ENCYCLOPEDIA OF POST-KEYNESIAN ECONOMICS

Edited by Louis-Philippe Rochon and Sergio Rossi

Entries by Fernando Rugitsky

Structuralism – Latin American

In the decade following the end of the Second World War, one of the most active fields of research in economics was development (Hirschman, 1981, Arndt, 1987, Krugman, 1993). Several researchers dedicated their work to understanding the reasons why so many countries remained underdeveloped, at the periphery of the world economy, and how this situation could be overcome. They would later be called the "pioneers in development" (Meier and Seers, 1984). An important part of this collective research effort was undertaken by Latin American economists working at the United Nations' Economic Commission for Latin American and the Caribbean (ECLAC), who were led by Raúl Prebisch. This particular strand of early development thinking is referred to as Latin American structuralism.

According to Furtado (1975: 83), Latin American structuralism "had as its main goal to put in evidence the importance of 'non-economic parameters' for macroeconomic models. As the behavior of the economic variables depend to a great extent on these parameters and their nature can change significantly in phases of rapid social change, (…) they must be studied meticulously. This observation is particularly pertinent with respect to social and technologically heterogeneous economic systems, like the underdeveloped economies." Such emphasis led these economists to argue that Latin American countries needed an economic theory of their own. In the words of Prebisch (1950: 7, fn. 1), "[o]ne of the most conspicuous deficiencies of general economic theory, from the point of view of the periphery, is its false sense of universality." (On the methodology of Latin American structuralism, see Boainovsky, 2015.)

Latin American structuralism dealt with many issues and shifted its focus along with the changing challenges faced by Latin American economies (a short summary can be found in Palma, 2008, and a longer one in Bielschowsky, 2016). But two issues are prominent among the formulations of this school of thought: the tendency of the terms of trade to deteriorate, also called the Prebisch-Singer hypothesis (see entry on Terms of Trade), and the interaction between the structure of demand and the structure of supply. The Prebisch-Singer hypothesis claimed that the terms of trade of underdeveloped countries specialized in the production and exports of primary commodities tended to deteriorate, pushing down their real income and dividing the world economy into two regions, a center and a periphery. This was one of the main arguments for the industrialization of Latin American economies.

The second issue, the interaction between the structure of demand and the structure of supply, is best understood as a critical extension of Lewis' (1954) model of economic development with unlimited supplies of labor. Lewis argued that economic development was characterized by the shift of the labor force from the subsistence sector to the capitalist sector, which would increase labor productivity, enlarge the surplus available to be accumulated as capital and, in the end, allow the capitalist sector to absorb the entire labor force. Furtado (1965) and Pinto (1976) extended such model to incorporate a crucial structural dynamic: the income distribution that resulted from the dual nature of the economy would determine the consumption patterns and the latter, in their turn, would determine the sectoral composition of output and employments. The main implication of this analysis was that, *contra* Lewis,

a process of development did not necessarily lead to the absorption of the entire labor force in high productivity capitalist sectors, but could reproduce continuously massive underemployment and high inequality. If, in Lewis' model, increasing inequality would be a temporary phenomenon, being attenuated once the unlimited labor supply was extinguished, for Furtado and Pinto inequality could become a permanent feature of underdeveloped countries, being a result of what Pinto (1970) called "structural heterogeneity".

This formulation is particularly relevant for Post-Keynesian economics because such structural dynamic can be fruitfully incorporated as a mediation between income distribution and aggregate demand in Post-Keynesian growth and distribution models (Rugitsky, 2016). In this way, shifts in income distribution impact aggregate demand not only through different propensities to consume between social classes and through its impact on aggregate investment. But it can also impact aggregate demand through changes in consumption patterns that, in their turn, impact the sectoral composition of output and employment. Such interaction can lead to cumulative processes in which growth is accompanied by either rising or falling inequality. This extension of Post-Keynesian growth and distribution models, which was suggested by Taylor (1983, 1989), may be particularly important in order for them to be relevant to interpret the trajectories of underdeveloped countries, which are still characterized by a high degree of sectoral heterogeneity.

