1

Introduction

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This introductory chapter is comprised of two parts. The first is an appreciation of John McCombie in terms of his contributions to economics. The second part is an introduction to the chapters that follow.

1 John McCombie: An Appreciation

It is almost by pure chance that John McCombie ended up as an economist. He essentially began his academic career when he went up to Downing College at the University of Cambridge to read for the Geographical Tripos. He had an interest in economic geography, broadly defined. After spending two years studying for this Tripos, John considered that some training in Economics was essential for a full understanding of these topics. He therefore changed subject to read for Part II of the Economics Tripos and graduated in 1973.

In the face of fierce competition, he was then awarded a prestigious Commonwealth Scholarship. The Scholarship provides funding for

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postgraduate studies at leading Commonwealth universities. This provided John with the opportunity to return to geography and to study for an MA in Geography at McMaster University in Canada. At the time, the Department of Geography there had some notable quantitative and theoretical economic geographers under whom John wished to study. It was there that he wrote his first published paper, a comment on 'Utility Accessibility and Entropy in Spatial Modelling' (McCombie 1975),[1] which was the first of many influential papers to come. After the productive year spent in Canada, John won a SSRC grant (as it then was) to return to Cambridge University to undertake research for a PhD. He was faced with an embarrassment of riches as he had offers from both the Faculty of Economics and Politics and the Department of Geography; he chose the former.

John returned to his old College, Downing, as a postgraduate student and was subsequently elected to a Bye-Fellowship of the College. So began his love of teaching and working with students as he undertook supervisions for the College for the first time. His first academic post was at the University of Hull, where the Department of Economics was looking for a regional economist (he turned down a Fulbright scholarship, which provided funding for further research to be undertaken in a leading US university, to take up the lectureship). He took up this appointment in 1977 and in 1986 took leave of absence to spend three years at the Department of Economics at the University of Melbourne, Australia. He returned to the UK in 1989 to take up a post in the Department of Land Economy at the University of Cambridge and was immediately offered a Fellowship in Economics and Land Economy at his old College. The Land Economy Tripos is an interdisciplinary subject, drawing on the disciplines, inter alios, of law, economics and real estate management. This environment suited John's interdisciplinary background and his research. He continued to publish widely and to build on his international reputation.

His move to Cambridge brought with it a host of administrative duties including being Director of Studies in the three subjects Economics, Land Economy and Management Studies for Downing College and Director of Studies for Land Economy for Christ's and Girton Colleges. With the late Nigel Allington, he built up Downing economics with its

18 students, so that in terms of economics degree results, it became one of the top five Cambridge colleges. As Director of Studies and supervisor, John excelled at the small-group teaching, gaining great pleasure from imparting knowledge to some of the brightest students in the UK. He was a very popular supervisor. He also had many PhD students, enjoying the two-way interchange of ideas. Most of his students went on to distinguished careers in academia, including professorships, or to work for international institutions such as the World Bank.

John spent the rest of his academic career at Cambridge, becoming Professor in Regional and Applied Economics, and working in his large 200-year-old study, with its wonderful views over the Downing domus—there can be few nicer places to write academic papers. During his tenure at Land Economy, he achieved substantial private funding that enabled him and Philip Arestis, as Director of Research, to establish the Cambridge Centre for Economic and Policy. The Centre also funded a Senior Research Associate. It built up an international reputation in such diverse areas ranging from monetary economics (both theory and policy), regional economic theory and policy to post-Keynesian economics, in general. In collaboration with the Department of Applied Economics V of the University of the Basque Country, the Centre has regularly organized what has now become one of the major European economics conferences, which, at the time of writing, is into its 15th year. The conference regularly leads to high-quality publications.

During his academic career, John has been invited to hold a variety of important appointments outside the University. He was a co-editor of *Urban Analysis and Policy, Regional Studies* and a founding co-editor of *Spatial Economic Analysis.* He has been an Economic Consultant to both the World Bank and the Asian Development Bank, acting as editor of the *Asian Development Review* for a number of years. He was Specialist Advisor to the House of Lords European Union Sub-Committee on the Future of the EU Structural and Cohesion Funds (2008/2009), reflecting his high standing in regional economics. He was particularly delighted to be elected Fellow of the Academy of the Social Sciences (FAcSS) and Fellow of the Regional Sciences Association (FeRSA). He was a specialist for Town and Country Planning (reflecting his interdisciplinary background) in the Teaching Quality Assessment for *the Higher Education*

Funding Council of England and the *Scottish Higher Education Funding Council* in the late 1990s. Over the years, he has received numerous invitations from universities to come as a Visiting Professor. These included the University of Castilla-La Mancha, Spain; Keio University, Japan; Pomona College, USA; the Federal University of Minas Gerais, Brazil; and the University of Otago, New Zealand. He is also a Visiting Fellow at Centre for Globalization Research and Queen Mary University of London.

