

Victoria Chick (1936-2023): An eminent Post-Keynesian Scholar – some retrospective remarks

Olesen, Finn

Published in:
Brazilian Keynesian Review

DOI (link to publication from Publisher):
[10.33834/bkr.v9i2.345](https://doi.org/10.33834/bkr.v9i2.345)

Creative Commons License
CC BY 4.0

Publication date:
2023

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):
Olesen, F. (2023). Victoria Chick (1936-2023): An eminent Post-Keynesian Scholar – some retrospective remarks. *Brazilian Keynesian Review*, 9(2), 328-340. <https://doi.org/10.33834/bkr.v9i2.345>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

VICTORIA CHICK (1936-2023): AN EMINENT POST-KEYNESIAN SCHOLAR – SOME RETROSPECTIVE REMARKS

Finn Olesen*

Abstract

For most heterodox economists Victoria Chick stands out as one of the most respected and knowledgeable Post-Keynesian scholars. As such, she has for decades been writing on the economics and methodology of Keynes, on trying to take inspiration from him when analysing important macroeconomic problems of modern times and on the importance of adopting an open system approach when analysing such matters. In this short article, the focus is primarily on Victoria Chick's work on economic methodology. She argued that methodology should be taken seriously - You cannot simply just do economics. You must consider *how* to do economics.

Keywords: Victoria Chick; Post-Keynesianism; Keynes' Method; Methodology.

JEL codes: B31, B32, B41; E12

* Professor in Macroeconomics at Aalborg University Business School, Denmark. Contact: finn@business.aau.dk

1. Introduction

On January 15, 2023, Victoria Chick died at the age of 86. For all of her academic life she has been one of the most important Post-Keynesians scholars. Although born and educated in Berkely, California, she later moved to England, first to finish some postgraduate studies at the London School of Economics, then later in 1963 to take up an academic position at University College (from 1992 and onwards as a Professor, Dow (2023). Basically, Victoria Chick was a macroeconomist who to a huge degree was inspired by the writings of John Maynard Keynes. Her research interests covered various aspects of monetary theory, banking, methodology but in particular she became known for doing Post-Keynesian economics¹. By the end of the day, she was first and foremost an eminent reader and interpreter of Keynes's theoretical and methodological understanding. As she stated in Chick (1995, p.20), to her, the Post-Keynesian research program had essentially to focus on three elements: "to recover the insights of Keynes, Kalecki and their early disciples, to extend those insights beyond the borders set by Keynes's *General Theory* ... and thus to complete the Keynesian Revolution". Fulfilling the last-mentioned goal, she thought it important to acknowledge "the way the economy has changed and the fact that economic theory is always context-dependent", Armstrong (2020, p.7). Old times theoretical statements can hardly ever be copied one to one when analysing the problems of modern economies. They need somehow to be adapted to a new and different context than the one that gave birth to them originally.

As such, her impact on generations of young economists' way of thinking cannot be exaggerated. Her remarkable efforts for passing on the central messages from Keynes's writing to next generations of upcoming Post-Keynesians was boundless. In this, as well as and in many other aspects, she was a very kind person indeed.

In this short article the focus is primarily on Victoria Chick's work on economic methodology. As she has done a lot of work concerning this particular topic only some selected aspects will be taken up in what follows. The selection is done seen from a Post-Keynesian perspective with a keen (and critical) eye for the need of considering methodological matters when doing economics. You cannot simple just do economics

¹ In an interview with Phil Armstrong from 2018 when she was asked what she considered her main field of interest, she answered "Money, Keynes and methodology", Armstrong (2020, p.7). As her major works, especially the two books *The Theory of Monetary Policy*, Oxford: Basil Blackwell (1977), first edition 1973, and *Macroeconomics After Keynes*, Cambridge, Massachusetts: MIT Press (1983) must be mentioned.