Reference:

ARNDT, H. W. (1987). *Economic Development: the history of an idea*. Chicago: University of Chicago Press.

BIELSCHOWSKY, Ricardo (2016). "Fifty years of ECLAC thought: a review." In: BIELSCHOWSKY, Ricardo (ed.). *ECLAC Thinking: selected texts (1948-1998)*. Santiago: United Nations / ECLAC, pp. 7-43.

BOIANOVSKY, Mauro (2015). "Between Lévi-Strauss and Braudel: Furtado and the historical-structural method in Latin American political economy." *Journal of Economic Methodology*, Vol. 22 (4), pp. 413-438.

FURTADO, Celso (1965). "Development and stagnation in Latin America: a structuralist approach." *Studies in Comparative International Development*, Vol. 1 (11), pp. 159-175.

FURTADO, Celso (1975). *Teoria e Política do Desenvolvimento Econômico*. 5th. Ed. São Paulo: Editora Nacional.

HIRSCHMAN, Albert O. (1981). "The rise and decline of development economics." In: HIRSCHMAN, Albert O. *Essays in Trespassing*: *economics to politics and beyond*. Cambridge: Cambridge University Press, pp. 1-24.

KRUGMAN, Paul (1993). "Toward a conter-counterrevolution in development theory." *Proceedings of the World Bank Annual Conference on Development Economics 1992*, pp. 15-38.

LEWIS, W. Arthur (1954). "Economic development with unlimited supplies of labour". *Manchester School of Economic and Social Studies*, Vol. 22 (2), pp. 139-191.

MEIER, Gerald M., SEERS, Dudley (eds.). *Pioneers in Development*. Oxford: Oxford University Press.

PALMA, José Gabriel (2008). "Structuralism." In: DUTT, Amitava, ROS, Jaime (eds.). *International Handbook of Development Economics*. Vol. 1. Cheltenham, UK: Edward Elgar, pp. 136-143.

PINTO, Aníbal (1970). "Naturaleza y implicaciones de la 'heterogeneidad structural' de la América Latina." *El Trimestre Económico*, Vol. 37 (145), pp. 83-100.

PINTO, Aníbal (1976). "Notas sobre estilos de desarrollo en América Latina." *Revista de la Cepal*, n. 1, pp. 97-128.

PREBISCH, Raúl (1950). "The economic development of Latin America and its principal problems." *Economic Commission for Latin America*.

RUGITSKY, Fernando (2016). "Growth, distribution, and sectoral heterogeneity: reading the Kaleckians in Latin America." *EconomiA*, Vol. 17 (3), pp. 265-278.

TAYLOR, Lance (1983). *Structuralist Macroeconomics: applicable models for the Third World*. New York: Basic Books.

TAYLOR, Lance (1989). "Demand composition, income distribution, and growth." In: FEIWEL, George (Ed.). *Joan Robinson and Modern Economic Theory.* London: Macmillan Press, pp. 623-637.

Terms of Trade

Terms of trade are defined as the ratio between the prices of the exports of a country and the price of its imports. It can thus be interpreted as the inverse of the real exchange rate, being negatively correlated with competitiveness (Carlin and Soskice, 2006: 302). The concept, however, is usually associated with the Prebisch-Singer hypothesis (Prebish, 1950; Singer, 1950), which maintains that the terms of trade of the underdeveloped countries tend to deteriorate.

