Introduction to Chris Freeman's "Schumpeter's 'Business Cycles' revisited"

Alan Freeman

Geopolitical Economy Research Group, University of Manitoba
Grosvenor Avenue Winnipeg, MB R3M 0N2 Canada
afreeman@iwgvt.org

ABSTRACT. *Chris Freeman's lecture represents an invaluable guide to Schumpeter's theoretical framework. Two of the many themes deserve special attention. The first is the apparent contradiction between Schumpeter's attachment to Walrasian equilibrium, and his advocacy of a theory of cyclic economic movement. The second is the economic role of institutions.*

RÉSUMÉ: *La conférence de Chris Freeman représente un guide inestimable pour comprendre le cadre théorique de Schumpeter. Parmi ses nombreuses contributions, deux méritent une attention particulière. La première est l'apparente contradiction entre l'attachement de Schumpeter à l'équilibre de Walras et son plaidoyer en faveur d'une théorie du mouvement économique cyclique. La seconde est le rôle économique des institutions.*

KEYWORDS: *Schumpeter, Chris Freeman, economic history, growth and fluctuations, long waves, technological revolutions, capitalist system, heterodox economics.*

MOTS-CLÉS : *Schumpeter, Chris Freeman, histoire de la pensée économique, croissance et fluctuations économiques, cycles longs, révolutions technologiques, système capitaliste, économie hétérodoxe.*

CLASSIFICATION *JEL: B2, B5, N100, E320, O32, P1.*

DOI:10.3166/EJESS.27.37-45

1. Introduction

Chris's paper played a special part in both our lives[1]. The University of La Tuscia, where I was working at the time, invited Chris to deliver a memorial lecture on Schumpeter. He spent a lot of time writing it, but was beginning to experience problems with blood pressure; his doctor advised him not to take the flight and I gave it in his place.

Perhaps because I studied the paper with especial care in view of having to deliver it or perhaps because my studies ran on parallel tracks, I have remained preoccupied with both this paper and the issues it raises, which I think are central to the problems we still face today. I like to think I shared these preoccupations with Chris; since I inherited them from him, there is sound support for this surmise.

In 2006 Andrew Kliman suggested, in connection with our work on Marx's ideas, on pluralism, and interpretation, that we organise a special edition of the *Cambridge Journal of Economics* on Samuelson's famous "out of the closet" Whig-historical programme for economics. The proposal bore fruit in July 2014. Early in our discussions, I suggested that a piece on Schumpeter was needed, and proposed that either we re-publish Chris's lecture, or that I work with Chris on a rewrite. We had often discussed the issues involved, in tandem with Long Waves, cycle theory, crisis theory, and the relation between the work of Marx and Schumpeter, a constant feature of my visits to Sussex.

Chris left us before the special edition was published, and the proposed joint article was replaced by my own piece (Freeman, 2014) which drew heavily on the La Tuscia lecture. I found it an invaluable guide to Schumpeter's theoretical framework.

Two of the many themes in this rich lecture deserve, I believe, special attention. The first is the apparent contradiction between Schumpeter's attachment to Walrasian equilibrium, and his advocacy of a theory of cyclic economic movement. The second is the economic role of institutions. I aim in this introduction to bring out their intimate connection.

At first sight, the notion of equilibrium conflicts with any idea of any economic fluctuation other than constrained randomness. On the face of it, it is difficult to see how we can explain recurrent upturns and downturns if we presuppose that nothing is changing. It is as if we sought to explain the movement of the planets by supposing them stationary at the centre of the sun.

One might "save the phenomena" (Duhem, 1908) by treating this state as the average of their motion[2], but this is a poor guide to planetary survival.

1. I thank Stefano Lucarelli and Carlota Perez for the opportunity to share my reflections on the piece, and Radhika Desai for her invaluable contributions to the ideas it contains. Errors are my own.
2. Actually it isn't, because planets move in conics, not circles.

Schumpeter's radical stance is to use cycle theory to defend Walras. I believe the result is false but this is not the point; *pace* Samuelson, the reason for studying controversies in economic theory is to understand the true nature of the alternatives. Of this, more later.