(unless of course you are a mainstreamer). You must consider *how* to do economics. The 'how' should always be at the very core of every relevant economic research program when focusing on methodological aspects. That is, methodology should always be taken seriously. As she stated herself, she understood "methodology ... as a descriptive thing ... I think methodology is terribly important, because people who don't look at that level do ridiculous things", Armstrong (2020, p.22). As such, based in methodology, the modern macroeconomic mainstream and Post-Keynesianism presents two very different worldviews on how they understand the functioning of modern global interdependent economies, financially as well as concerning real economic activity.

2. Methodological individualism or methodological holism?

In one of her last published contributions in *Routledge Handbook of Macroeconomic Methodology* written together with Jesper Jespersen the authors point to one of the crucial demarcation lines between the more modern macroeconomic mainstream and the Post-Keynesian understanding as having fundamental different methodological views on economics. Whereas the mainstream adheres to a view of methodological individualism the Post-Keynesian view is much more holistic: "the one sees all decisions being taken by individuals, where those individuals are regarded as 'atoms' independent of each other. The other, non-reductive view, is that understanding the system as a whole requires looking not only at the elements of the system but also at the connections, and only when the connections are made clear is it possible to discover feedback relations and other intra-system repercussions that result from an event that impinges on the system", Chick & Jespersen (2023a, p.55).

And the Post-Keynesian view is of course in very good accordance with Keynes's own view as the two describe as: "Keynes's macroeconomic 'landscape' has a dynamic structure without a clearly defined gravitation centre and without any rigid expectation-formation. The macroeconomic system was therefore evolving into an increasingly unknowable future, which methodologically could point towards a path-dependent analysis", op. cit. p. 59. Therefore, "the challenge of macroeconomic methodology is to understand that *the outcome of a macroeconomic analysis is different from the sum of individual agents' intended economic actions*", op. cit. p. 60. That is, macroeconomics, if claiming relevance, should not be studied as a kind of applied microeconomics as modern mainstreamers in general do. It should be studied at the aggregate level as a unique context dependent and changeable macroeconomic landscape.

3. Robert E. Lucas – the father of the modern macroeconomic mainstream

Grounded in methodological individualism Lucas launched his quest for explicit microfoundations for macroeconomics in the 1970s. A seminal contribution is Lucas (1976), where he stated partly that economic behaviour is goal-oriented partly that economic behaviour is determined on factors including changes in economic policy. That is, one cannot expect in general that the behaviour of households and firms is unaffected by for instance income tax changes. And behavioural stability was assumed when using the large-scale macroeconometric models of the Keynesian heydays. In consequence, you cannot rely on the simulation results you get from these models when trying to analyse the quantitative effects of deliberate fiscal and monetary policy changes aiming at regulating aggregate demand in such a way that full employment (or nearby) positions are the actual macroeconomic outcomes of the economy in question.

So, Lucas criticised Keynesian macroeconomics for not having the right microfoundations (if having any at all). That is, they had a mistaken take on macroeconomics. Seen from a Lucasian perspective, macroeconomics needed an explicit choice theoretic microeconomic foundation to become relevant. Macroeconomics at the core is all about solving a dynamic optimisation problem. Let the representative agent plan freely acting on rational expectations and using all available relevant information, then intertemporal optimality becomes the economic output period for period.

Based on this understanding, the New Classical theory developed to become synonymous with Real Business Cycle theory claiming that disturbances on the intertemporal optimal equilibrium path of economies were all about an equilibrium-like adjustment process initiated by the representative agent to various shocks with technological shocks being of primary importance. Then came the New Keynesian criticism arguing that modern economies do not function to perfection in the short run due to various kinds of imperfections and rigidities; such an outcome of perfection is for the longer run to be materialised. As both camps, although holding quite different theoretical views, fully agreed on methodological matters, the road was paved for a new synthesis in macroeconomics that became what we now terms the modern macroeconomic mainstream understanding (termed either 'The New Neoclassical Synthesis' or 'The New Consensus Macroeconomics') with its

DSGE-models². Due to criticism of lack of realism concerning the mainstream missing coherence with important real-life phenomena called forward by the years of the Great Recession and later the lessons learnt by the Covid-19 pandemic, the modern mainstream has been in a process of development for some years. However, acknowledging the changes made, so far, the macroeconomic mainstream adheres still essentially to the method of making macroeconomic analyses that are defined to take place within the framework of a deterministic functioning closed system. That is, methodologically, no important changes have so far been made to the modern macroeconomic mainstream.