There is no doubt that a powerful influence on an economist's approach to his or her subject is the academic training, often for the doctorate. It is not for nothing that the Jesuits' motto is 'give me the child until he is seven and I will give you the man'. During the time John was pursuing his undergraduate and postgraduate studies in the early 1970s, there was what might be best termed a school of 'Cambridge Economics'. These included some intellectual heavyweights such as Nicky Kaldor, Joan Robinson, Luigi Pasinetti, Bob Rowthorn and Geoff Harcourt. It is probably fair to say that what gave the group its coherence was more its rejection of neoclassical economics than anything else. On the applied side, there was also Wynne Godley and the Cambridge Economic Policy Group.

John had come to Cambridge to do his PhD in the area of what was then called the 'New Urban Economics'. However, he became intrigued by the debate between Kaldor and Rowthorn at that time over what was then a deceptively simple relationship between the growth of productivity and output known as the Verdoorn law. This was interpreted as providing evidence of substantial dynamic and static increasing returns to scale.

This debate raised some intriguing issues and led first to what was going to be a temporary diversion of John's research. However, he eventually switched his PhD research to a full-time consideration of various aspects of the law and the Kaldorian approach to growth. This led to a large number of papers on the subject, including papers extending the Kaldor-Rowthorn debate (McCombie 1981a), new empirical evidence using US state data (McCombie and de Ridder 1983) and quantifying the importance of Kaldor's laws (McCombie 1980). Inevitably John's interests developed over time to other areas of what might be best termed

post-Keynesian economics. But he returned to the Verdoorn law throughout his career. One thing that had bothered him was what he termed the 'Static-Dynamic Verdoorn law paradox'. Many studies using cross-regional data and conventional aggregate production functions estimated in log level found very small increasing or constant returns to scale. Paradoxically, using the same regional data set, the estimation of the Verdoorn law using growth rates gave estimates of significant increasing returns to scale. John's (McCombie 1982a) initial attempt to provide an explanation of this was not convincing, even to himself. It was not until several years later with Mark Roberts that he provided a satisfactory explanation (McCombie and Roberts 2007). It had to do with spatial aggregation bias.

Inevitably, recent developments in econometrics have led to a reconsideration of earlier studies and this is true of the extended Verdoorn law. In the latter case, it was the development of spatial autocorrelation estimation techniques. John's more recent work with his co-authors, using these more sophisticated techniques, has confirmed earlier results (Angeriz et al. 2008, 2009).

A further area of research where John has made a significant contribution has been in the area of balance-of-payments-constrained growth. This approach originated in a short note by Tony Thirlwall, published in 1979. John was at initially somewhat sceptical of this argument and this led him to publish a short comment on the analysis of the same journal (McCombie 1981b). The upshot was an invitation by Tony Thirlwall to visit him at his University to discuss their differences, which turned out to be small. There followed a fruitful collaboration on the subject for many years including a major book published in 1994. Since then there has been an explosion of the literature on balance-of-payments to which John has again returned to make influential contributions.

John has become a leading authority and developed an international reputation for the extension of a fundamental critique of the neoclassical aggregated production function. One of the outcomes of the Cambridge capital theory controversies of the late 1960s was that the results from an aggregate production function did not hold outside of a one-commodity world. Aggregation theorems also gave the same result. Over time, the Cambridge capital theory controversies have been relegated to the history

of economic thought and largely forgotten. The reason seems to have been an implicit reliance on the not compelling Friedman's methodology of economics. According to Friedman, what matters is not the realism or otherwise of the assumptions of a model, but its predictive power. Douglas's statistical work in the 1930s with various colleagues using cross-industry or cross-state data found remarkably good statistical fits with the output elasticities very close to the factor shares. Time-series data usually, but not always, gave good fits. Hence, statistical estimations of aggregate production functions increased during the post-war period using ever more sophisticated statistical techniques. The good statistical fits were taken at both the textbook and advanced level to confirm that markets were competitive and factors of productions were paid their marginal products.

John found similar results and good statistical fits in the 1970s to the Cobb-Douglas aggregate production functions using the regional data he had collected and constructed for his PhD. This remained a puzzle until he came across, quite by chance, in the 1980s a small number of largely ignored papers that provided what he thought was a convincing explanation. Herbert Simon, for example, considered the critique of sufficient importance that he mentioned it explicitly in his Nobel Prize acceptance speech.[2]

If the arguments were logically correct, and John was convinced that they were, they had devastating implications for neoclassical macroeconomics. Theoretically, the aggregate production function should be expressed in *physical* terms, yet in empirical studies of the aggregate production function the measures of output and the capital stock are *constant price value terms*; not physical volumes. This is in spite of these measures misleadingly being called 'volumes', in much of the applied work on aggregate production functions. This is not an innocuous difference because it means that there is an underlying accounting identity, namely, that constant price value added equals the wage rate multiplied by the numbers employed plus the constant price value of capital multiplied by the rate of profit. It may be straightforwardly shown that if the accounting identity is differentiated, and then integrated, the result is a mathematical isomorphism that is identical to a Cobb-Douglas 'production function' with the estimated 'output elasticities' equalling the factor

shares. The national accounting identity is, of course, compatible with any state of competition, whether there are increasing returns or not, and most importantly with the complete absence of an aggregate production function. The results are not dependent on factor shares being constant. If the identity is estimated, say, using data where the factor shares are changing, then a more flexible functional form (such as the CES 'production function') will give a better fit.