Schumpeter's approach in *Business Cycles* is to propose the equilibrium point as the *centre around which the economy moves.* This is a departure from the Walrasian standard; he acknowledges that the economy is almost never in the state that equilibrium supposes. The radical nature of this break must be understood. One may reconcile equilibrium with small fluctuations, even occasional crashes, by discounting them as exceptional, small, or manageable. Equilibrium is then rhetorically presented as true "most of the time", or a good approximation, small enough to ignore[3]. Or one argues, as in Samuelson's 1992 textbook, that they are manageable:

"The United States has experienced numerous cyclical ups and downs. At the same time, we have avoided depressions – the prolonged, cumulative slumps like those of the 1870s, 1890s, or 1930s. What has changed in the last 50 years? Primarily, developments in macroeconomics now allow governments to take monetary and fiscal steps to prevent recessions from snowballing into a persistent and profound slump. If Marxists wait for capitalism to collapse in a final cataclysmic crisis, they wait in vain. The wild business cycle that ravaged mature capitalism during its early years has been tamed." (Samuelson and Nordhaus, 1992, p. 371-372)

Schumpeter makes a bolder leap: he explicitly recognises the real economy will always be some distance from its hypothetical equilibrium. The consequences for the traditional defence of equilibrium need to be grasped. First and foremost, the Schumpeterian leap rules out the use of 'discountable deviations'. If we wish to say that cyclic motion is the essence of equilibrium, then we have already conceded that deviations from equilibrium are significant economically.

But by the same token, all standard defences fall. In place of "the economy is in equilibrium most of the time" we have "the economy is never in equilibrium." In place of "a good approximation" we have to write "not even close". In fact, no other defence is left except one, namely Schumpeter's: equilibrium is the centre of the oscillations.

However this rhetorical, hand-waving defence, whilst widely adopted, is mathematically indefensible. As I showed in Freeman (2006) it cannot be true in general because for all but the simplest harmonic oscillations, the hypothetical stationary point is neither the average nor the centre. I think this accounts for Schumpeter's interest and friendship with Goodwin; the closest to a sustainable defence is a variation on "good approximation" in which the orbit of the economy is sufficiently close to the hypothetical static point that its equations of motion are of

---

3. The steady state may be extended, not without difficulties, to proportionate expansion: a "von Neumann ray".

the first order, and therefore approximate to a simple harmonic oscillator. Nice try, but no cigar; observed departures from any hypothetical equilibrium are too large for this defence, even during the normal business cycle.

I believe this is the underlying reason that Schumpeter has always been a fringe figure, and why even Austrian economists have some difficulty welcoming him to their ranks. The argument leaves equilibrium theory defenceless, and with it all the optimality results that flow therefrom. Hence Samuelson's (1983, p. 175) derisory dismissal:

"Like other students of Schumpeter and like his academic colleagues and friends, I tended to regard as a bit comical … his 1939 fascination with the fol de rol of Kondratieff long waves, superimposed on the decade length sinusoidal undulations of the major Juglar business cycle and on the Kitchin-Crum workaday 40-month National Bureau cycles. Among us professionals the recent revival of Kondratieff moonshine – in its disparate Rostow, Forrester, Shonihara, and Christopher Freedman [sic – A.F.] reincarnations – does not make us look back more kindly on Schumpeter's Ptolemaic epicycles."

Why, then, did Schumpeter take this bold step? Two important reasons suggest themselves. First, a theory of cycles does away with crisis, and with it the primary case for public intervention. This is not an unimportant issue in the battles most dear to Austrian hearts of the time, the need to keep at bay the then growing impact of the thinking of Karl Marx. Many eminent interpreters (see Fagerberg, 2003) offer convincing evidence of an affinity between Marx and Schumpeter. There is, it is true, a common emphasis on the economic effects of science and innovation. There, however, I believe the similarity ends. I think Chris's policy conclusions, whilst drawing on Schumpeter's understanding of the mechanisms of innovation-led growth, cannot be reconciled with Schumpeter's theory.

To illustrate the point let us first consider Schumpeter's fulsome endorsement of Marx as a pioneer of business cycle theory:

"He [Marx] aptly says that "the superficiality of Political Economy shows itself in the fact that it looks upon expansion and contraction of credit, which is a mere symptom of the periodic changes of the industrial cycle, as their cause." […] We find practically all the elements that ever entered into any serious analysis of business cycles, and on the whole very little error. Moreover, it must not be forgotten that the mere perception of the existence of cyclical movements was a great achievement of the time. Many economists who went before him had an inkling of it. In the main, however, they focussed their attention on the spectacular breakdowns that came to be referred to as 'crises'. *And these crises they failed to see in their true light, that is today, in the light of the cyclical processes of which they are mere incidents.*" (Schumpeter, 1965, p. 41; emphasis added).

