances rises, which is supposed to stimulate aggregate demand. Kalecki argued that in an economy where fiat money is backed by credit, gains of money holders must be equal to losses of bank debtors. Moreover, when prices fall, the real value of bank deposits and bank loans rises, because loans and deposits are two sides of banks' balance sheets. Therefore falling prices, through operation of the Pigou effect, can neither restore nor maintain full employment (Kalecki 1944 [1990]). In Kalecki's theory, the supply of money is determined first of all by entrepreneurs' investment decisions which drive business cycle and growth, with extension of credits by the banking system flexible enough not to generate rising short-term rates of interest. Should short-term rates change, however, these changes would not affect long-term interest rates, which show little variability. And it is the long-term rate, Kalecki argued, that is relevant for investment decisions.⁹ The supply of money is endogenous and changes in banks' balance sheets are driven by changes in loans (Kalecki 1954 [1991]).¹⁰

If savings do not determine investments but, to the contrary, investment spending generates the savings necessary to finance it, what is the mechanism of financing investment? Kalecki simplifies it to investment being financed by bank credits, even when it is actually financed from retained profits (credit financing implies a bank transfer to the current account of the investor while financing from undistributed profits is seen as a transfer from the investor's deposit account to his current account). In the case of credit financing, the banking system generates purchasing power that finances investment that in turn gives rise to private savings of firms and households.

At that juncture Kalecki introduces his 'principle of increasing risk,' which determines the bankability of a firm applying for a loan and which in turn depends on the firm's profits and wealth. The greater the loan in relation to the firm's profit and wealth, the greater is

9. For this reason, Kalecki also did not think much of the other mechanism through which falling prices were supposed to stimulate aggregate demand, that is, through the so-called 'Keynes effect'. According to Keynes, falling prices would make the rate of interest decline. Kalecki thought, however, that this mechanism was unlikely to affect long-term interest rates (see Sawyer 2006: 178).

10. See also Sawyer (2006) and Sawyer/Passarella (2017). Kalecki's endogenous treatment of money and finance is discussed by, among others, Lavoie (2014: ch. 4), Godley/Lavoie (2007), Hein (2014: chs 5, 9), and Toporowski (2017).

the risk of the bank and the firm. The cost of borrowing is a rising function of the loan value. Moreover, the size of the firm and its growth potential are a rising function of its already accumulated wealth.

The limitation of the size of the firm by the availability of entrepreneurial capital goes to the very heart of the capitalist system. Many economists assume, at least in their abstract theories, a state of business democracy where anybody endowed with entrepreneurial ability can obtain capital for starting a business venture. This picture of the activities of the 'pure' entrepreneur is, to put it mildly, unrealistic. The most important prerequisite for becoming an entrepreneur is the *ownership* of capital. (Kalecki 1954 [1991]: 280, emphasis in original)

If desired savings are brought to equality with intended investment not through accommodative changes in interest rates but, as in Kalecki's theory, through changes in output and employment, how is the interest rate determined? Kalecki argued that

the rate of interest cannot be determined by the demand for and the supply of capital because investment automatically brings into existence an equal amount of savings. [Thus investment] finances itself whatever the level of the rate of interest The rate of interest is, therefore, the result of the interplay of other factors. We shall argue that the short-term rate is determined by the value of transactions and the supply of money by banks; and that the long-term rate is determined by anticipations of the short-term rate based on past experience, and by estimates of the risk involved in the possible depreciation of long-term assets. (Ibid.: 262)

When examining determinants of the long-term interest rate, he starts by establishing the relation between the short- and the long-term rates, which he presents as 'the problem of substitution between a representative short-term asset, say a bill of exchange, and a representative long-term asset, say a consol' (ibid.: 268). Comparing the yields of these two assets he finds a relative stability of the long-term interest rate. The absence of any significant cyclical fluctuations of the long-term rate he considers fully compatible with his theory, and concludes:

The short-term rate normally falls in a slump and rises in a boom because the supply of money undergoes smaller fluctuations than the value of transactions. But the long-term rate reflects these fluctuations only to a small extent. Indeed, the long-term rate is based on the average short-term rate expected in the next few years rather than on the current short-term rate; moreover, the long-term rate changes considerably less than the expected short-term rate because the increase in it, that is, the fall in the price of bonds makes the risk of their future depreciation less likely

Some authors have attributed to the rate of interest an important role among the forces underlying economic fluctuations. As it is the long-term rate that is relevant to the determination of investment and thus to the mechanism of the cyclical process, the results arrived at above are of considerable significance. Indeed, in view of the fact that the long-term rate of interest, for reasons discussed above, does not show marked cyclical fluctuation, it can hardly be considered an important element in the mechanism of the business cycle. (Ibid.: 276)

Thus Kalecki saw both the short- and the long-term interest rates determined not by 'real economy' factors but by monetary phenomena, although they have redistributive effects between entrepreneurs and rentiers, and through that channel they affect investment decisions; unless that effect is offset by Kalecki's (1937 [1990]) device of a 'capital tax'. The critical conclusion of his argument is this: business cycles and economic dynamics are determined by entrepreneurs' investment decisions, that is, by 'real economy' factors, and not by financial and money markets.

