## Albert Aftalion and Business Cycle Theory: A Note

K. Vela Velupillai\*, Ragupathy Venkatachalam\* and Stefano Zambelli\*

31 August, 2014 Revised: 29 September, 2014

"As almost any book on business cycle theory will indicate, the name Aftalion is important in the field of theory of economic fluctuations." Fisher (1952), p. 475

<sup>\*</sup> Department of Economics, New School for Social Research (NSSR), 6 East 16<sup>th</sup> Street, New York, USA.

Centre for Development of Studies, Ulloor, Thiruvananthapuram 695 011, Kerala, India.

<sup>&</sup>lt;sup>♠</sup> Department of Economics, University of Trento, Via Inama 5, 381 22 Trento, Italy.

<sup>•</sup> We are greatly indebted to the Managing Editor of this Journal, Professor Alberto Quadrio Curzio, for important suggestions that helped improve our contribution quite considerably. He is, of course, not responsible for the remaining short-comings of this revised version.

In a recent issue of this Journal, Professor Scazzieri states what we, as students of trade cycle theory<sup>1</sup>, find important (Scazzieri, 2014, p. 89; italics added):

"Unfortunately, Aftalion's work in [the structural explanation of economic fluctuations] is *little known*, and *seldom quoted*, *in the Anglophone*<sup>2</sup> *economic literature*."

This has a large element of truth in it<sup>3</sup>.

However, as a matter of fact, from Mitchell (1913) & Robertson (1914, 1915) at what may be referred to as the 'dawn' of modern trade cycle theory<sup>4</sup>, all the way through the interwar 'years of high theory' (*pace* Shackle (1967)), Aftalion's pioneering role was handsomely recognized, both in the form of appreciative criticisms Mitchell (op.cit, pp. 8-9), Robertson (op.cit, p. 84, ff & p. 14, ff, respectively), mild, although misplaced enthusiasm (Haberler, 1946, pp. 134-5, Tinbergen, 1942, footnote 31, p. 138, Frisch, 1931), in a general sense in Pigou's classic study of a psychological theory of industrial fluctuations (Pigou, 1927<sup>5</sup>), and as a basis for the development of one of the most enduring macrodynamic models of the trade cycle: Frisch's famous **Cassel Festschrift** article (Frisch, 1933)<sup>6</sup>, the acknowledged methodological fountainhead of one of the frontier approaches to *business cycle* theory (Kydland & Prescott, 1982). Aftalion's contributions to trade cycle theory were given central importance in the significant *Annual Survey* series of the early years of the **Econometrica**, in the crucial year of 1933, in Alvin Hansen's pre-Keynesian days (Hansen & Tout, 1933).

\_

<sup>&</sup>lt;sup>1</sup> In the 'modern' literature, particularly in the Newclassical era, this field is now referred to as *business* cycle theory.

<sup>&</sup>lt;sup>2</sup> One is reminded of Myrdal's (1939, pp.8-9) pungent 'broadside', in this particular context (Myrdal, 1939, pp. 8-9):

<sup>&</sup>quot;... the attractive Anglo-Saxon kind of unnecessary originality, which has its roots in certain systematic gaps in the knowledge of the German language on the part of the majority of English economists."

<sup>&</sup>lt;sup>3</sup> We refer only to the English language literature, especially since Professor Scazzieri refers to the 'Anglophone economic literature'.

<sup>&</sup>lt;sup>4</sup> Without doubt, Marx, Juglar, Hilferding and a host of others are distinguished predecessors to this tradition.

<sup>&</sup>lt;sup>5</sup> Pigou (1927) formed the link between the *foundationless*, *phenomenological*, sunspot theory of cycles formulated by Jevons, in the mid-nineteenth century, and its modern, so-called *microfounded*, sunspot theory of the cycle of Cass & Shell (1983).

<sup>&</sup>lt;sup>6</sup> That this classic is fundamentally wrong in its numerical claims (cf. Zambelli, 2007), does not detract it from being a fountainhead for the muddle-headed doctrine-historical claims of the real business cycle theorists!

However, Professor Saczzieri's timely reminder, that modern research particularly in business cycle theory, seems to have little time and even much less space for the way the classics influenced the formative theories of the business cycle, must be taken very seriously. Professor Scazzieri, however, emphasizes the unfortunate absence of references to Aftalion's work in 'the structural explanation of economic fluctuations'.

We would like to add a minor observation, of a related point, that work at the frontiers of research on business cycle theory – whether it be of the Newclassical, New Keynesian or Post Keynesian variety – is equally negligent in making explicit the important role Aftalion's work played in what was eventually to become one or another foundational element of practically every kind of macroeconomic theory of fluctuations.

In the postwar years of Keynesian orthodoxy, especially in theories of aggregate fluctuations in its mathematical mode, Aftalion's works provided basic building blocks in many ways (see the copious references to, and use of, this great Frenchman's – of Bulgarian origin (Niehans, 1990, p. 376) – fertile ideas in Hansen, 1951 and Ch. 22, in it, by Goodwin). Almost without exception, every model of aggregate fluctuations, whether based on so-called microfoundations, or not, paid at least lip service to Aftalion's 'furnace' metaphor - the crucial importance of the time lag between *production starting*, the *carry-on-activity* and *delivery time*. This was so in the classic models of Tinbergen (1931), Frisch (1933, particularly in the crucial §4) and Kalecki (1935)<sup>7</sup>.