The hypothesis resulted from independent efforts by Prebisch and Singer to provide explanations for the empirical finding reported in an United Nations document elaborated by Singer in the late 1940s: that the ratio between the prices of primary commodities and the prices of manufactured goods declined by about a third between 1870s and 1940s (Toye and Toye, 2003). Given that trade between developed and underdeveloped countries, at that time, consisted predominantly in the exchange of primary commodities produced in the underdeveloped countries by manufactured goods produced in the developed ones, the mentioned ratio could be interpreted as an approximation to the terms of trade of the underdeveloped economies. Singer's explanation for the decline was mainly based on the low price and income elasticities of primary goods, whereas Prebisch also focused on the role played by differences between the structures of the labor markets of the two regions. These elements explained why productivity gains in the production of manufactured goods generally resulted in higher wages, with prices remaining stable, while the (less frequent) productivity gains in the production of primary commodities tended to result in lower prices. This contrast implied that the developed countries not only kept to themselves the fruits of their technical progress, but also were able to appropriate part of the fruits of the technical progress that took place in the underdeveloped countries.

The Prebisch-Singer hypothesis put forward, in this way, an explanation for the continuous reproduction of two polarized regions in the world economy: the developed countries at the core and the underdeveloped ones at the periphery. In the early days of development thinking, the hypothesis was one of the most influential bases for the defense of state-led industrialization in the periphery. Industrialization was seen as a way to defend the economy against the negative effects of deteriorating terms of trade between primary commodities and manufactured goods. But if the terms of trade can be interpreted as the inverse of the real exchange rate, is it not possible to claim that its deterioration is expansionary through its positive impact on exports? Thirlwall (1983: 252) raised this question in the following terms, when he examined Prebisch's work: "[i]t is often forgotten that when countries devalue their currency they deliberately deteriorate their terms of trade in the hope of real income gains from a greater volume of home production." The Prebisch-Singer hypothesis assumed that this real income gains would not materialize due to low price elasticities of the exports and imports of the underdeveloped countries, in a context of specialization in the production of primary commodities and high dependence on foreign goods not produced domestically. In technical terms, the Marshall-Lerner condition does not hold for theses economies and the terms of trade deterioration (or, equivalently, an exchange rate devaluation) is contractionary, a possibility that was entertained by Hirschman and Diaz-Alejandro and further elaborated by Krugman and Taylor (1978).

After almost seven decades, one is allowed to ask how the Prebisch-Singer hypothesis stood the test of time. Abundant empirical research suggests that the deterioration of the terms of trade between primary commodities and manufactured goods remains observable in the data and that the recent commodities prices boom was but a cycle around a declining trend (see, for instance, Harvey et al., 2010, Erten and Ocampo, 2013, and Baffes and Etienne, 2016). It is true that the international division of labor changed considerably since the 1950s, especially with the shift of the production of manufacturing goods to Asia, shielding the countries of the region from the negative effects of the declining primary commodities prices. However, some regions of the underdeveloped world, especially in Africa and South America, remain highly dependent on the exports of primary commodities and still face the challenges identified long ago by Prebisch and Singer.

Reference:

BAFFES, John, ETIENNE, Xiaoli (2016). "Analysing food price trends in the context of Engel's Law and the Prebisch-Singer hypothesis." *Oxford Economic Papers*, Vol. 68 (3), pp. 688-713.

CARLIN, Wendy, SOSKICE, David (2006). *Macroeconomics: imperfections, institutions and policies*. Oxford: Oxford University Press.

ERTEN, Bilge, OCAMPO, José Antonio (2013). "Super cycles of commodity prices since the mid-nineteenth century." *World Development*, Vol. 44, pp. 14-30.

HARVEY, David, KELLARD, Neil, MADSEN, Jakob, WOHAR, Mark (2010). "The Prebisch-Singer hypothesis: four centuries of evidence." *Review of Economics and Statistics*, Vol. 92 (2), pp. 367-377.

KRUGMAN, Paul, TAYLOR, Lance (1978). "Contractionary effects of devaluation." *Journal of International Economics*, Vol. 8 (3), pp. 445-456.

PREBISCH, Raúl (1950). "The economic development of Latin America and its principal problems." *Economic Commission for Latin America*.

