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The Impact of Innovations on Investments and Economic Growth in the Thought of Kalecki

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6.1 Introduction

Kalecki treats investment as a key point in a business cycle that is connected with the effect of that investment on demand and output. This is in contradiction to mainstream economics which treats external factors as major determinants of business cycles. The problem of innovation activity (which Kalecki often called technical progress) and its impact on economic development, mainly by the necessity for new investments, was analysed by Kalecki in many of his publications. Typically he analysed innovation not from a long-term perspective but as a chain of short-term decisions of entrepreneurs concerning their innovative activities. In his opinion (1968) the long-run trend is a chain of short-period situations. Innovation activity supported by profits which are achieved by it have, for Kalecki, a crucial impact on growth in the business cycle.

6.2 The literature on the impact of technical progress and innovation upon investments

Schumpeter treated innovation as the key dimension of economic change. According to him (1939), investment is determined by waves of optimism and pessimism which create clusters of innovation. In this way localized investments are created. However, Courvisanos (2012) points out differences between Schumpeter’s and Kalecki’s views of innovation. Schumpeter in his Business Cycles, published in 1939, treated technological change as one driver of such cycles. Kalecki, in Courvisanos’s
opinion, accepted the role of technological change in creating long-term trends in the economy but was more sceptical about systemic connections between new inventions, investment and growth. Whereas Schumpeter stressed the role of individual entrepreneurship in innovative technology development, Kalecki, having in mind the collapse of his father’s business, was more sceptical about the effectiveness of the market to finance entrepreneurs’ innovative projects. The ability to deliver a stable flow of money for innovation was, according to Kalecki, rather more possible in a socialism system than in capitalism, where firms’ profits dominate.

Harrod, in his theory of growth (1948) and works connected with trade cycle (1936), pointed out that net investments in fixed capital are the results of the prospective increase of demand which cannot be satisfied by existing equipment. Technological inventions in his model have an impact on the amount of capital which is needed to produce the expected amount of goods. In this way technological change can alter the amount of additional capital necessary to equate the supply of goods to demand.

The problem of the role of innovation in economic growth was also present in the works of Kalecki’s friend Steindl. He stressed the role of technological progress as a factor stimulating investments, which allows the transformation of the know-how into innovation. Innovations were, according to Steindl, one of three main factors (among internal accumulation and capacity utilization), which impact on investments (1981/1990). He compared the role of innovations to random, but always positive, shocks in business cycles. Steindl stressed the role of education in economic growth, especially the training of engineers. The weakness of educational systems was treated by him as an important barrier to technological development (Steindl, 1968).

Solow, in his neoclassical theory of economic growth (1956) noted the role of technological change in stimulating growth. According to him, an especially easy kind of technological change is connected with simply multiplying the production function by an increasing scale factor. Growth, which was not explained by variables in Solow’s model, was treated as a result of exogenous technological change. Solow used his own model of economic growth for calculating the impact of technical progress on the US economy, which was estimated as being responsible for four-fifths growth in output per worker. Kaldor (1957) in turn treated technology as an endogenous factor in his model of economic growth based on the ‘dynamic’ approach originally developed by Harrod. He assumed a linear relation between the growth of capital per employee