As such, today, there is still a huge gulf between the mainstream understanding and the heterodox alternatives regarding theory, methodology and economic policy perspectives. A gulf that is very similar to the one that existed between Keynes and the mainstream economics of his time when he was preparing his *General Theory*³.

4. John Maynard Keynes – the father of the Post-Keynesian alternative

As is well known, Keynes got a life-long inspiration from the work of the philosopher G.E. Moore. From his work, Keynes learnt that life in general as well as economics as a particular kind of human activity was all about trying to ‘be good’ rather than ‘doing good’ – “an action is good to him if it is directed to something intrinsically worthwhile rather than towards some ulterior goal”, Chick & Jespersen (2023b, p.188)⁴. As economic behaviour is conducted in an environment characterized by lack of perfect knowledge, Keynes talks about ‘rational beliefs’⁵ not rational expectations, he was concerned with developing a new theory of rationality under the conditions of uncertainty (epistemologically as well as ontologically) when he was designing his *General Theory*.

Given these circumstances of various degrees of uncertainty, it is more than questionable if the self-regulating forces of a market economy is so strong that a

² On the development of modern macroeconomics see e.g., Olesen (2022).

³ As Keynes pointed out in November 1934 on the fundamental difference between the mainstreamers of his time and himself: “On the one side are those who believe that the existing economic system is, in the long run, a self-adjusting system, through with creaks and groans and jerks, and interrupted by time lags, outside interference and mistakes ... On the other side of the gulf are those who reject the idea that the existing economic system is, in any significant sense, self-adjusting. They believe that the failure of effective demand to reach the full potentialities of supply, in spite of human psychological demand being immensely far from satisfied for the vast majority of individuals, is due to much more fundamental causes”, CW (XIII:486 & 487).

⁴ With Chick & Jespersen (2023b, p.188): “to Keynes, both economics and politics dealt only with means. They were facilitators of the good life, never ends in themselves”.

⁵ Under these circumstances of various degrees of uncertainty “a proposition and its uncertain outcome is connected by scrutinizing the available evidence and giving it a weight according to its (probable) reliability and relevance”, op. cit. p. 188. That is, this should be the procedure of how you try to form the best ‘rational beliefs’ possible.

macroeconomic outcome of full employment is established by itself. Only by chance would that be the case. Most often economies are put in disequilibrium positions. As economic behaviour – to plan, to decide and to act – moves forward in historical time, this process of change involves that the economy experiences some pattern of disequilibrium positions moving from time t_0 to t_1 (understood in calendar time terms). Therefore, to Victoria Chick economics is about studying a dynamic process as the economy “goes through time and that makes you face uncertainty squarely”, Armstrong (2020, p.8). Therefore: “If only equilibrium is acknowledged, not only is there a drastic loss of relevance, but the whole notion of *cause* is removed from economic theorising”, Chick (1998, p.1866).

In general, the classical theory lacked empirical validity – what it predicted should be the macroeconomic output is generally out of sync with real life facts. Therefore, Keynes argued, we need a macroeconomic model to determine the level of output. The one given by *The General Theory* was ‘the principle of effective demand’ as presented in Chapter 3 of the book.

Although Keynes focused a lot on the short run in his economic analysis, *The General Theory* has also a longer run perspective. Probably inspired by Marshall, Keynes operates with three kinds of time horizons: the very short run with a fixed level of output, the short run where output could vary but is restrained by a given level of capital, and the long when both output and the level of capital can change. Because of the three time periods, Keynes talks about short run expectations, having to do with production decisions, and long run expectations which controls the level of capital through investment decisions. Therefore, to Chick & Jespersen (2023b p.190-191), Keynes’s macroeconomic method is characterised by: “The main analytical outcome of the *GT* is a sequence of short-period equilibria adding up to a long period path-dependent system ... First he varies short-term expectations (output), then also long-term expectations (real investment)”⁶.