But, as one of the (disputed – cf. above, Tinbergen, 1942) founding fathers of the venerable *acceleration principle*, Aftalion was also instrumental in providing notable hints to the formulation of what eventually came to be known as the *nonlinear accelerator* – by suggesting the distinction between *desired capital* and *actual capital*, in motivating aggregate investment, based on not-necessarily optimizing entrepreneurial behavior (Tinbergen, 1931, Goodwin, 1951).

<sup>&</sup>lt;sup>7</sup> There is textual evidence that Aftalion's approach was discussed at the 1933 Leyden meeting of the Econometric Society (see Marschak, 1934) where Kalecki, Frisch and Tinbergen were all

present. In particular Aftalion's concept related to the 'time to build idea' was part of Frisch and Kalecki's conference presentations on the mathematical models of the business cycles.

That Aftalion is 'seldom quoted' in the recent literature on business cycle theory may well be true, justifying Professor Scazzieri's claim. This is, we think, particularly true in the field emphasized by Professor Scazzieri – 'the structural explanation of economic fluctuations'.

On the other hand, that Aftalion's ideas are not explicitly mentioned – as Mitchell's is, by the New Classicals, as Harrod is beginning to be invoked by the New Keynesians and Minsky's is by the Post Keynesians, may well be because those ideas have, almost seamlessly, been absorbed in the fabric of orthodoxy's building blocks – a fate reserved for the works and concepts of our masters.

We do not think – and, in this, we believe we are one with Professor Scazzieri - that Aftalion's many-splendoured contributions to theories of the business cycle can contribute to the neoclassical macroeconomic vision of the dynamics of fluctuations, taken over with a vengeance by the newclassicals. Elaborating and explaining this particular point would be – should be – the subject matter of an entirely independent essay.

## References

Fisher, G. H (1952), A Survey of the Theory of Induced Investment, 1900 – 1940, **Southern Economic Journal**, Vol. 18, No. 4, April, pp. 474-494.

Cass, David & Karl Shell (1983), *Do Sunspots Matter?*, **Journal of Political Economy**, Vol. 91, No. 2, pp. 193-227.

Frisch, Ragnar (1931), *The Interrelation Between Capital Production and Consumer-Taking*, **Journal of Political Economy**, Vol. 39, No. 5, October, pp. 646-654.

Frisch, Ragnar (1933), *Propagation Problems and Impulse Problems in Dynamic Economics*, in: **Essays in Honour of Gustav Cassel**, pp. 171-205, Allen & Unwin, London.

Goodwin, Richard. M (1951), *The Nonlinear Accelerator and the Persistence of the Business Cycle*, **Econometrica**, Vol. 19, No. 1, January, pp. 1-17.

Haberler, Gottfried (1946), **Prosperity and Depression: A Theoretical Analysis of Cyclical Movements**, third edition enlarged, United Nations, Lake Success, New York.

Hansen, Alvin.H (1951), **Business Cycles and National Income – Expanded Edition**, W. W Norton & Company., Inc., New York.

Hansen, Alvin. H & Herbert Tout (1933), Annual Survey of Business Cycle Theory: Investment and Saving in Business Cycle Theory, **Econometrica**, Vol. 1, No. 2, April, pp. 119-147.

Kalecki, Michał (1935), A Macrodynamic Theory of Business Cycles, Econometrica, Vol. 3, No. 3, July, pp. 327-344.

Kydland, Finn & Edward. C Prescott (1982), *Time to Build and Aggregate Fluctuations*, **Econometrica**, Vol. 50, Issue 6, November, pp. 1345-1370.

Marschak, Jacob (1934), *The Meetings of the Econometric Society in Leyden*, September-October, 1933, **Econometrica**, Vol. 2, No. 2, April, pp. 187-203.

Mitchell, Wesley. C (1913), **Business Cycles**, University of California Press, Berkeley.

Myrdal, Gunnar (1939), Monetary Equilibrium, William Hodge & Company Limited, London.

Niehans, Jürg (1990), **A History of Economic Theory: Classic Contributions – 1720 – 1980**, The Johns Hopkins University Press, Baltimore.

Pigou, Arthur Cecil (1927), **Industrial Fluctuations**, Macmillan and Co., Ltd., London.

Robertson, Dennis Holme (1914), *Review*, **Economic Journal**, Vol. 24, No. 93, March, pp. 81-89.

Robertson, Dennis Holme (1915), A Study of Industrial Fluctuation: An Enquiry into the Character of the so-called Cyclical Movements of Trade, P. S. King & Son, Ltd, London.

Scazzieri, Roberto (2014), *Foreword to Albert Aftalion's Essay*, **Economia Politica**, Vol. XXXI, n. 1, April, pp. 89-91.

Shackle, G.L.S (1967), **The Years of High Theory: Invention and Tradition in Economic Thought, 1926 – 1939**, Cambridge University Press, Cambridge.

Tinbergen Jan (1931), *Ein Schiffbauzyklus*, **Weltwirtschaftiliches Archiv**, Vol. 34, Issue 1, pp. 152-164.

Tinbergen, Jan (1942), *Critical Remarks on Some Business-Cycle Theories*, **Econometrica**, Vol. 10, No. 2, April, pp. 129-146.

Zambelli, Stefano (2007), A Rocking Horse that Never Rocked: Frisch's 'Propagation Problems and Impulse Problems', **History of Political Economy**, Vol. 39, No. 1, pp. 145-166.