If planned private investment should prove insufficient to secure and maintain full employment, given the volume of intended private savings and the balance of foreign trade, then fiscal expansion financed by increased public debt must come to the rescue

in order to prevent a business downswing and rising unemployment. Wouldn't then high interest rates imposed by financial markets disable counter-cyclical fiscal policy measures? Kalecki thought the interest rate on public debt could be contained by sufficiently flexible monetary policy to keep the long-term interest rate in check, and the public debt burden financed by the above-mentioned 'capital tax.'¹¹

Finally, as noted by Sawyer, in contrast to Keynes who collapsed various motives for holding money (transactions, speculative, precautionary) into an overall demand for money, Kalecki distinguished between demand for money related to the volume of real transactions, and demand for it related to portfolio motive (that is, wealth), each of those demands being linked to different definitions of money.

The transactions demand for money is a demand for money used as a medium of exchange, which is satisfied by a narrow definition of money. ... The portfolio demand for money is a demand for money as a store of wealth which is generally linked with a broader definition of money and excluding those forms of money which yield a zero or negligible rate of interest. (Sawyer 2006: 184)

In Kalecki's approach to money and finance, it is the nominal volume of transactions that determines the demand for money, and not the stock of money that determines the nominal volume of transactions.

The summary of Kalecki's approach to money and finance given above is roughly what Łaski and many other interpreters and followers of Kalecki use as a point of reference in their respective discussions of Kalecki's theories. At the same time, there is a rising awareness among them of the need to expand the Kalecki–Keynes macroeconomic framework by taking on board various channels through which global financialization affects the course of business fluctuations and long-run economic development under finance-dominated capitalism. This is the second field of debate which goes well beyond the inner circle of Łaski and finds reflection in actual attempts to account for financialization within the Kaleckian theoretical framework.

Eckhard Hein (2014: 375–376) enumerates four channels through which financialization affects capitalist economic dynamics: (i) distributional, (ii) investment in capital stock, (iii) wealth-based and debt-financed consumption, and (iv) current-account balance. The first finds reflection in increased gross profit shares in GDP and increasing wage and salary inequalities, the major reason for this being the 'falling bargaining power of trade unions, rising profit claims imposed in particular by increasingly powerful rentiers, and a change in the sectoral composition of the economy in favour of the financial corporate sector' (*ibid.*: 375).¹² The essence of the second is increased shareholder power vis-à-vis management (and workers), which leads to an increasing rate of return on equity and bonds held by rentiers, and thereby to short-termism of management and to depressing their 'animal spirits' regarding investment in capital stock and their increasing preference for investment in far more liquid financial assets which generate high profits in the short run. The third channel relates to substituting wealth-based and debt-financed consumption for wage financed consumption to counter the aggregate

11. However when, in contrast to Kalecki's time and axiological economic policy framework, sovereign debt is at record high levels, as it is nowadays in most developed capitalist countries, the question arises whether fiscal stimulus can be feasible and sustainable (see, for example, Nuti 2015: 122).

12. Nuti (2015: 122) would add here globalization of world labor markets 'through international migrations, de-localization of output to lower-wage locations, but primarily through trade.'

demand, depressing the impact of factors operating through channels (i) and (ii).¹³ Channel four accounts for the potential persistent current-account deficits, large and mounting foreign indebtedness, and the resulting exchange-rate volatilities and currency crises.

Many post-Keynesians show that in the past few decades financialization tended to slow economic growth and investment, and made the economy more prone to financial crises and to misallocation of resources. Following an extensive survey of that literature Sawyer (2016: 62) concludes that on various counts the financial sector is 'too large in terms of its use of resources relative to the economic and social benefits provided by the financial sector,' that 'financial instability and the associated costs of financial crisis have resulted from financialisation and financial liberalization ... [and that] it has shifted away from the facilitation of savings and the financing of investment. It is then perhaps not surprising that the growth of the financial sector (relative to GDP) is not linked with economic growth as the growth of the capital stock is no longer being facilitated by the operations of the financial sector.' At the same time, while 'a rather small proportion of new funds are raising through issue of new equity ... , and indeed through share buy-backs and mergers the contribution of equity markets to additional funding can be negative, [and] there is, in some sense, a lack of funding for small and medium sized enterprises' (ibid.: 64). That criticism leads Sawyer to outline some ideas on how to definancialize and scale down operations of the financial sector, among others through reviving Keynes's (1936 [1967]) idea of what could be now termed a financial transaction tax, and of which Keynes (ibid.: 160) wrote that 'a substantial Government transfer tax on all [financial] transactions might prove the most serviceable reform available, with a view to mitigating the predominance of speculation over enterprise.'