SINGER, Hans (1950). "The distribution of gains between investing and borrowing countries." *American Economic Review*, Vol. 40 (2), pp. 473-485.

THIRLWALL, Anthony (1983). "Foreign trade elasiticities in centre-periphery models of growth and development." *Banca Nazionale del Lavoro Quarterly Review*, Vol. 36 (146), pp. 249-261.

TOYE, John, TOYE, Richard (2003). "The origins and interpretation of the Prebisch-Singer thesis." *History of Political Economy*, Vol. 35 (3), pp. 437-467.

Wealth distribution

In the preface to his *Principles of Political Economy and Taxation*, David Ricardo (1821, p. 5) famously claimed that the "principal problem of Political economy" was determining the laws by which income is distributed between three classes: the landowners, the capitalists, and the workers. The focus on the distribution of income overcasts an implicit assumption regarding the distribution of wealth. The existence of the three classes depends on the distribution of income not altering substantially the distribution of wealth, allowing the land to remain owned by the landowners and the capital by the capitalists, whereas the workers do not accumulate wealth in a significant amount. What is implicit in Ricardo becomes explicit in Karl Marx. In the latter's view, capitalist production is not only the production of goods and services but also the continuous reproduction of "the working man as a working man, and the capitalist as a capitalist", by incessantly separating the workers from the means of production (Marx: 1865, p. 42). That is, by reproducing continuously a certain distribution of wealth.

In spite of this relationship between the functional distribution of income and the distribution of wealth, the debate on the former seldom disregards the latter, probably in part due to the predominant focus of economic theorizing on flows rather than stocks. The issue of wealth distribution, however, re-surfaced again in the mid-1960s, in the debates around the so-called Pasinetti theorem, one of the last chapters of the Cambridge capital controversies (Harcourt, 1972). In their reaction to Luigi Pasinetti's (1962) formulation, Paul Samuelson and Franco Modigliani (1966a) argued that an "anti-Pasinetti regime" could be derived, in which the accumulation of wealth by workers ended up eliminating the capitalists.

This opened an empirical debate on whether the wealth distribution underlying the class structure supposed by the classical political economists was stable or not (besides Samuelson and Modigliani [1966a], see Kaldor [1966], Pasinetti [1966], Samuelson and Modigliani [1966b], and Vaughn [1979]). The controversy focused on the empirical meaning of the conditions for the Pasinetti and anti-Pasinetti regimes, especially the heterogeneous saving propensities from different kinds of income, and the connection between the income and wealth distributions would soon be pushed aside to the margins of the Post Keynesian debates, surviving only in a few attempts to re-examine the issues raised by Pasinetti in a Kaleckian growth and distribution setting (Dutt [1990], Lavoie [1998], and Palley [2012]).

Recently, however, the studies on inequality based on tax data allowed the issue to be empirically reassessed. The classical political economists indication that wages were determined by subsistence, a plausible interpretation of the situation in Western Europe in the first half of the 19th century (Allen, 2009), ruled out the possibility that workers would accumulate any significant amount of wealth. However, the trajectory of wages in the following two centuries raised the question of whether there was a reduction of wealth inequality. In effect, Thomas Piketty (2014, pp. 336-376) has shown that wealth inequality, after increasing mildly in the 19th century, fell markedly in the first half of the 20th century in Britain, France, Sweden, and the United States, as a result of capital destruction during the wars and the Great Depression and of policies adopted in the period. Concretely, the top 10 per cent wealth holders owned 80 to 90 per cent of all wealth in the eve of the First World War. By the 1970s, these shares were reduced to 60 to 70 percent, recovering slightly ever since.