John first extended and revived this critique in a paper published in 1998 as nothing had been written on the topic for several years. It also led to a long and productive collaboration with Jesus Felipe in this area. In a series of papers, they examined some well-known papers that used the aggregate production function. Using only the identity and some 'stylised facts' that did not depend upon the putative aggregate production function, they were able to correctly predict the estimates before a single regression had been run. These papers include the following topics: estimating biased technical change in aggregate production functions (McCombie and Dixon 1991), estimating CES production functions (Felipe and McCombie 2001b), Hall's estimation of the mark-up in manufacturing (Felipe and McCombie 2002), Mankiw-Romer-Weil's test of the Solow growth model (Felipe and McCombie 2005b), the concept of total factor productivity (Felipe and McCombie 2007b) and estimations of labour demand functions (Felipe and McCombie 2009a). Moreover, they explained why Solow's 'startling' result that technical change explained by far the largest proportion of productivity growth was hardly surprising, when the accounting identity was taken into account. In fact it could hardly be otherwise.

What is surprising is that the argument is one of logic. There have been a few attempts to criticize the argument, none of them compelling. John and Jesus Felipe brought their papers together in a book published in 2014, *The Measurement of Technical Change and the aggregate Production Function. 'Not Even Wrong'*.

Consequently, neoclassical macroeconomists continue to behave analogously to the geocentrists who were confident that their predictions of the movement of the planets using ad hoc epicycles confirmed the view that the planets moved around the earth. The foundations of a Copernican revolution in economics are there, but it has yet to happen. This work on

the aggregate production function had implications for the Verdoorn law in that Verdoorn in his original paper had derived the law from a Cobb-Douglas production function. This contradiction puzzled John until he eventually reconciled the two, in the process providing firmer foundations for Kaldor's 'technical progress function' (McCombie and Spreafico 2015).

John has also made a considerable contribution to a large number of areas within what may be best described as the post-Keynesian economics. Although he is now retired and is an Emeritus Professor of the University of Cambridge, and Emeritus Fellow in Economics at Downing College, he is still doing some teaching for the Department, attending international conferences and writing papers and books. He will no doubt continue to make an outstanding contribution to the debates in economics.

2 References

2.1 Articles

Allington, N. F. B., McCombie, J. S. L., & Pike, M. (2011). The failure of the new macroeconomic consensus: From non-ergodicity to the efficient markets hypothesis and back again. *International Journal of Public Policy*, *7*(1/2/3), 4–21.

Angeriz, A., McCombie, J. S. L., & Roberts, M. (2006). Productivity, efficiency and technical change in EU regional manufacturing: A DEA approach. *Manchester School*, *74*(4), 500–525.

Angeriz, A., McCombie, J. S. L., & Roberts, M. (2008). New estimates of returns to scale and spatial spillovers for EU regional manufacturing, 1986–2002. *International Regional Science Review*, *31*(1), 62–87.

Angeriz, A., McCombie, J. S. L., & Roberts, M. (2009). Increasing returns and growth of industries in the EU regions: Paradoxes and conundrums. *Spatial Economics Analysis*, *4*(2), 147–168.

Britto, G., & McCombie, J. S. L. (2015). Increasing returns to scale and regions: A multilevel model for Brazil. *Brazilian Keynesian Review*, *1*(2), 118–134.

Dixon, R., & McCombie, J. S. L. (1989). Inter-industry differences in the factor-augmenting bias of technological change. *Australian Economic Papers*, *28*(52), 103–111.

Felipe, J., & McCombie, J. S. L. (2001a). Biased technical change, growth accounting, and the conundrum of the East Asian miracle. *Journal of Comparative Economics*, *29*(3), 542–565.

Felipe, J., & McCombie, J. S. L. (2001b). The CES production function, the accounting identity and Occam's razor. *Applied Economics*, *33*(10), 1221–1232.

Felipe, J., & McCombie, J. S. L. (2002). A problem with some estimations and interpretations of the mark-up in manufacturing industry. *International Review of Applied Economics*, *16*(2), 187–215.

Felipe, J., & McCombie, J. S. L. (2003). Some methodological problems with the neoclassical analysis of the East Asian miracle. *Cambridge Journal of Economics*, *27*(5), 695–721.

Felipe, J., & McCombie, J. S. L. (2005a). How sound are the foundations of the aggregate production function? *Eastern Economic Journal*, *31*(3), 467–488. Reprinted in Harcourt, G. C., & Kriesler, P. (Eds.), *The oxford handbook of post-Keynesian economics.* Oxford: Oxford University Press.

Felipe, J., & McCombie, J. S. L. (2005b). Why are some countries richer than others? A sceptical view of Mankiw-Romer-Weil's test of the Solow growth model. *Metroeconomica*, *56*(3), 360–392.