Needless to say, the questions of limiting the scope of financial speculation vis-à-vis enterprise investment, and of feasibility of policy measures aimed at achieving that goal, goes far beyond the scope of this paper. The purpose of my comments on the work of Sawyer, Hein, Nuti, and others is merely to provide a broader context to the aforementioned discussions of Łaski's Study Group on the need to extend Kalecki's effective demand theoretical framework in order to enable it to accommodate the new challenges of globalized financial capitalism.

Following his aforementioned 'Three lectures on effective demand under financialization,' in October 2015 Bhaduri wrote that he had 'cracked the awkward problem of how to include finance in Kalecki framework' and that he 'would be very happy to have a chance to show this new formulation in a small, informal workshop.'¹⁴ He hoped to be moving towards integrating 'modern finance in Marx-Kalecki by extending a two sector framework' and thought Łaski's 'last piece to us did initial part of it as a simple extension of Kalecki but more is needed to get insight in especially endogenous money and securitization of debt.'¹⁵ The draft of his paper opened with the section on 'The principle of effective demand: Marx, Kalecki and Keynes,'¹⁶ and its final version appeared in

13. It may be noted in passing that such private borrowing may prove unsustainable. See also Bhaduri et al. (2015), who examine changes in asset prices as a driver of the dynamic interaction between the real and the financial sectors and show that such changes affect income determination in the real economy in the short period through aggregate demand changes, potentially leading to systemic crises and macroeconomic instability.

14. Bhaduri's email communication of 20 October 2015 to Walther, Riese, Osiatyński, and Elisabeth Hagen. In April 2016 he gave two guest-lectures on that topic, one at the National Bank of Poland, and the other at the Economic University of Vienna.

15. Bhaduri's email communication to Riese, Walther, and Osiatyński on 12 November 2015.

16. For a different examination of links between credit and crises in the doctrines of Marx, Hawtrey, Fisher and Keynes, to Breit, Kalecki, Steindl and Minsky, see Toporowski (2017).

the 2017 *Review of Keynesian Economics (ROKE)* as Bhaduri/Raghavendra (2017).¹⁷ The argument outlined in the *ROKE* paper Bhaduri expanded in a series of papers, the first of which was his ‘Growth and instability through interaction between the real and the financial sector’ (unpublished). In his email of 21 November 2017 to Osiatyński, Bhaduri asked for comments and wrote: ‘The attached simple model/paper in a raw form probably with some mistakes on how to deal with finance and growth theory in a stock flow consistent framework using the Kalecki–Cambridge equation might interest you. Hope to have your reaction before finalizing it.’

What is the essence of Bhaduri’s approach? Next to the real sector of the economy he subdivides its financial sector into the regulated banking subsector and the mostly unregulated shadow banking subsector which is the provider of most of the modern financial services. This model he uses to examine changes in output and profits under credit expansion of the financial sector, and demonstrates that while the transfer of profits between the real and the financial sectors depends on the ratio of respective rates of return of investment in fixed capital, and those of bank deposits and of various financial instruments, it will also affect the profit realization potential in the real sector. The latter depends in turn on whether the loss of aggregate demand in the real sector (due to the transfer of profits) will, or will not, be overcompensated by increased demand due to rising consumption in the banking and shadow banking subsectors following increased employment there. However (as shown in his ‘Growth and instability through interaction between the real and the financial sector’ paper), although the feedback between market valuation of shares and stock does not affect the intersectoral distribution between business profits and property-type incomes, changes in this distribution do affect stock and share prices. Therefore that feedback may lead to sharp reductions of overall market prices of stocks and shares, and to deep financial crises.

Osiatyński responded to Bhaduri’s ‘Growth and instability’ paper with some reservations:

I have a rather fundamental problem with fully sharing its final conclusion that ‘(a)n expansion of employment in the financial sector does add to aggregate demand and realization of profit in the economy’ (pp. 13–14).

Of course, in an underemployed economy expansion of employment in any sector generates additional income and welfare, and through the Keynesian multiplier mechanism it affects the whole economy. So employment in the gambling sector is just as good as Keynes’s unused coal-mines trick. True, you put a number of restraining caveats on your conclusion. Nevertheless in a very simple model of economy in which supply of money is endogenous and demand determined (no *ex ante* savings is needed to finance investment), and in which financial capitalists (financial rent-seekers) speculate with regard to future profitability of the spectrum of financial instruments, would a sectoral re-allocation of employment and a rise in their numbers (or in numbers of their financial transactions) indeed increase GDP growth rates beyond that resulting from the multiplier mechanism (which would be rather of one-off nature)? In our times we see expansion of financial