Recognition indeed, which contains however a poison pill in the last sentence: the "true light" in which crises must be seen is "the cyclical processes of which they are mere incidents". But if this is accepted, then capitalism is in fact crisis–free, and Marx's error consisted in failing to reconcile his own discovery of cycles with his predilection for forecasting immanent self-destruction. Schumpeter uses Marx against Marx, neutralising his most dangerous message: that capitalism is inherently crisis-prone, unleashing destructive forces of such power that future generations will have no choice but to replace it.

Schumpeter, we might say, goes for Marx's Juglar. He saves the phenomena in a unique and ideologically powerful way: since periodic or regular motion is a constitutive feature of capitalism, crisis has no sting. It is simply the way capitalism corrects itself.

However, he entered the lists at an unfortunate time for his reputation as scholar. Events like the Great Depression, fascism, and the Second World War are hard to discount as mere incidents; worse still, if one's cheerful message is that such catastrophes are not only necessary for capitalism's survival but likely to recur, the popular masses may react in unintended ways. Worse still, post-war reconstruction marginalised the Austrian vision, as Europe built welfare states whilst America turned to the "Keynesian" management techniques for which Samuelson became chief evangelist. His Austrian colleagues were marginalised anyhow, his adaptation of their basic doctrine was at best quirky and at worst downright threatening, and state intervention remained the new norm in academia until Friedman and the dawn of neoliberalism.

It is in this light that we consider the second reason for Schumpeter's reconstruction of Walras. His attitude to state involvement in the economy and more generally to the role of institutions expresses an overlooked theoretical integrity. Chris draws our attention to his deep–rooted antipathy to Keynes. One might dismiss the vitriolic review of the *General Theory* [page reference when printed] as academic jealousy or an uncharacteristic outburst. However, it makes more sense to seek a consistent interpretation which makes it coherent with his cycle theory.

The connection is rather obvious. Once we suppose the economy is cyclic, we cannot but enquire into the *mechanism* of cyclic regularity; when growth rises above average, some force or set of forces must bring it down, and when it falls below, the same or another force must make it rise.

Chris notes the vagueness in Schumpeter's mechanism of decline, as highlighted by Kuznets; this is not the point. Schumpeter was the apostle of growth, not a prophet of doom, a function he was probably happy to delegate to the Marxists. His demons are delegated to catch their fallen angels; he is justly famous for his theory of the mechanism of *rise*, accounting for the abiding respect he earned from his most crabbed critics, and for Chris's consuming life interest: innovation. The romantic entanglement of the financier and the entrepreneur, driven by the lure of the surplus profits arising from the deployment of new techniques and products, launch benign phases of investment-led expansion that save capitalism from itself.

Moreover, the worse the crisis, the greater the marriage prospects. *Laissez Faire* is thus the logical conclusion of self-restoration. If capitalism possesses *internal* mechanisms of restoration, intervention is not only unnecessary but may well make things worse, subverting the banker and nipping innovation in the bud. Just as Schumpeter's cyclic restatement sets out to save equilibrium theories from themselves, self-restoration is positioned to save *Laissez Faire* policies from themselves.

Schumpeter thus hits on the key political flaw in equilibrium theory, which is in fact the foundation of Samuelsonism. If one supposes that the natural state of the economy is steady and optimal, then when it deviates from this golden ideal, the only logical conclusion is that it is broken. The obvious policy response is that it should be fixed, by the firm hand of government. Schumpeter offers a theoretical response to such an ill-advised reaction: deviation from the centre is a requirement of restoration; the famous "creative destruction" must have its way. Once self-restoration enters the theoretical arsenal of the economist, one can argue in any situation, no matter how bad, that the best thing to do is let capitalism take its course.

I think any systematic reading of *Business Cycles* makes clear that at least through the Thirties and well into the Forties, Schumpeter was resolutely Austrian in his opposition to state intervention. As for the context and direction of his political views, which are well beyond the scope of this commentary, I cannot do more than recommend Swedberg's introduction to the 1976 edition of *Capitalism, Socialism and Democracy.* My argument here concerns the theoretical consistency of Schumpeter's ideas; I think Chris convincingly demonstrated that Schumpeter's *theory* of business cycles is indissolubly connected to a *theory* of self-restoration, and with it, a theoretical foundation for rejecting institutional interference in the economy, most of all, state interference.