Concerning the revolutionary content of *The General Theory*, Chick & Jespersen (2023b, p.194) states: “In developing a path-dependent, open-system analysis, Keynes created a theory which reflected reality better than the theories of his predecessors (and most

⁶ As further explained by Chick & Jespersen (2023b, p.192): “in real time producers must form expectations about the future level of demand to combine with their (known) cost structure to determine the profit-maximising level of output and thus employment ... If expectations are not fulfilled, profits are larger or smaller than expected, and firms may alter their expectations, and their output decisions, but only in the future ... If expectations are fulfilled, the output and employment decisions are likely to be repeated unchanged. This result is called an equilibrium, whether full employment or not”. Looking at the individual firm, Keynes is quite mainstream as he argues for profit maximising as the guiding principle when deciding what to produce. However, he is revolutionary arguing that producers try to maximise the *expected* level of profit due to the existence of uncertainty.

of his successors). There were many possible equilibria, depending on the constraints imposed and, more importantly, policies assumed, and there was no presumption that an actual economy would ever settle into any specific equilibrium, let alone one in which full employment prevailed⁷. Or as Dow (2023, p.488) puts it: “Because the context evolves, theory needs to adapt accordingly”. That is, the mode of thought that Keynes unfolded in his *General Theory* was to describe an economic system that was “open in time ... path-dependent and not necessarily convergent”, Chick (2003, p.317).

That is, to Keynes, and to Post-Keynesians, it really doesn’t give any sense to talk about a unique optimal intertemporal equilibrium path. Identifying such a path in macroeconomic textbooks might look both nice and convincing, however, it has nothing to do with real life phenomena. Furthermore, in Chick (2016) she addressed the quest for microfoundations as advocated by the modern macroeconomic mainstream. As such, to argue for some kind of microeconomic argumentation in connection with macroeconomic statements is in itself not a problem⁸. However, the mainstreams statement that such a microeconomic foundation should be defined as a choice theoretic kind of microeconomics – “the theory of ‘rational choice’ as the appropriate, let alone the only acceptable, description of (micro) decision-making and its corollary, that economic agents are unrelated ‘atoms’”, Chick (2016, p. 100) – is to her utterly wrong. As she argues convincingly pointing to the various microeconomic statements given in *The General Theory*, there “are alternative ways of looking at microeconomics”. Keynes tried to address how decisions are taken in the real world in an economic environment characterized by uncertainty and limited and often also imperfect information. And to act the way Keynes described in his *General Theory* is not to be irrational; it is just another way of being rational than defined by a perfect choice theoretic set up⁹.

⁷ For a definition of the term ‘an open system’ see Dow (2002, p.140). As she sees it, such a worldview is originally due to the reasoning of Hume discussing the problems of induction. The fundamental problem being that: “the causal structure of the real world is ultimately inaccessible to the human mind”, op. cit. p. 140.

⁸ “In my view, there is no need to reject the idea that macroeconomics should be related to micro decision-making in some way ... The study of decision-making has a legitimate place in macroeconomics. Indeed, the economist widely credited with initiating modern macroeconomics, Keynes, gave considerable attention to the question of individual decisions. But he did not base those decisions on the principles of rational choice theory ... Microdecision-making played a substantial role in Keynes’ *General Theory*, but the relationship between the micro and macro levels was complex and shifted between different elements of the theory: sometimes micro dominates, sometimes macro.”, Chick (2016, pp. 100, 101 & 110).

⁹ As she goes on criticising: “Not only is ‘rational choice’ theory useless in providing a guide to forming relevant macro-aggregates, it also ignores time: tastes and preferences are immutable. Uncertainty about the future, at least in probabilistic terms, is acknowledged by the inclusion of state-contingent preferences, but these too are set in stone: the analysis is completely static: the future is known, in probabilistic terms. Not only that, but the relevant constraints are also assumed to be known with certainty into the indefinite future”, Chick (2016, p. 103).