17. *ROKE* devoted five consecutive issues (vol. 4, no 4 through to vol. 5, no 4) to a debate stimulated by Bhaduri/Marglin (1990) on wage-led versus profit-led growth. Bhaduri/Raghavendra’s (2017) paper appeared as their contribution to that debate. Circulating, in the middle of June 2017, the proof version of his *ROKE* paper, Bhaduri emailed Osiatyński: ‘Might interest you and a few others in Poland, based on Kalecki. It started with that lecture at the Polish National Bank when it was actually premature for me to speak. But thanks for that opportunity which posed this challenge.’ At the same time he wrote to the editor of *ROKE*: ‘Here is a paper using Kalecki, and enough room to incorporate the problem of “margin” in a financialized economy. Its policy relevance would be obvious using the theoretical model.’

capitalists compared to Schumpeterian businessmen. In fact increasing numbers in the latter category tend to allocate their undistributed profits into financial market instruments instead of investing them in productive capital expansion. What would be the dynamics of an economy in which no-one invests any more into expansion of 'real' capital assets and everyone speculates in financial markets? What then would be the value of financial assets of primary and secondary nature, and so on, so forth? I am aware, my example is as extreme as to render it absurd. But I think, don't we have a problem when all wish to play in casino – both in the enterprise and the household sector – but there is nowhere where one could earn money (wages and profits) to spend it gambling? Moreover, considering the experience of capital-founded pension systems vis-à-vis the pay-as-you-go ones, and the fact that in long run and on average, profitability of investment funds' sector is at best equal to, but often less than the long run GDP growth rate, I have additional doubts regarding competitiveness of the investment funds sub-sector.

Surely, I must be missing something in your basic assumptions that does not allow me to enjoy your final conclusion.¹⁸

True, in contrast to a casino which for all gamblers taken together is a negative-sum game, allocating one's savings into different financial instruments for all savers as a whole is a positive-sum result, barring financial and/or business crisis. Hence the analogy was inaccurate. Moreover, Bhaduri was aware of the nature of the financial sector, naming its output 'fictitious'. Nevertheless, in the area of financialization and globalization, Keynes's (1936 [1967]: 159) prophetic warning that 'speculators may do no harm as bubbles on a steady stream of enterprise. But the situation is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done', becomes increasingly actual.

Of the two challenges which arise when the economy is overwhelmed by the casino-type operations, Sawyer is concerned with the question of how to stop and divert that trend, and Bhaduri with the question of how to account for it. In their 2017 paper Bhaduri and Raghavendra set themselves two interrelated objectives. The first is to present a general formulation of the principle of effective demand in a multi-sector macroeconomic model that accommodates the modern banking and finance sector. The second is to use that model to examine income and profit determination under the presence and expansion of the modern financial sector through various primary and secondary credit instruments (Bhaduri/Raghavendra 2017: 426). Aware of the complexities of the relationship between profit generated in the real sector of the economy and that generated by trading financial instruments, which is the essence of their second objective, Bhaduri and Raghavendra conclude that while the banking and finance sector 'also adds to aggregate demand and therefore helps in realization of profit ... the question of its generation would require deeper analysis of the nature of surplus [which they] are unable to present ... in this paper' (ibid.: 437). This question, however, is of rather central importance in examining

18. Email to Bhaduri of 25 November 2017. The line of argument of the 2017 *ROKE* paper was next developed in Bhaduri/Guha's (2018/2019) paper, 'An outline of the theory of growth and crisis in a financialized economy,' which he presented in October 2018 at the conference of the Forum for Macroeconomics and Macroeconomic Policies (FMM) in Berlin and at the SOAS, University of London, and in March 2019 at the National Bank of Poland (NBP); see Bhaduri (2018) and Bhaduri/Guha (2019). It is noteworthy that following his 2019 guest-lecture at the NBP, Bhaduri wrote that he no longer thought the end of the tunnel was in sight, as he had done earlier. 'A satisfactory integration of the real with the financial sector has not been done, and the role played by finance in the growth and sudden collapse of the economy is not yet satisfactorily explained in the literature with sufficient clarity. And certainly not by me' (Bhaduri's email to Osiatyński of 6 April 2019).

the present-day relevance of Kalecki's (and Keynes's) macroeconomic framework. I shall address some of its aspects in my concluding notes.