To complete that picture, I finish with the most controversial aspect of Schumpeter's *œuvre*, the concept of Long Waves of capitalism, of which though not the originator, he is surely the most dedicated protagonist. What was its attraction for Schumpeter?

Again, it is the only logical way to reconcile a theory of cyclic self-restoration with events like the Great Depression. Schumpeter's central difficulty was the following: it is one thing to argue that the regular business cycle, whose repetitive 7-10 year alternation of boom and slump can be observed throughout capitalist history, is a structural feature of the capitalist economy: large branches of orthodox economic theory, not least Real Business Cycle theory and Rational Expectations, have no problem with this idea. It is quite another to claim that prolonged, profound periods of stagnation like the Great Depression, taking the economy far from anything resembling stability, let alone optimality, can be construed as evidence for equilibrium. The more things fall apart, the less defensible is the claim that the centre must hold.

This is of especial theoretical significance today as we enter a period of history disconcertingly similar to that in which Schumpeter's ideas were formed. Schumpeter, notwithstanding his hesitations about the pathological character of the Great Depression, eschewed a course he could have taken. He could have concluded there are two separate processes at work in the capitalist economy, one being the short–term cyclic motion that gives rise to the business cycle, the other a secular trend of decline which does not respond to deviations from equilibrium in the same way as the business cycle.

He took the opposite route, groping for a universal theory of cycles, based on a universal principle of self-restoration. The scientific merit of this evolution is precisely the grasp for universality at any cost. In pushing to its logical limit the theory of cyclic motion, Schumpeter makes it possible to study this theory in its pure form. The result is an endogenous theory of long cycles (Menshikov, 1989) in which both decline and restoration, over large periods, are governed by forces essentially internal to capitalism. The alternative is that restoration in the long cycle is governed by exogenous forces, that is to say, institutions. But in that case, we no longer have a theory of cycles: as Desai (2015) remarks, we have a theory of history.

Schumpeter was in my view fully aware of this issue which is why he is exercised, in the early chapters of *Business Cycles,* to distinguish between internal and external forces.

What can be learned from all of this? Like Chris, I remain unconvinced of endogenous long cycles, and with it the theory of capitalist self–restoration; also like Chris, I think we can deduce better explanations of capitalist dynamics from the ideas of Marx and Keynes. I have moved away from the idea which Ernest Mandel (1995) pioneered, that Long Waves can play a useful role in such accounts, and am more convinced of Perez's (2012) concept of Great Surges, which I further think are not automatic, but called into being by the action of institutions (Freeman 2015). The issue then is, naturally, which institutions are required, and what they should do.

However I also believe that an indispensable function of the economist is to understand theories she doesn't agree with. This is a basic principle of pluralism (Freeman, 2010), to which Chris with his support for the AES 1992 declaration (Hodgson *et al.,* 1992) was an early subscriber. The reason lies far deeper than magnanimity or the modern pragmatic idea that one can create useful explanations of reality by sewing together disparate theoretical body parts stolen from dead economists.

So why rob Schumpeter's grave for his "real" ideas? Because one can only truly understand a theory by grasping its true opposite. Moreover one can only *test* a theory empirically, if one correctly states its opposite: otherwise, we will test the wrong thing. It's the easiest thing in the world to "prove" a theory by comparing it with a straw opposite. If instead we wish to restore the status of economics as an inductive science, insisting that facts must inform theory – which all who knew Chris recognise as the very foundation of his approach to all economic phenomena – we must introduce a process of hypothesis testing in which the alternative to every claim is as carefully chosen as the claim itself.

The notion of "null" hypothesis is thus, in my view, profoundly misguided. There is no such thing as a null hypothesis, save perhaps absolute nihilism. Equally there is no such thing as a perfect theory: an empirically complete heliocentric account of observed planetary motion was unavailable until Kepler diagnosed it as elliptical, not circular as Galileo supposed. Yet Galileo was right as opposed to the extant alternative, namely Ptolemaic theory. A correct test is to see which of *two opposed theories* best explains what we see. No scientific theory is ever perfect; what the true scientist seeks is a theory better than the available alternatives.