5. Open system analysis

In much of her writings, Victoria Chick has advocated the usefulness of applying an open system analysis when doing macroeconomics as the macroeconomic landscape evolves in a path-dependent manner over time. Seen from her perspective, economics must be viewed as a dynamic game. And sometimes, the degree of changeability is very significant indeed. That is, history matters. Context is always important. Economics is basically a story about various kinds of path-dependencies. Of course, in real life, the system is always open. Furthermore, it is a social system inhabited by human beings with various motives, ethical concerns, and norms in general. Not by robots that act deterministically and mechanical (just as the old-fashioned ‘rational economic man’ in mainstream economics is expected to act). The economic system “is a network, a structure with connections, within which agents act ... sometimes in ways which lead the system to evolve”¹⁰, Chick (2004, p.5). That is, it is organic in nature¹¹.

However, looking at economic theory – what Chick (2023, p.145) terms “the thought-system” – you have a choice. The theory could be constructed to be open or closed. Whereas heterodox minded economists in general see the economic system as an open system¹² - “Macroeconomics is a system embedded in a social system”, Chick (2023, p.149) – the mainstreamers see it quite differently. Therefore: “in the world of macroeconomic models, closed systems predominate. This has been partly a consequence of the widespread adoption of mathematical technique, where closure, if the model is specified correctly, gives demonstrable results”, Chick (2023,p.146)^{13 14}.

As such, mainstreamers are in general much too concerned with general equilibrium analysis somehow apparently forgetting that “the economy is not a system of simultaneous equations, particular not a static system”, Chick (2022, p.109). And it has to be remembered

¹⁰ These connections are in general flexible as they are “mutable; institutions and behaviour evolve. Ideas change in response to changes in the real world, to discourse and by the exercise of imagination; new ideas can lead to new connections”, Chick & Dow (2005, p.365).

¹¹ In such systems, “the units of analysis – individuals and all the institutions of society: families, firms, governments etc. – evolve interdependently, changing society and creating new conventions of behaviour ... variables are interrelated, and both variables and their interrelations evolve, in such a way as to evade capture by a closed system of logic”, Chick & Dow (2001, p.712-714).

¹² As Victoria Chick points out, an open system cannot be completely open as it requires some kind of boundaries: “a system must have limits of some sort to be a system at all”, Chick (2023, p.147).

¹³ “A model is a formal structure defined by its assumptions and definitions. Within the model these restrictions are complete and fixed. Such models are closed. Theories are broader than models. They may be either formal or informal and may encompass several models”, Chick (2023, p.147). Theories are as explained by Chick & Dow (2005) interrelated sets of ideas or hypotheses.

¹⁴ On her views on the use of formalism in economics see e.g., Chick (1998) and Chick & Dow (2001) for more details.

when doing equilibrium analyse that it is the process that is stated to lead from one equilibrium to another that is the most important part of the analysis as this process – a kind of disequilibrium analysis – illustrates the essential elements (core statements) of the economic theory within which the given general equilibrium analysis is embedded. Although somewhat hesitant and sceptical towards the usefulness of general equilibrium analysis¹⁵, Chick seems to accept that such a method could have some kind of usefulness concerning abstraction although “equilibrium is not a property of actual economic systems ... [she] ... reject the conclusion that therefore it should not be used in analysis”¹⁶.

In principle, the structures of a closed system can be validated by empirical experiments. However, it is highly questionable if this method also applies to economics as it must be remembered that “our ability to construct experiments is limited, and the results are not independent of the time at which they were conducted, of circumstances outside the experiment, or of the fact that the experiment is being conducted”, Chick (1998, p.1867). Furthermore, not every element of relevant economic information is quantifiable with the needed degree of precision to state a satisfactory level of certainty (take various kinds of expectations as examples). And what about the changeability of the meaning of concepts? They may have “different meaning in different contexts (over space and time”. Likewise, we know as a fact that “knowledge is socially constructed; it follows that meaning itself is context-specific”, Chick & Dow (2001, p.709-710). More so: “Closure precludes openness to history and creativity”, Chick (1998, p.1866). Therefore, we might have to rely on pure closed theoretical systems alone (with a low degree of empirical validation and/or corroboration)¹⁷. Taking account of these aspects by themselves is to question the actual degree of ‘closeness’ of such closed systems. Therefore: “if human nature and the social world more generally are understood as an open system ... it is necessary to explore the relationship between results obtained under conditions of closure to the open-system reality”, Chick & Dow (2001, p.708-709).