In the subsequent research Bhaduri focuses on two interrelations that help to explain the mechanism through which changes in distribution of profits between the real and the financial sector of the economy may lead to a sudden collapse of the economy, and concludes:

The proposition that the stock market is representative of the state of the real economy is largely a myth, because increasing inter-sector profit transfer in favour of the financial sector tends to be detrimental to the real economy and income distribution. However, if total profit continues to increase sufficiently through Kaleckian profit realization route ... the situation may be mitigated to an extent, but it would show in real variables like capacity utilization and employment. (Bhaduri 2018: 41)

That line of argument is developed further in 'An outline of the theory of growth and crisis in a financialized economy.' In that paper Bhaduri/Guha (2019) examine the interrelations between the ratio of relative shares of profit in the real economy sector and in the financial sector, and the ratios of wealth (given by the market valuation of stock and shares) to the book value (or replacement value) of capital assets. In conclusion they find that: (i) if along a trend line the capitalized value in the stock market is lower than the replacement book value of capital assets then the economic system is unlikely to continue to be stable for very long; and (ii) if the distribution of profits tends to shift in favor of the financial sector and the stock prices rise, this should be seen as an early warning signal for an imminent financial collapse.¹⁹

4 CONCLUDING NOTES

Earning profit is a common denominator of Schumpeterian-innovative entrepreneurs as well as of rent-seekers. Moreover, for entrepreneurs, the wealth gains related to rent-seeking may compete with their entrepreneurial-motivated investment decisions to expand their fixed capital assets. When the power of rentiers increases, and entrepreneurs are also guided by wealth effects of their financial investments, the latter become an important co-determinant of the course of the business cycle and of economic dynamics. Isn't, then, the instability and cyclical development of present-day financial capitalism generated by factors that operate in financial and capital markets rather than, or as well as, by factors operating in the real sphere of the economy? To what extent are the instability and business fluctuations therefore of a Minskyan rather than a Kaleckian nature?

Following the 2008 global financial crisis there has been a strong revival of interest in Hyman Minsky's (1986; 1992) financial instability hypothesis and in his theory of financial crises. Although Minsky, in presenting his 'financial theory of investment,' does not directly refer to Kalecki's theory of the business cycle, the former is often seen as an extension and continuation of the latter. There is, however, an important difference between them.

For Minsky, the primary cause and the trigger of financial crises are breakdowns in financial markets which are next transmitted to the real sector of the economy. Following Keynes, Minsky concentrated on the transaction and the speculative demand for money. While realized profit is the prime goal of economic activity, profit is achieved only as long as the cost of servicing loans incurred to finance investment in productive capital goods, or to speculate in financial markets, is less than the return on investment in capital assets or

19. See also Bhaduri (2018).

in financial instruments. In periods of economic prosperity, lenders are able to finance the cost of repayment of the principle and interest on their credits out of their income cash flows. However, as prospects of future profits appear to be bright, some of those 'hedge' lenders (as Minsky calls them) increase their debts, and with time and deterioration of business opportunities they become 'speculative' lenders, that is, able to meet only their interest payments, rolling over their servicing of principals, and then 'Ponzi' lenders who can service their debts only by incurring new loans. When the real economy sector slows down, the 'Minsky moment' arrives, when a fire sale of assets is hoped to help regain financial liquidity. This simplified mechanism represents a trajectory of development along which excess optimism of borrowers and lenders leads to financial bubbles and busts, and makes capitalism prone to move from periods of financial stability to instability. In that theory of 'financial Keynesianism,' investment determines the volume of income cash flow necessary to meet outstanding debt obligations.

What is the difference between this theory and Kalecki's theory of the business cycle? For Kalecki the business cycle is an inherent feature of investing in productive capital assets that takes place in the real sector of the economy. Following Aftalion, Tinbergen, and other pioneers of the study of business fluctuations in the 1930s, for Kalecki the primary cause of these fluctuations is the time lag related to the construction period of investment and the lapse of time between taking investment decisions and starting their implementation. That combined time lag determines the distance between the income effect that appears in the course of investment implementation, and the supply effect which appears only once the undertaken investment is put into operation and thereby increases competition and deteriorates prospects of future profits. As argued above, in Kalecki's theory financing of investment is not a separate determinant of cyclical fluctuations of investment, although it may make investment decisions more difficult if increased demand for credit is not followed by appropriate monetary policy aimed at preventing a rise in long-term interest rates. Moreover, Kalecki's theory requires a roughly stable period of the cycle (given by the duration of the combined time lag), and a stable amplitude of investment fluctuations (given by normal distribution of random shocks),²⁰ and he often wrote and spoke of the mechanism of an 'automatic' business cycle. The determinants of Kalecki's canonic profit equation and of his equation determining cyclical fluctuation of investment, aggregate output, and employment are embedded in the real sector of the economy.

This is not quite the world of Minsky, nor that of present-day financial capitalism, nor the world of Keynes for whom financial speculation was a special field of research and practical experience. Keynes and Minsky saw the primary cause of business fluctuations in the operation of financial markets and they did not expect business fluctuations to be regular, of a stable period and amplitude. It may well be, however, that under present-day financial capitalism business fluctuations, or rather financial crises which are then transmitted to the real economy sector, are in fact determined by global financial markets and ruled by the mechanisms discussed by Minsky rather than those of Kalecki's theory. Then the question arises of how to expand Kalecki's analytic framework in such a way that Kalecki's revised canonic equations of determining profits and of economic dynamics should still generate regular business fluctuations in the real economy and be integrated with factors responsible for the inherent (Minskyan) instability of the global financial markets?