Felipe, J., & McCombie, J. S. L. (2006). The tyranny of the identity. Growth accounting revisited. *International Review of Applied Economics, 20*(3), 283–299.

Felipe, J., & McCombie, J. S. L. (2007a). Is a theory of total factor productivity really needed. *Metroeconomica*, *58*(1), 195–229.

Felipe, J., & McCombie, J. S. L. (2007b). On the rental price of capital and the profit rate. The perils and pitfalls of total factor productivity growth. *Review of Political Economy*, *19*(3), 317–345.

Felipe, J., & McCombie, J. S. L. (2009a). Are estimates of labour demand functions mere statistical artefacts? *International Review of Applied Economics*, *23*(2), 147–168.

Felipe, J., & McCombie, J. S. L. (2009b). Why the data tell us nothing about returns to scale and externalities to capital in economic growth. *Economia e Sociedade*, *17*, 657–677.

Felipe, J., & McCombie, J. S. L. (2010). What is wrong with aggregate production functions. On temple's 'aggregate production functions and growth economics'. *International Review of Applied Economics*, *24*(6), 665–684.

Felipe, J., & McCombie, J. S. L. (2011/2012). On Herbert Simon's criticisms of the Cobb-Douglas and the CES production functions. *Journal of Post Keynesian Economics, 34*(2), 275–293.

Felipe, J., & McCombie, J. S. L. (2012). Problems with regional production functions and estimates of agglomeration economies: A caveat emptor for regional scientists. *Spatial Economic Analysis*, *4*, 461–484.

Felipe, J., & McCombie, J. S. L. (2014). The aggregate production function: 'Not even wrong'. *Review of Political Economy*, *26*(1), 60–84.

Felipe, J., Hasan, R., & McCombie, J. S. L. (2008). Correcting for biases when estimating production functions: An illusion of the laws of algebra? *Cambridge Journal of Economics*, *32*(3), 441–459.

Felipe, J., McCombie, J. S. L., & Naqvi, K. (2011). Is Pakistan's growth rate balance-of-payments constrained? Policies and implications for development and growth. *Oxford Review of Development Studies*, *38*, 477–496.

Fingleton, B., & McCombie, J. S. L. (1999). Increasing returns and economic growth. Evidence for manufacturing from the European Union regions. *Oxford Economic Papers*, *50*(1), 89–105.

Hein, E., & Lavoie, M. (2015). Interview with John McCombie: 'I think there's absolutely no way out for them: An aggregate production function does not make any sense at all!' *Intervention: The European Journal of Economics and Public Policy*, *12*, 1–6.

McCombie, J. S. L. (1975). Utility, accessibility and entropy in spatial modelling: A comment. *Swedish Journal of Economics*, *77*(4), 497–501.

McCombie, J. S. L. (1980). On the quantitative importance of Kaldor's laws. *Bulletin of Economic Research*, *32*(2), 102–112. Reprinted in King, J. E. (Ed.). (1994). *Economic growth in theory and practice: A Kaldorian perspective.* Cheltenham: Edward Elgar.

McCombie, J. S. L. (1981a). What still remains of Kaldor's laws? *Economic Journal*, *91*(361), 206–216. Reprinted in King, J. E. (Ed.). (1994). *Economic growth in theory and practice: A Kaldorian perspective.* Cheltenham: Edward Elgar.

McCombie, J. S. L. (1981b). Are international growth rates constrained by the balance of payments? A comment on Professor Thirlwall. *Banca Nazionale del Lavoro Quarterly Review*, *139*(December), 455–458.

McCombie, J. S. L. (1982a). Economic growth, Kaldor's laws and the static-dynamic Verdoorn law paradox. *Applied Economics*, *14*(3), 279–294.

McCombie, J. S. L. (1982b). How important is the spatial diffusion of innovations in explaining regional growth disparities? *Urban Studies*, *19*(4), 377–382.

McCombie, J. S. L. (1983). Kaldor's laws in retrospect. *Journal of Post Keynesian Economics*, *5*(3), 414–428.

McCombie, J. S. L. (1985). Increasing returns and manufacturing industries: Some empirical issues. *Manchester School*, *53*(1), 55–75.

McCombie, J. S. L. (1985–1986). Why cutting real wages will not necessarily reduce unemployment – Keynes and the "postulates of the classical economics". *Journal of Post Keynesian Economics*, *8*(2), 233–248. Reprinted in Blaug, M. (Ed.). (1991). *John Maynard Keynes (1883–1946)* (Vol. 2). Aldershot: Edward Elgar.

McCombie, J. S. L. (1986). On some interpretations of the relationship between productivity and output growth. *Applied Economics*, *18*(11), 1215–1225.

McCombie, J. S. L. (1987). Does the aggregate production function imply anything about the laws of production? A note on the Simon and Shaikh critiques. *Applied Economics*, *19*(8), 1121–1136.

McCombie, J. S. L. (1987–1988). Keynes and the nature of involuntary unemployment. *Journal of Post Keynesian Economics*, *10*(2), 202–215. Reprinted in Blaug, M. (Ed.). (1991). *John Maynard Keynes (1883–1946)* (Vol. 2). Aldershot: Edward Elgar.