Unfortunately, an open macroeconomic system is too complex to handle as a unity. It is impossible to grasp every relevant aspect of macroeconomics in total when analysing a

¹⁵ As Chick (2022,p.110) states: “general equilibrium precludes the *possibility* of uncertainty *ever* playing a role: everything of relevance is endogenized in a timeless framework”.

¹⁶ Furthermore, she states: “Equilibrium need not mirror the economy: the purpose of abstraction, of theorizing, it to find and highlight important features and processes – the map is not the territory”, Chick (2022,p.119).

¹⁷ However, this should make you concerned with the question of “what relation does this ‘thought experiment’ of a closed theoretical system bear to our concept of reality? In other words, what is the relation between our theory and out ontology?”, Chick & Dow (2001, p.707).

particular problem. You need to ‘cut’ the system, so to speak, up in bits. That is, you define subsystems and declare semi-closure¹⁸. And you have to do this kind of ‘breaking up’ with extreme care as “the chosen abstraction may be either apt or inappropriate and, if the latter, will yield misleading results”, Chick (2023:152). That is, when you construct models, you impose restrictions that can be very crucial indeed concerning the theoretical statements that can be drawn from an analysis done using a particular model. Therefore: “the important issue is how this is done; reality has to be ‘cut up’ in some way for analysis, and some cuts make more sense than others”, Chick & Dow (2005, p.378).

Done the right way, such a procedure – by Chick & Dow (2005) termed a method of partial and temporary closure – allow you to analyse a given problem step by step within a larger theoretical frame and/or paradigm. To Chick, that was the method used by Keynes in his *General Theory*: “Keynes’s system is open to the normal flow of time but involves a series of temporary closures, so that, although his formal apparatus is often static, what he is portraying is a sequence of decisions and actions through time. The system, being open to the future, can evolve, as of course the actual economy has done and will continue to do”, Chick (2023, p.150)¹⁹. Furthermore, *The General Theory*, according to Chick, provided “a single theory within which are several subsystems, each defined by a change in the *ceteris paribus* assumptions that define its borders. In this sense it is an open system comprising several closed models with different *quaesita* or dependent variables and exploring a different aspect, but they fit together”, Chick (2004:11). Therefore, within such an economic universe there does not exist the same kind of uniqueness as is seen within the modern macroeconomic mainstream understanding. It has to be remembered that: “In a path-dependent system, in which decisions are continually reviewed in the light of past expectations and later outcomes, there is an infinite number of possible paths that the system might take”, Chick (2022, p.118).

Basically, Post-Keynesians and mainstreamers in general are divided by their different methodological worldviews. As Chick & Dow (2005, p.378) argues, the methodology of a mainstreamer puts its focus at a pure theoretical level: “At this level, the difference between us is between attempting to understand a complex reality by an open-systems technique

¹⁸ Thereby somehow combining the approach of closed system analysis with the approach of open system analysis: “Instead of seeing atomic and organic systems as mutually exclusive duals ... atomic systems could be seen as comparatively isolated subsets of organic systems, in which closed systems can be appropriately and safely applied”, Chick (1998, p.1866).

¹⁹ As she points out, in Chapters 3 and 5 of *The General Theory* a path-dependent system is constructed: “one with multiple potential equilibria and no necessary drive toward any particular one – if at all: change and adjustment of expectations could go on indefinitely without ever coming to rest ... In Keynes’s story, equilibrium has been robbed of its status as a state that will endure. Analytically of course, one can stop the economy’s restless change to examine the features on an equilibrium configuration”, Chick (2022, p.113).

which allows for uncertainty and mutability, and the method of closed models based on axioms and which fully specify external and internal forces, respectively”.