20. Much shorter construction periods of fixed capital assets compared to what they were some 90 or 60 years ago, and increased relative shares of services in the structure of aggregate output (where construction periods are normally shorter than in the industry), made the period of cyclical fluctuations shorter compared to what it was in Kalecki's time.

The other issue that relates to the relevance of Kalecki's theory under present-day financial capitalism is its stagnatory trend. In his *Maturity and Stagnation in American Capitalism*, Joseph Steindl (1952), a close friend and admirer of Kalecki with whom he worked at the Oxford University Institute of Statistics during the Second World War, explained the stagnation trend in the American economy that followed the 1929–1933 crisis as the result of its long-run monopolization.²¹ Steindl followed Kalecki's investment decision function (with greater emphasis on under-capacity use of capital equipment), and Schumpeter, in arguing that under competitive markets surplus capacity generated in the boom is eliminated through 'creative destruction' which leads to the closing of high cost plants. Thus, while in 'competitive' sectors of the economy excess capacity is eliminated in the long run through the price-cutting mechanism, in the oligopolistic sectors surplus capacity will not be squeezed out. And since restoration of 'normal' degree of utilization (Steindl), and of 'normal' profit margins (or gross profit mark-ups – Kalecki), go hand in hand, the redistribution of profits to monopolized industries discourages investment decisions.

Next to financialization and globalization, which intensify monopolization, another new feature of present-day capitalist development refers, I think, to the nature of private savings. For Kalecki and Steindl, whereas undistributed profits of firms encourage investment decisions and facilitate their execution, household savings depress aggregate demand and thereby investment. When, in the middle of the 1929–1933 world economic crisis, Kalecki wrote his 1933 'Essay on the business cycle theory,' in line with the Marxist tradition he might have thought of workers as being dispossessed in the sense of them owning nothing except their labor power. This, I think, is the root of his assumption: 'workers spend what they earn.' That assumption he maintained in subsequent versions of his theory although by the early 1950s, when he worked on his 'Theory of economic dynamics,' he limited that caveat to manual workers only (and showed that introducing workers' savings would only complicate his formal analysis but would not change its conclusions). Moreover, whatever were the savings of the middle class and the salaried employees, during the 'golden age' of post-Second World War capitalism, at high rates of growth of national income and high employment rates, barring mild business fluctuations, private investment and business willingness to incur debts were strong enough to absorb household savings. On average, not much government counter-cyclical and debt-financed intervention was needed, and, by present-day standards, government debt-to-GDP and deficit-to-GDP ratios were amazingly low.

In this respect, under finance-dominated modern capitalism the situation in two respects has significantly changed. The first change refers to household savings and capacity of fiscal expansion policy to counterbalance effects of their rising. The second refers to pattern of behavior of businessmen.

Together with the overall increase of wages and salaries and rising income disparities, household savings (net of household mortgages) have also increased, in absolute terms and as a percentage of GDP. This would add to depressing aggregate demand effects of monopolization, because at any given volume of intended private investment the gap between what the business is willing to borrow over and above its retained profits and the volume of net financial assets which households plan to acquire would increase. Unless this rising gap were absorbed by debt-financed government spending, or by the increased demand of the rest of the world, the adjustment process that would bring realized savings to equilibrium with realized investment would be effected through reduced volume of output and employment, and thus reduced household incomes and savings made out of them.

21. See also Steindl (1990: part III).

To avoid this type of recession/stagnatory adjustment and the resulting decline in social cohesion, political radicalization, and social unrest, several economic policy options may be followed. Each has its limitations, however. The first is the debt-financed government spending, that is, some sort of full employment policy, albeit within the regime of Kalecki's 'political business cycle.' The scope and length of that potential intervention of national governments in a globalized financial capitalism is limited by financial and capital markets which may bring the country to sovereign insolvency.

An alternative policy option is debt-financed consumer spending. From a macroeconomic point of view this can be seen as a reduction in the overall propensity to save. However, since different households save and other 'overspend,' credit-financed consumer spending also has limits determined by households' capacity to service their debts. Moreover, this type of stimulation of the economy also increases its instability.

Another option is a form of 'beggar-thy-neighbor' policy through wage rate dumping, called 'internal devaluation.' Its shortcomings are twofold. It cannot be applied by all countries at the same time, since for every net exporter there must be some net importer(s). Second, reductions in wage rates, and therefore in aggregate wage bill and demand, may well offset increases in aggregate demand due to rising net exports. For instance, Germany experienced over a decade-long period of very large export surplus (in percentage of GDP), nearly stagnant real wage rates, and hardly any growth of real GDP (Łaski 2019: 177).²² In conclusion, it appears that whichever option is practiced, increased household savings are difficult to contain in the present-day environment of monopoly financial capitalism.