McCombie, J. S. L. (1988a). A synoptic view of regional growth and unemployment: II – The post Keynesian theory. *Urban Studies*, *25*(5), 399–417. Reprinted in Haynes, K. E., et al. (Eds.). (1996). *Regional dynamics. Volume 1. Elgar reference collection. Modern classics in regional science.* Cheltenham: Edward Elgar.

McCombie, J. S. L. (1988b). A synoptic view of regional growth and unemployment: I – The neoclassical theory. *Urban Studies*, *25*, 267–281. Reprinted in Haynes, K. E., Button, K., Nijkamp, P., & Qiangshang,

L. (Eds.). (1996). *Regional dynamics. Volume 1. Elgar reference collection. Modern classics in regional science.* Cheltenham: Edward Elgar; and in Cheshire, P. C., & Evans, A. (Eds.). (1992). *Urban and regional economics, the international library of critical writings.* Cheltenham: Edward Elgar.

McCombie, J. S. L. (1991). The postwar productivity slowdown and the intersect oral reallocation of labour. *Australian Economic Papers*, *30*(56), 70–85.

McCombie, J. S. L. (1993). Economic growth, trade interlinkages and the balance-of-Payments constraint. *Journal of Post Keynesian Economics*, *5*(4), 471–505.

McCombie, J. S. L. (1997). The empirics of balance-of-payments constrained Growth. *Journal of Post Keynesian Economics*, *19*(3), 345–375.

McCombie, J. S. L. (1998). Are there laws of production? Some early criticisms of the Cobb-Douglas production function. *Review of Political Economy*, *10*(2), 141–173.

McCombie, J. S. L. (2000). Regional production functions and the accounting identity: A problem of interpretation. *Australasian Journal of Regional Studies*, *6*(2), 133–156.

McCombie, J. S. L. (2000–2001). The Solow residual, technical change, and aggregate production functions. *Journal of Post Keynesian Economics*, *23*(2), 267–297.

McCombie, J. S. L. (2001). What does the aggregate production function show? Further thoughts on Solow's 'second thoughts on growth theory'. *Journal of Post Keynesian Economics*, *23*(4), 589–615.

McCombie, J. S. L. (2012). Criticisms and defences of the balance-of-payments constrained growth model: Some old, some new. *PSL Quarterly Review* (formerly *Banca Nazionale Quarterly Review*), *64*(259), 353–392.

McCombie, J. S. L. comment on, Cohen, A., Harcourt, G. C., & Felipe, J. (2004). Whatever happened to the Cambridge capital theory controversies? *Journal of Economic Perspectives*, *1*, 299–301.

McCombie, J. S. L. (1992). 'Thirlwall's law' and balance-of-payments constrained growth: More on the debate. *Applied Economics*, *24*(5), 493–512.

McCombie, J. S. L., & de Ridder, J. R. (1983). Increasing returns, productivity and output growth: The case of the United States. *Journal of Post Keynesian Economics*, *5*(3), 373–387.

McCombie, J. S. L., & de Ridder, J. R. (1984). The Verdoorn controversy: Some new evidence using US state data. *Oxford Economics Papers*, *36*(2), 268–284.

McCombie, J. S. L., & Dixon, R. (1991). Estimating technical change in production functions: A critique. *International Review of Applied Economics*, *5*(1), 24–46.

McCombie, J. S. L., & Pike, M. (2013). No end to the consensus in macroeconomic theory? A methodological inquiry. *American Journal of Economics and Sociology*, *72*(2). Reprinted in Lee, F. S. (Ed.), *Markets, competition and the economy as a social system.* Oxford: Wiley.

McCombie, J. S. L., & Roberts, M. (2007). Returns to scale and regional growth: The static-dynamic Verdoorn law paradox revisited. *Journal of Regional Science*, *47*(2), 179–208.

McCombie, J. S. L., & Roberts, M. (2008). Effective demand constrained growth in a two-sector Kaldorian model. *Journal of Post Keynesian Economics*, *31*(1), 57–78.

McCombie, J. S. L., & Spreafico, M. R. M. (2015). Kaldor's 'technical progress function' and Verdoorn's law revisited. *Cambridge Journal of Economics*, *40*(4), 1117–1136.

McCombie, J. S. L., & Spreafico, M. R. M. (2016). Could the Icelandic banking collapse of 2008 have been prevented? The role of economists prior to the crisis. *European Journal of Economics and Economic Policies: Intervention*, *13*(3), 323–338.

McCombie, J. S. L., & Thirlwall, A. P. (1985). Economic growth, the Harrod foreign trade multiplier and the Hicks super-multiplier. *Applied Economics*, *17*(1), 55–72. Reprinted in Wood, J. C., & Woods, R. N. (Eds.). (1988). *Sir John Hicks: Critical assessments.* London: Routledge.

McCombie, J. S. L., & Thirlwall, A. P. (1997). The dynamic Harrod foreign trade multiplier and the demand-orientated approach to economic growth: An evaluation. *International Review of Applied Economics*, *11*(1), 5–26.