6. Concluding remarks

As a Post-Keynesian, Victoria Chick took macroeconomics seriously. It had to be grounded in methodology and stated with precision to be able to depicture important real-world phenomena to an acceptable degree. As she stated her views on economics in Chick (1995, p.23): “Theory should be realistic abstraction, not models of an imaginary economy”. Therefore, as she expressed herself: “I for one see economics as defined by its real world subject matter”, Chick (1998, p.1867). Economic behaviour is not conducted in a timeless environment, it has to do with “a process through historical time. This should be reflected in theory”, Chick (1995, p.23). As such, economic decisions may have a high degree of irreversibility. More so, macroeconomics is not just microeconomics times N. It is different from microeconomics and “has its own validity”.

To sum up, seen from the perspective of Victoria Chick, macroeconomics fundamentally has to do with *time*, *uncertainty*, and *expectations*. As she pointed out in Chick (2003, p.320): “Time must lead to uncertainty and uncertainty to partial knowledge ... Time, the source of uncertainty, also dictates the open-system mode of theorizing”.

Therefore, in perfect agreement with Keynes²⁰, to her, economics is in a crucial way about how to choose the right model among a variety of models. There is no ‘one model for all seasons’ to paraphrase a well-known Post-Keynesian statement. You must adopt an approach of pluralism. As Chick (1998, p.1859) points out: “economics is so complex and interwoven that the achievement of cogent knowledge by any single method is impossible; therefore there is scope and need for a variety of approaches”. Being an advocate of understanding the economy as an open system is not only theoretical and methodological superior to viewing the economy as a closed system. It is also advantageous concerning the design of economic policy. As Victoria Chick expressed it herself: “A policy-maker guided by open-system thinking is cautious, is conscious of potential surprise, and keeps alert, trying to anticipate the next move. This strikes me as a sensible and desirable policy attitude”, Chick (2004, p.16).

²⁰ As Keynes said it himself: “**Progress** in economics consists almost entirely in a progressive improvement in the choice of models ... Economics is a science in terms of models joined to the art of choosing models which are relevant to the contemporary world”, CW (XIV, p.296).

To Victoria Chick, although she was very knowledgeable about different schools of thought and in many ways argued for the need of adopting an approach of pluralism²¹, to her there was no relevant alternative as an economist than to be a Post-Keynesian. As she stated at the end of an interview with Marc Lavoie in 2018: “If you are convinced that post-Keynesian economics is a good way of thinking, a positive and productive way of thinking, get on with it. What else can you do?”, Lavoie (2020, p.7).

References

- Arestis, Philip & Sawyer, Malcolm (2000). *A biographical dictionary of dissenting economists*, Edward Elgar.
- Armstrong, Phil (2020). *Can heterodox economists make a difference?* Edward Elgar.
- Chick, Victoria (1995). Is there a case for Post Keynesian economics? *Scottish Journal of Political Economy*, 42(1), pp. 20-36. Doi: <https://doi-org.zorac.aub.aau.dk/10.1111/j.1467-9485.1995.tb01143.x>
- Chick, Victoria (1998). On knowing one’s place: the role of formalism in economics. *The Economic Journal*, 108, No. 451, pp. 1859-1869. Doi: <https://doi.org/10.1111/1468-0297.00381>.
- Chick, Victoria (2003). Theory, method and mode of thought in Keynes’s *General Theory*. *Journal of Economic Methodology*, 10(3), pp. 307-327. Doi: <https://doi-org.zorac.aub.aau.dk/10.1080/1350178032000110873>.
- Chick, Victoria (2004). On open systems. *Brazilian Review of Political Economy*, 24(1), pp. 3-17. Doi: <https://doi.org/10.1590/0101-31572004-1638>.
- Chick, Victoria (2016). On Microfoundations and Keynes’ Economics. *Review of Political Economy*, 28(1), pp. 99–112. Doi: <https://doi-org.zorac.aub.aau.dk/10.1080/09538259.2016.1108130>