Closely linked with rising household incomes and their net financial assets is the change in economic policy priorities. Notwithstanding large disparities in household wealth distribution combined with a rise in the number of asset-holders and the inequality among them, public interest in low inflation also rises and fighting inflation becomes an important policy goal for middle- and low-wage earners too. One does not need to be a rentier or a salaried manager to expect the government and/or the central bank to 'care about the value of my money.' The trade-off between full employment and acceptable inflation rates seems to have moved towards tolerating more unemployment, although this may change with social polarization, political radicalization, and a rising tide of nationalisms across the world, all of which are correlated with unemployment and social marginalization.

The second change relates to the pattern of behavior of businessmen. Earning profit is a common denominator of Schumpeterian-innovative entrepreneurs as well as of rent-seekers. However, under the finance-dominated capitalist system it is also true for entrepreneurs that the wealth gains related to rent-seeking may compete with their entrepreneurial-motivated investment decisions to expand their fixed capital assets. When the power of rentiers increases, and when entrepreneurs are also guided by the wealth effects of their financial investment, those effects become an important co-determinant of the course of business cycle and economic dynamics. If, however, instability and cyclical development of present-day financial capitalism are generated by factors that operate in financial and capital markets rather than – or as well as – by factors operating in the real sphere of the economy, to what extent are the instability and business fluctuations of a Minskyan nature rather than of that studied by Kalecki and Keynes?

In conclusion to the argument presented above, what is the answer to the question on the present-day relevance of Kalecki's theory, as presented by Łaski (2019)? Whatever is the essence of secondary, tertiary, and next-order financial instruments that have been invented and traded, there must be the real economy sector that generates output and

22. An alternative policy option would be, of course, rising real wage rates in step with labor productivity, contrary to tendencies seen in recent decades under financial capitalism.

primary incomes of firms and households, and determines the value of financial primary instruments linked to them. That real sector is the engine of development of the economy. Hence the macroeconomic framework of Kalecki, which Łaski presents in his *Lectures*, continues to be relevant under present-day financial capitalism. The key question which needs to be addressed relates to Kalecki's private investment decision function. To what extent does the rising role of rentier profit-seeking under financial capitalism affect that function? How should it be modified and what new parameters should it include to make it explain the system's instability and cyclical progression, considering that for Kalecki they originate from the real rather than from the financial sector of the economy? How to combine the Minsky-type determinants, which operate predominantly in the financial markets, with the Kalecki-type determinants of private investment in fixed capital?

Kalecki always thought his investment decision function was 'the central *pièce de résistance* of economics.' It still is. The question implied in the subtitle of Łaski's book – 'is full employment possible in a capitalist economy?' – may need rephrasing into 'is full employment possible in the present-day finance-dominated capitalist economy?' To answer that question we may need a new investment decision function that would combine Kaleckian and Minskyan (other?) determinants of financial and business cycles and economic dynamics. Notwithstanding many attempts towards a more comprehensive integration of the interactions between the real and the financial sectors of the economy, we are still only at the beginning of the research into satisfactory answers to those questions.

REFERENCES

- Arestis, P., Sawyer, M. (eds) (2016): *Financial Liberalisation: Past, Present and Future*, Basingstoke, UK and New York: Palgrave Macmillan.
- Bhaduri, A. (1990): *Macroeconomics: The Dynamics of Commodity Production*, revised Indian edn, New Delhi: Macmillan.
- Bhaduri, A. (2011): A contribution to the theory of financial fragility and crisis, in: *Cambridge Journal of Economics*, 35(6), 995–1014.
- Bhaduri, A. (2014): What remains of the theory of demand management in a globalizing world, Levy Economics Institute of Bard College, Public Policy Brief, No 130.
- Bhaduri, A. (2015): Three lectures on effective demand under financialization, unpublished; electronic copies circulated among Łaski's inner circle.
- Bhaduri, A. (2018): Growth and crisis under finance-dominated capitalism, unpublished; for an audio recording of his SOAS presentation see URL: <https://player.fm/series/soas-economics-seminar-series-public-lectures-and-events/growth-and-crisis-under-finance-dominated-capitalism>.
- Bhaduri, A., Guha, S. (2019): An outline of the theory of growth and crisis in a financialized economy, URL: <https://www.nbp.pl/badania/seminaria/29iii2019.pdf>.
- Bhaduri, A., Marglin, S. (1990): Unemployment and the real wage: the economic basis for contesting political ideologies, in: *Cambridge Journal of Economics*, 14, 375–393.
- Bhaduri, A., Raghavendra, S. (2017): Wage- and profit-led regimes under modern finance: an exploration, in: *Review of Keynesian Economics*, 5(3), 426–438.
- Bhaduri, A., Łaski, K., Riese, M. (2006): A model of interaction between the virtual and the real economy, in: *Metroeconomica*, 57(3), 412–427.
- Bhaduri, A., Raghavendra, S., Guttal, V. (2015): On the systemic fragility of finance-led growth, in: *Metroeconomica*, 66(1), 158–186.
- Godley, W., Lavoie, M. (2007): *Monetary Economics: An Integrated Approach to Credit, Money, Income, Production and Wealth*, Basingstoke, UK and New York: Palgrave Macmillan.
- Hein, E. (2014): *Distribution and Growth After Keynes: A Post-Keynesian Guide*, Cheltenham, UK and Northampton, MA: Edward Elgar Publishing.