McCombie, J. S. L., Spreafico, M. R. M., & Xu, S. (2017). Productivity growth of the cities of the Jiangsu province, China: A Kaldorian approach. *International Review of Applied Economics*, 1–22. https://doi.org/10.1080/02692171.2017.1351529.

Ribeiro, R. S. M., Lima, G. T., & McCombie, J. S. L. (2016). Exchange rate, income distribution and technical change in a balance-of-payments constrained growth model. *Review of Political Economy*, *28*(4), 545–565.

Romero, J. P., & McCombie, J. S. L. (2016a). Differences in increasing returns between technological sectors: A panel data investigation using the EU KLEMS database. *Journal of Economic Studies*, *43*(5), 863–878.

Romero, J. P., & McCombie, J. S. L. (2016b). The multi-sectoral Thirlwall's law: Evidence from 14 developed European countries using product-level data. *International Review of Applied Economics*, *30*(3), 301–325.

Tharnpanich, N., & McCombie, J. S. L. (2013). Balance-of-payments constrained growth, structural change, and the Thai economy. *Journal of Post Keynesian Economics*, *35*(4), 569–598.

2.2 Books

Arestis, P., & McCombie, J. S. L. (Eds.). (2008). *Unemployment: Past and present*. Basingstoke: Palgrave Macmillan.

Arestis, P., & McCombie, J. S. L. (Eds.). (2009). *Missing links in the unemployment relationship*. Basingstoke: Palgrave Macmillan.

Arestis, P., Baddeley, M. C., & McCombie, J. S. L. (Eds.). (2001). *What global economic crisis?* Basingstoke: Palgrave.

Arestis, P., Baddeley, M. C., & McCombie, J. S. L. (Eds.). (2003). *Globalisation, regionalism and economic activity*. Basingstoke: Palgrave Macmillan.

Arestis, P., Baddeley, M. C., & McCombie, J. S. L. (Eds.). (2007). *Economic growth. New directions in theory and policy*. Cheltenham: Edward Elgar.

Arestis, P., McCombie, J. S. L., & Baddeley, M. C. (Eds.). (2006a). *The new monetary policy, implications and relevance*. Cheltenham: Edward Elgar.

Arestis, P., McCombie, J. S. L., & Vickerman, R. (Eds.). (2006b). *Development and economic growth: Essays in honour of A.P. Thirlwall*. Cheltenham: Edward Elgar

Felipe, J., & McCombie, J. S. L. (2013). *The aggregate production functions and the measurement of technical change: 'Not even wrong'.* Cheltenham: Edward Elgar (2013, hardback; 2014, paperback).

Fontana, G., McCombie, J. S. L., & Sawyer, M. C. (Eds.). (2010). *Macroeconomics, finance and money: Essays in honour of Philip Arestis.* Basingstoke: Palgrave Macmillan.

McCombie, J. S. L., & Gonzalez, C. R. (Eds.). (2007a). *Issues in finance and monetary policy*. Basingstoke: Palgrave Macmillan.

McCombie, J. S. L., & Gonzalez, C. R. (Eds.). (2007b). *The European Union: Current problems and prospects*. Basingstoke: Palgrave Macmillan.

McCombie, J. S. L., & Thirlwall, A. P. (1994). *Economic growth and the balance-of-payments constraint*. Basingstoke: Macmillan.

McCombie, J. S. L., Pugno, M., & Soro, B. (Eds.). (2002). *Productivity growth and economic performance: Essays on Verdoorn's law*. Basingstoke: Palgrave Macmillan.

Thirlwall, A. P., & McCombie, J. S. L. (2004). *Essays on balance of payments constrained growth*. London: Routledge.

3 Introductory Part

A number of John McCombie's colleagues who are familiar with his work have kindly offered to contribute to this book in honour of John. The rest of this introduction offers a brief summary of the chapters that follow.

Tony Thirlwall in Chap. 2, entitled, 'John McCombie's Contribution to the Applied Economics of Growth in a Closed and Open Economy', focuses on John McCombie's major contributions to our understanding of growth rate differences between countries. This chapter is divided into three parts. The first part deals with Kaldor's growth laws, and particularly John's work on Verdoorn's Law—its estimation—and resolving the static/dynamic paradox that increasing returns are found when the growth of labour productivity is regressed on the growth of manufacturing output but not when the log level of productivity is regressed on the level of manufacturing output. The second part outlines John's contribution to the theory of balance-of-payments-constrained growth, particularly showing that the dynamic Harrod trade multiplier result can be

interpreted as the Hicks super multiplier. The third part shows that Kaldor's first law of growth, that manufacturing is the engine of growth, is also a reduced form of an export-led growth model, because the export growth of countries is closely related to the growth of manufactured exports.