With this in mind, we can formulate with great exactness the rival hypotheses, concerning the present state of the economy, that need to be tested. Thanks to the work of Chris and SPRU, we even know how to test them. The issue is quite precise; *what are the conditions for innovation to take place on the expanded scale associated with exceptional upturns?*

Schumpeter leaves us a precise account of the mechanism on which his supporters and opponents coincide. There are two decisive agents, the entrepreneur and the financier. The entrepreneur discovers, or acquires knowledge of, an alteration to the process of production which would allow him, if he develops it, to make a profit above and exceptional to the norm. He convinces the financier that the process will yield exceptional returns and pledges a part of them in consideration for the advance of capital. The financier complies, the innovation is introduced, and the anticipated profits yielded – launching the whole gear-train of expanded development.

But what are the *conditions* for the entrepreneur to secure his knowledge, for the capital to be advanced, and the innovation to succeed? Will Schumpeter's mechanism always work, that is to say, is it endogenous to capitalism? Once we acknowledge cyclic variation we are obliged to say that under some circumstances it works, and under some circumstances it does not. What are these circumstances?

Chris's whole life was based on the insistence that one indispensable circumstance was the directed intervention of institutions under the conscious control of human agents, to ensure the best possible use of science accompanied by the widest diffusion of knowledge, hence the greatest possible levels of education, of access to knowledge, and the systematic deployment of policies to provide for national systems of innovation that really work to enhance the lives of billions of people.

Schumpeter's theory of self–restoration comprises the precise, testable opposite of that theory. Let us now, therefore, *test* these two alternative hypotheses, as in Marianna Mazzucato's (2013) superb book on the state as entrepreneur. Let us see in which nations, at what times in history, and under what institutional "regimes" the financier, the entrepreneur, and the citizen have actually worked in the way that

Schumpeter and Chris respectively – and differently – claimed they would. Let's invite economists of all persuasions to investigate, objectively, scientifically and impartially, what those conditions really are, and let's then take all and every appropriate measure that will bring those conditions into existence. This is the Economics of Hope: Chris's message to the world.

Bibliography

Desai R. (2015). *The value of history and the history of value*. Manuscript

Duhem P. (1908). *To Save the Phenomena: essays on the concept of Physical Theory from Plato to Galileo*. Chicago, University of Chicago Press.

Fagerberg J. (2003). *Schumpeter and the Revival of Evolutionary Economics: an Appraisal of the Literature.* Aldershot, Edward Elgar

Freeman A. (2006). An Invasive Metaphor: the Concept of Centre of Gravity in Economics, Presented at the *Association for Heterodox Economics*, London < http://mpra.ub.uni-muenchen.de/6812/1/MPRA_paper_6812.pdf>

Freeman A. (2010). The Economists of Tomorrow, *American Journal of Economics and Sociology,* Wiley Blackwell, vol. 69, n° 5, November, p. 1591-1613.

Freeman A. (2014). Schumpeter's theory of self-restoration: a casualty of Samuelson's Whig Historiography of science. *In* Freeman A., Chick V. and Kayatekin S. (eds). CJE vol. 38, n° 3, p. 663-669

Freeman A. (2015). What Causes Booms? *Marxism: with and Beyond Marx*. *In* Bagchi A. and Chatterjee A. (Eds). New Delhi: Routledge.

Hodgson G., Mäki U. and McCLoskey D. (originators). (1992). A Plea for a Pluralistic and Rigorous Economics, *The American Economic Review*, vol. 82, n° 2.

Mandel E. (1995). *Long Waves of Capitalist Development: a Marxist Interpretation*. London, Verso

Mazzucato M. (2013). *The Entrepreneurial State*. Anthem Press

Menshikov S. (1989). The Long Wave as an Endogenous Mechanism. *Proceedings of the International Colloquium on the "Long Wages of the Economic Conjuncture*", Brussels, January 12-14.

Perez C. (2002). *Technological Revolutions and financial capital: the Dynamics of Bubbles and Golden Ages*. Cheltenham: Elgar

Samuelson P. (1983). Marx, Keynes and Schumpeter. *Eastern Economic Journal*, vol. IX, n° 3, p.166-179

Samuelson P. and Nordhaus W. (1992). *Economics* (Fourteenth Edition). McGraw-Hill.

Schumpeter J. (1965). *Capitalism, Socialism and Democracy*. Unwin.

Schumpeter J. (1939a). *Business Cycles*. McGraw-Hill.