Such a reduction of wealth inequality, however significant, did not alter substantially the polarized class structure assumed by the classical political economists. The reduction of the wealth share of the top decile resulted in the emergence of what Piketty (2014, pp. 346-347) calls a "patrimonial middle class," but that did not entail that such a class became capitalist: it was able generally to buy a home,

but it could not live out of capital income. United States' data from 2001 shows that the bottom 98 per cent of the population received around 90 per cent of its income as wages, a share that drops significantly once one moves up the social pyramid (Duménil and Lévy, 2004, p. 107). The top 2 per cent earns almost half of its income from sources other than wages (including capital income, capital gains, and sole proprietor income) and the shares of wages in the income of the top thousandth goes down, depending on the country, to around 20 to 30 per cent (Piketty, 2014, pp. 277, 302). Despite its changes in the 20th century, wealth distribution remains polarized and income from capital remains concentrated at the top.

REFERENCES

Allen, R. (2009), "Engels' pause: technical change, capital accumulation, and inequality in the British industrial revolution", *Explorations in Economic History*, **46** (4), 418-435.

Duménil, G. and D. Lévy (2004), "Neoliberal income trends: wealth, class and ownership in the USA", *New Left Review*, **30**, 105-133.

Dutt, A. K. (1990), "Growth, distribution and capital ownership: Kalecki and Pasinetti revisited", in: Dutta, B., S. Gangopadhayay, D. Mookherjee, and D. Ray (eds.), *Economic Theory and Policy: Essays in Honor of Dipak Banerjee*, Bombay: Oxford University Press, 130-145.

Harcourt, G. C. (1972), *Some Cambridge Controversies in the Theory of Capital*, Cambridge: Cambridge University Press.

Kaldor, N. (1966), "Marginal productivity and the macro-economic theories of distribution: comment on Samuelson and Modigliani", *Review of Economic Studies*, **33** (4), 309-319.

Lavoie, M. (1998), "The neo-Pasinetti theorem in Cambridge and Kaleckian models of growth and distribution", *Eastern Economic Journal*, **24** (4), 417-434.

Marx, K. (1865), "Value, price and profit", in: Marx, K. (1976), *Wage-Labor and Capital & Value, Price and Profit*, New York: International Publishers, 5-62.

Palley, T. I. (2012), "Wealth and wealth distribution in the neo-Kaleckian growth model", *Journal of Post Keynesian Economics*, **34** (3), 453-474.

Pasinetti, L. (1962), "Rate of profit and income distribution in relation to the rate of economic growth", *Review of Economic Studies*, **29** (4), 267-279.

Pasinetti, L. (1966), "New results in an old framework", *Review of Economic Studies*, **33** (4), 303-306.

Piketty, T. (2014), *Capital in the Twenty First Century*, translated by Arthur Goldhammer, Cambridge, Mass.: Harvard University Press.

Ricardo, D. (1821), *Principles of Political Economy and Taxation*, in: Ricardo, D. (2004), *The Works and Correspondence of David Ricardo*, Vol. I, ed. by Piero Sraffa, Indianapolis: Liberty Fund.

Maturity and Stagnation in American Capitalism (Steindl)

First published in 1952, Josef Steindl's *Maturity and Stagnation in American Capitalism* is an impressive intellectual effort. It not only bears the influence of Kalecki on its author, but it also reminds one of Kalecki's books in its combination of detailed examination of data with conceptual (and algebraic) analysis. But, in comparison with the latter's work, Steindl's is more detailed in the discussion of data, in the comments on previous literature and in the attempt to draw the implications of his analysis for the historical tendencies of American capitalism. He claimed that the theoretical basis in which he built his analysis was "Kalecki's economic dynamics", with one main modification: for Steindl the degree of utilization of capacity is one of the main determinants of firms' actions, whereas for Kalecki "utilization is a purely passive variable" (1952/1976: xiii-xiv).