Paul Davidson continues in Chap. 3, under the title, 'Why Neither Samuelson's Neoclassical Synthesis Keynesianism Nor New Keynesianism Theory Is Compatible with Keynes's General Theory'. This chapter demonstrates that the specified presumptions underlying Neoclassical Synthesis Keynesian Theory and New Keynesian Theory are in direct conflict with Keynes' statements regarding the foundation of his theory of involuntary unemployment. Stickiness of wages, and/or administered prices, is their fundamental cause of involuntary unemployment. Keynes's essential properties are that (1) all liquid assets have a zero elasticity of production, and therefore are nonproducible, and (2) the elasticity of substitution between all liquid assets and producible goods and services is zero. Thus, when people put their savings out of current income into the form of liquid assets, these savings find a resting place in nonproducibles even if all wages and prices are perfectly flexible. Consequently, every penny saved is a penny not earned by workers and enterprises that produce goods and services. In other words, in Keynes's general theory sticky money wages and/or administered prices are not the fundamental cause of unemployment.

Giuseppe Fontana and Marco Veronese Passarella in their Chap. 4, entitled, 'Aggregate Demand, Money and Finance in the New Consensus Macroeconomics: A Critical Appraisal', critically assess the 'New Consensus Macroeconomics' (NCM) theory and its recent developments. Building on the Wicksellian 'two-interest-rates model', the NCM highlights the role of interest rates in the transmission mechanism of monetary policy, whereas monetary aggregates are treated as residual variables. However, in contrast with Wicksell's theory, banks and financial institutions are usually neglected in the NCM theory. As a result, the financial instability and recurrent banking crises of modern economies have received little attention in modern macroeconomics. This chapter has three main goals. First, it aims to provide a critical analysis of the original NCM model and some recent developments. Second, it aims to show

that few amendments to it are sufficient to account for the financial instability and banking crises of real-world economies. Third, it shows that some important policy-making conclusions logically follow once the role of banks, credit and finance is properly taken on board.

Malcolm Sawyer continues in Chap. 5 with considering the relationships between microeconomics, mesoeconomics and macroeconomics. Macroeconomic analysis has often been accused of lacking 'microeconomic foundations'. However, macroeconomic analysis always had microeconomic underpinnings though not ones based on life-time utility maximization. The use of the term 'microeconomic foundations' suggests causation runs from the micro level to the macro, whereas causation runs in both directions and involving the meso level. The notion that macroeconomic analysis can be based on the 'representative agent rational expectations' approach is strongly critiqued. The nature of macroeconomic relationships is discussed and the general proposition set out to suggest that macroeconomic conditions cannot be ready derived from microeconomic considerations. Economic analysis is only interesting when conducted above the individual level involving interactions between individuals and the resolution of their actions and decisions with consideration of whose decisions are decisive. Some of the problems surrounding the use of macro relationships which mimic micro relationships are set out.

Philip Arestis in the Chap. 6 entitled, 'A Coherent Approach to Macroeconomic Theory and Economic Policies', offers a new approach to macroeconomics, which focuses on the notion that there is often inadequacy of aggregate demand relative to what would be required for full employment of the factors of production. The level and distribution of productive capacity can often be inadequate to underpin full employment. Consequently, and under such circumstances, distributional effects are paramount and should be seriously taken on board in the analysis and policies; and such effects are actually considered in this contribution. Economic policies are thereby very relevant and important. We briefly summarize the theoretical framework that underpins the relevant economic policies before we turn our attention to the latter themselves. We suggest that in addition to the well-known economic policies, namely, fiscal and monetary policies, and of equal importance, co-ordination of

them, two new, relevant and important policy dimensions emerge as paramount: distributional effects and financial stability. We also discuss briefly current 'unorthodox' monetary policies.

Marta Spreafico in Chap. 7, entitled 'Is the Share of Income of the Top One Percent Due to the Marginal Product of Labour or Managerial Power?', argues that the last 30 years have seen the rapid increase in the share of income of the top 1 per cent, especially in the USA. This has led to increasing concern in some quarters about the consequences of the increase in income inequality. However, for a long time, neoclassical economics has generally ignored the problem. This is largely because of its uncritical acceptance that all employees, including the highest paid, are paid their marginal products in competitive labour markets and receive their 'just deserts'. The recent increase in overall inequality is also attributed to skill-biased technical change and the race between technology and education. These explanations are examined in light of empirical and theoretical arguments that question the existence of the aggregate production function and the marginal productivity theory of distribution. It is concluded that the explanation for the increase in income of the top 1 per cent must lie elsewhere such as an increase in managerial power.

Jesús Ferreiro, in the Chap. 8, entitled 'Macroeconomic Lessons from the Financialisation Process', has the objective in contribution to outline the main macroeconomic lessons resulting from the financialization process. This chapter is structured into four main sections. The first section will focus on the definition of the financialization process. The second section will focus on the consequences of the financialization process on economic activity in general and on the activity carried out by particular sectors and agents. The third section will deal with the Great Recession as far as there is an extended consensus on the key role played by the excessive growth of finances on the burst of the crisis. This study will pay attention to the different impacts of the economic and financial crises in European countries and on the consequences generated by the management of macroeconomic policies, mainly in developed and European countries. A final section will be devoted to the consequences of financialization on the European integration process.