- Kalecki, M. (1933 [1990]): Essay on the business cycle theory, in: *Collected Works of Michał Kalecki*, vol. I, Oxford: Oxford University Press, 65–108.
- Kalecki, M. (1937 [1990]): A theory of commodity, income, and capital taxation, in: *Collected Works of Michał Kalecki*, vol. I, Oxford: Oxford University Press, 319–325.
- Kalecki, M. (1944 [1990]): Professor Pigou on 'the classical stationary state': a comment, in: *Collected Works of Michał Kalecki*, vol. I, Oxford: Oxford University Press, 342–343.
- Kalecki, M. (1954 [1991]): Theory of economic dynamics: an essay in cyclical and long-run changes in capitalist economy, in: *Collected Works of Michał Kalecki*, vol. II, Oxford: Oxford University Press, 205–348.
- Keynes, J.M. (1936 [1967]): *The General Theory of Employment, Interest and Money*, London: Macmillan.
- Łaski, K. (2009): *Myths and Reality in Economic Policy and in Teaching Economics*, Warsaw: Instytut Nauk Ekonomicznych Polskiej Akademii Nauk and Fundacja Innowacja (in Polish).
- Łaski, K. (2019): *Lectures in Macroeconomics: A Capitalist Economy Without Unemployment*, Oxford: Oxford University Press. (Polish edition: 2015.)
- Łaski, K., Osiatyński, J. (eds) (2015a): *Michał Kalecki, Kapitalizm: dynamika gospodarcza i pełne zatrudnienie (Michał Kalecki: Selected Essays in Economic Dynamics and Full Employment)*, Warsaw: iTON Society (in Polish).
- Łaski, K., Osiatyński, J. (eds) (2015b): *Globalny kryzys gospodarczy po roku 2008. Perspektywa post-keynesowska (Global Economic Crisis After 2008 from a Post-Keynesian Perspective)*, Warsaw: Instytut Studiów Zaawansowanych (in Polish).
- Lavoie, M. (1992): *Foundations of Post-Keynesian Economics Analysis*, Cheltenham, UK and Northampton, MA: Edward Elgar Publishing.
- Lavoie, M. (2014): *Post-Keynesian Economics: New Foundations*, Cheltenham, UK and Northampton, MA: Edward Elgar Publishing.
- Minsky, H.P. (1986): *Stabilizing an Unstable Economy*, New Haven, CT: Yale University Press.
- Minsky, H.P. (1992): The financial instability hypothesis, Working Paper No 74, Levy Economics Institute of Bard College.
- Nuti, M.D. (2015): Michał Kalecki's capitalist dynamics from today's perspective, in: Toporowski, J., Mamica, Ł. (eds), *Michał Kalecki in the 21st Century*, Basingstoke, UK: Palgrave, 119–130.
- Pasinetti, L.L. (1962): The rate of growth and income distribution in relation to the rate of economic growth, in: *The Review of Economic Studies*, 29(4), 267–279.
- Sawyer, M. (2006): Kalecki on money and finance, in: Arestis, P., Sawyer, M. (eds), *A Handbook of Alternative Monetary Economics*, Cheltenham, UK and Northampton, MA: Edward Elgar Publishing, 172–187.
- Sawyer, M. (2016): Confronting financialization, in: Arestis, P., Sawyer, M. (eds), *Financial Liberalisation: Past, Present and Future*, Basingstoke, UK and New York: Palgrave Macmillan, 43–85.
- Sawyer, M., Passarella, M.V. (2017): The monetary circuit in the age of financialization: a stock-flow consistent model with a twofold banking sector, in: *Metroeconomica*, 68(2), 321–353.
- Steindl, J. (1952): *Maturity and Stagnation in American Capitalism*, Oxford: Basil Blackwell.
- Steindl, J. (1990): *Economic Papers 1941–88*, Basingstoke, UK: Macmillan.
- Toporowski, J. (2015): Kazimierz Łaski, 15 December 1921 – 20 October 2015, Royal Economic Society Newsletter. (Reprinted in the *Economic and Labour Relations Review*, 2017, 28(3), 474–480.)
- Toporowski, J. (2017): *Credit and Crisis from Marx to Minsky*, Cheltenham, UK and Northampton, MA: Edward Elgar Publishing (forthcoming; first published in Polish).