²¹ As she explained in an interview with Andrew Mearman in August 2017, adhering to a genuinely pluralistic approach implies having proper conversations with others holding different views than yourself: “it’s a conversation where you’re not two ships passing in the night but you’re actually getting down to this question, why do we differ? Why have we taken these two different approaches?”, Mearman et al. (2019, p.241). And to participate in conversations was a core activity of Victoria Chick throughout her entire life. However, there might be a problem when trying to go into dialogues with core members of the modern macroeconomic mainstream. As she pointing out in Arestis & Sawyer (2000:105): “The face of economics has changes enormously since I began in it ... mainstream economics has closed ranks and defended itself far more vigorously ... The philosophy of science which informs mainstream economics is out of date by at least 60 years!”. Perhaps this observation made her somewhat harshly state: “I think that conversation with them is an utter waste of time. It’s a pity, but unresolvable”, Mearman et al. (2019, p 242).

- Chick, Victoria (2022). Should equilibrium be abandoned by heterodox economists? *Economic Methodology, History and Pluralism - Expanding Economic Thought to Meet Contemporary Challenges*, edited by Ioana Negru and Penelope Hawkins, Routledge, pp. 108-121.
- Chick, Victoria (2023). Open and closed systems. *Routledge Handbook of Macroeconomic Methodology*, edited by Jesper Jespersen, Victoria Chick and Bert Tieben, Routledge, pp. 144-153.
- Chick, Victoria & Dow, Sheila (2001). Formalism, logic and reality: a Keynesian analysis. *Cambridge Journal of Economics*, 25(6), pp. 705-721. Doi: <https://doi-org.zorac.aub.aau.dk/10.1093/cje/25.6.705>.
- Chick, Victoria & Dow, Sheila (2005). The meaning of open systems. *Journal of Economic Methodology*, 12(3), pp. 363-381. Doi: <https://doi-org.zorac.aub.aau.dk/10.1080/13501780500223585>.
- Chick, Victoria & Jespersen, Jesper (2023a). Holism and the fallacy of composition in macroeconomics. *Routledge Handbook of Macroeconomic Methodology*, edited by Jesper Jespersen, Victoria Chick and Bert Tieben, Routledge, pp. 54-63.
- Chick, Victoria & Jespersen, Jesper (2023b). Keynes's macroeconomic method. *Routledge Handbook of Macroeconomic Methodology*, edited by Jesper Jespersen, Victoria Chick and Bert Tieben, Routledge, pp. 187-196.
- CW (XIII). *The Collected Writings of John Maynard Keynes, Vol. XIII, The General Theory and After, Part I: Preparation*, Macmillan Cambridge University Press 1973.
- CW (XIV). *The Collected Writings of John Maynard Keynes, Vol. XIV, The General Theory and After, Part II: Defence and Development*, Macmillan Cambridge University Press 1973.
- Dow, Sheila (2002). *Economic methodology: an inquiry*, Oxford University Press.
- Dow, Sheila (2023). Victoria Chick 1936-2023. *The European Journal of the History of Economic Thought*, 30(3), pp. 486-490. Doi: <https://doi-org.zorac.aub.aau.dk/10.1080/09672567.2023.2200058>.
- Lavoie, Marc (2020). 'If you are convinced that post-Keynesian economics is a good way of thinking, get on with it' – Interview with Victoria Chick. *European Journal of Economics and Economic Policies: Intervention*, 17(1), pp. 1–8. Doi: <https://doi-org.zorac.aub.aau.dk/10.4337/ejeep.2020.01.01>.

- Lucas, Robert E. (1976). 'Econometric Policy Evaluation: A Critique'. *The Phillips Curve and Labor Markets*, edited by Karl Brunner and Allan H. Meltzer, Carnegie-Rochester Conference Series on Public Policy, Volume 1, North-Holland Publishing Company, pp. 19-46.
- Mearman, Andrew; Berger, Sebastian & Guizzo, Danielle (2019). *What Is Heterodox Economics? Conversations with Leading Economists*, Routledge.
- Olesen, Finn (2022). Macroeconomics – developments and modern trends. *Journal of Behavioural Economics and Social Systems*, 4, 2022, pp. 64-80.