Michelle Baddeley in Chap. 9 entitled, 'Financial Instability and Speculative Bubbles: Behavioural Insights and Policy Implications', draws

on themes from Baddeley and McCombie's (2001) exploration of speculative bubbles, which applied different models of speculation to analysing famous historical speculative episodes, specifically Tulipmania and the South Sea Bubble. This chapter re-assesses these insights in the light of all that has happened during the US sub-prime mortgage crisis and subsequent global financial crises of 2007/2008. It also extends the analysis to include new insights from behavioural finance about the nature and causes of speculative bubbles, blending insights from behavioural finance and post-Keynesian economics. Speculative bubbles throughout history have a number of common, predictable features so why have we not learnt more from these past experiences? In answering these questions, this chapter concludes with an analysis of policy implications—including fiscal and monetary measures that could be implemented to minimize the destabilizing real-side impacts from speculative bubbles and the financial shocks and crises which often follow, with significant de-stabilizing impacts for real economies.

João P. Romero and Gustavo Britto in Chap. 10, entitled 'Sophistication, Productivity and Trade: A Sectoral Investigation', argue that in balance-of-payments-constrained growth models, income elasticities of exports and imports are the crucial parameters determining the long-term growth rate. Consequently, it is critical to understand what determines the level of these elasticities. The chapter investigates whether measures of productive sophistication developed by Hausmann et al. (2007) and Hidalgo and Hausmann (2009) can explain not only productivity growth but also the size of income elasticities of trade in different technological sectors. It does so by testing the impact of initial industry sophistication on subsequent productivity growth for low and high-tech industries as well as by assessing if changes in industry sophistication are associated with higher exports and imports in these sectors. The empirical investigation uses product-level trade data from UN Comtrade, combined with price data from Feenstra and Romalis (2014) and with productivity data from EU KLEMS for 13 industries from seven countries, over the period 1984–2007.

Mark Roberts in the Chap. 11, entitled 'Patterns of Urban Growth in South Asia: A View from Outer Space', examines the South Asia's case where since the turn of the century, the area has added an estimated

130 million people to its towns and cities, a number equivalent to the entire population of Japan. In the process, its urban share of the population has grown from 27.3 per cent in 2000 to 30.9 per cent in 2011, implying a pace of urbanization that has been on a par with that in sub-Saharan Africa. However, although South Asia's relatively rapid pace of urbanization over the last decade and a half is well-known, less understanding exists of patterns of physical urban expansion and economic growth across the region's cities. This chapter, therefore, makes use of data on night-time lights for the period 1999–2010 which has been remotely collected by satellites orbiting the earth to provide new insights into these patterns. The chapter furthermore explores the empirical links between urbanization and rates of extreme poverty across subnational regions within South Asia.

Marc Lavoie in Chap. 12, entitled 'Production Functions, the Kaldor-Verdoorn Law and Methodology', focuses on John McCombie contributions and argues that he has been an unrelenting critic of the neoclassical production function for over 30 years. With his co-author Jesus Felipe, along with Anwar Shaikh, he has provided a number of proofs demonstrating that the apparent empirical successes of neoclassical production functions could be attributed to the fact that these production functions were reproducing the identities of the national accounts. Kaldor's technical progress function and the Kaldor-Verdoorn equation, however, do share some similarities with these identities, and thus one may wonder if they are subjected to the same critique. It is shown that the Kaldor-Verdoorn equation is impervious to the critique. Some of the methodological considerations are advanced by John McCombie, notably those concerning the instrumentalist approach of mainstream economics and its DSGE model. The chapter concludes with a pledge in favour of meta-regression analysis, recalling that a recent such analysis has shown that the Kaldor-Verdoorn effect is genuine.

Finally, Mark Setterfield and Selen Ozcelik in Chap. 13, entitled 'Is the Balance-of-Payments-Constrained Growth Rate Time-Varying? Exchange Rate Overvaluation, Deindustrialization, and Long-Run Growth', examine the long-held view among macroeconomists in the UK and USA that sustained currency over valuation, often the result of financial-sector dominance, weakens domestic macroeconomic performance and results

in premature deindustrialization. Similar concerns have been expressed about persistent, policy-induced recessions. According to balance-of payments-constrained growth (BPCG) theory, meanwhile, the BPCG rate in a multi-sector economy varies directly with the share of manufacturing in total output. This chapter develops a simple model that combines these observations to show how a temporary but persistent shock to the nominal exchange rate and/or domestic demand can both affect the actual rate of growth in the short run (by moving it away from the long-run equilibrium BPCG rate) and alter the BPCG rate itself (by lowering the income elasticity of demand for exports as a result of induced premature deindustrialization). The result is a time-varying balance-of payments constrained growth (TV-BPCG) rate. Because actual growth and the TV-BPCG rate vary directly, the latter is also characterized as quasi path dependent.

Notes

1. The numbers reported in the text refer to the ones in 'selected bibliography' as below.
2. Simon, H.A. (1979), 'Rational Decision-making in Business Organizations', *American Economic Review,* 69, pp. 493–513.