From a theoretical standpoint, the main contribution of the 8 chapters that comprise the first part of the book is the differentiation between the pattern of competition in industries with plenty of small producers and in those where entry is difficult, that is, in competitive and in oligopolistic industries. In the first case, an eventual decline in utilization brought about by, for instance, a cyclical contraction unleashes a competitive struggle in which the high cost firms are eliminated and the utilization is brought back to its desired level. Such adjustment of utilization is accompanied by a parallel adjustment of capital accumulation, given that the latter is influenced by the former. Steindl (1952/1976: 53) argues that this adjustment process is "considerably impaired" in oligopolistic industries as, in these cases, the significant size of the high cost firms makes their elimination in the competitive struggle more difficult. As a consequence, low utilization and high profit margins interact with accumulation in a cumulative manner, leading to stagnation. The connection suggested by Steindl between changes in the pattern of competition and their impact on accumulation of capital required a sophisticated effort to relate macroeconomic dynamics to microeconomic decisions, with which he opened the second part of the book. Then, he used this conceptual framework to offer an interpretation of the long-run decline of capital accumulation in the United States based on the tendency towards the concentration of industry.

There is no better indication of the relevance of *Maturity and Stagnation in American Capitalism* than the fact that it was the starting point of two independent intellectual enterprises. The first of them was the Marxian theory of monopoly capital, inaugurated by the book published by Baran and Sweezy in 1966. Their argument was that the monopoly stage of capitalism entailed a thorough revision of Marxian economic theory and they based the economic theory they claimed relevant to the case of monopoly capital on Steindl's examination of the relations between concentration of industry, profit margins and investment decisions. In the book, they write that "anyone familiar with the work of Kalecki and Steindl will readily recognize that the authors of the present work owe a great deal to them." (1966: 56)

The second intellectual enterprise that stemmed from Steindl's book was the Kaleckian growth and distribution models (Lavoie, 2014: chaps. 5-7). In the early 1980s, several authors attempted to formulate simple mathematical models connecting functional distribution of income and aggregate demand (Rowthorn, 1981, Dutt, 1984, Taylor, 1985). While much of the framework came from Kalecki, a crucial element of such models was an investment function that included the degree of capacity utilization and that was explicitly inspired by the empirical and conceptual analysis presented in *Maturity and Stagnation in American Capitalism*. These early models derived, following Steindl, a negative relation between the profit share of income and aggregate demand. However, this result was challenged a few years later by works that showed that demand could be either wage-led or profit-led

(Blecker, 1989, Bhaduri and Marglin, 1990, Marglin and Bhaduri, 1990). A significant part of current Post-Keynesian macroeconomics is still referred to these concepts and formulations, making Steindl's contribution unavoidable after more than six decades.

Reference:

BARAN, Paul, SWEEZY, Paul (1966). *Monopoly Capital: an essay on the American economic and social order*. New York: Monthly Review Press.

BHADURI, Amit, MARGLIN, Stephen (1990). "Unemployment and the real wage: the economic basis of contesting political ideologies." *Cambridge Journal of Economics*, Vol. 14 (4), pp. 375-393.

BLECKER, Robert (1989). "International competition, income distribution and economic growth." *Cambridge Journal of Economics*, Vol. 13 (3), pp. 395-412.

DUTT, Amitava (1984). "Stagnation, income distribution and monopoly power." *Cambridge Journal of Economics*, Vol. 8 (1), pp. 25-40.

LAVOIE, Marc (2014). *Post-Keynesian Economics: new foundations*. Cheltenham: Edward Elgar.

MARGLIN, Stephen, BHADURI, Amit (1990). "Profit squeeze and Keynesian theory." In: MARGLIN, Stephen, SCHOR, Juliet (eds.). *The Golden Age of Capitalism: reinterpreting the postwar experience.* Oxford: Oxford University Press, pp. 153-186.

ROWTHORN, Robert (1981). "Demand, real wages and economic growth." *Thames Papers in Political Economy*, pp. 1-39.

STEINDL, Josef (1952/1976). *Maturity and Stagnation in American Capitalism*. New York: Monthly Review Press.

TAYLOR, Lance (1985). "A stagnationist model of economic growth." *Cambridge Journal of Economics*, Vol. 9 (4), pp. 383-403.