ABSTRACT

The (Forgotten?) Link Between the Entrepreneur, Increasing Returns, and Economic Growth

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This paper explains what I believe to be the link between the concept and role of entrepreneurship, increasing returns, and economic growth, which seems to be nowhere in evidence in contemporary theory. While contemporary writers recognize the main historical themes of entrepreneurship—risk, uncertainty, innovation, arbitrage, and resource allocation, these inquiries reflect the predominant neoclassical and Austrian focus on the theory of value and price. Particularly in the literature that has developed from the perspectives of Knight (1920), Coase (1937), Mises (1949), Penrose (1959), Kirzner (1973, 1979, 1985, 1989) and, most recently Casson (1982), entrepreneurship has become linked to the operation of the successful firm as the arbiter of personal drive and creativity. Contemporary interpretations of entrepreneurship are thus predicated on a variant of the methodological individualism that is the hallmark of neoclassical analysis (Davis 1998). While there is some commonality between these contemporary interpretations and their classical origins, more fundamentally they have wrested the entrepreneurial function from its classical moorings in which entrepreneurs *as a class* harness the social surplus in their quest for increasing returns. Classical writers from the Physiocrats forward concerned themselves primarily with the phenomenon of economic growth via additions to the social surplus coupled with accumulation and productive use. The process of growth was thus envisioned as being endogenous to the economy and as involving the shift of resources from less productive to more productive uses. While J. B. Say was the first writer to actually use the term *entrepreneur*, the Physiocrats were cognizant of the critical role that the entrepreneur has for realizing increasing returns in the process of transforming the economy by envisioning and directing the inter-sectoral shift of resources. Their *Tableau* envisioned the transfer of members of the sterile classes into sectors (chiefly agriculture) where nature works with man to generate a surplus. While Nature is recognized as the primary source of agricultural surplus, Quesnay understood that the reinvestment of profits by tenant farmers into large-scale agricultural production (i.e., reorganization) generates dynamic increasing returns to scale, which decreases per unit input requirements. Quesnay's model implicitly envisions the transition from small to large estates, which facilitates growth by shifting human and physical resources from the economy's unproductive sector(s). The inter-sectoral exchanges taking place in Quesnay's *Tableau* after the harvest among landlords, tenant farmers, and the artisan (or sterile) classes are inherently dynamic. Cantillon also pursues the theme of the earnings of the tenant farmers as deriving from the generation of increasing returns via an endogenous

process driven by tenant farmer entrepreneurship that utilizes the economy's surplus to re-deploy resources from less productive to more productive sectors to generate uncertain increasing return. The *bon prix* established by competition covers the socially defined requirements for worker subsistence, the replacement of fixed capital plus the surplus that is the source of the rent paid to proprietors and entrepreneurial profits (which are not necessarily positive). In turn, Quesnay's theory of the net product matured into Turgot's surplus theory of profit and his appreciation of the role of the landowner as a capitalist. Because land is but one form of capital, the uses of capital are competitive, causing its deployment from less productive sectors to those that are more productive.

In short, I want to credit the Quesnay/Cantillon/Turgot perception of the tenant farmer's entrepreneurial function as shifting resources and discovering new agricultural techniques to generate increasing returns. Thus the economy's growth is endogenous to the system, and the Physiocrats argued that it can be aided by appropriate reforms of the tax system and a shift from *petite culture* to *grans culture* to sustain the rate of profit.

Though Smith entertained a very different view from that of the Physiocrats of the exclusive capability of land to produce a surplus, the *Wealth of Nations* is predicated on essentially the same conception of endogenous growth based on deploying labor and capital according to a sectoral hierarchy that is dictated by the vertical interdependence of the economy's sectors (Rima, 1998). The view that economic progress is an endogenous response to the requirements of a multi-sectoral economy that has become vertically interdependent in consequence of division of labor is equally clear in Charles Babbage's book *On the Economy of Machinery and Manufacturing* (1835), which explored the basis for Britain's comparative advantage in the production of machinery and the organizational changes necessary for establishing large manufacturing enterprises will enable English manufacturers to maximize the increasing returns inherent in large-scale production. He provided pioneering insights to both John Stuart Mill and Karl Marx.

While THE conventional wisdom associates the phenomenon of increasing returns to Marshall's external economies, and his conern that decreasing long run costs would likely compromise pure competition, my reading suggests that J. S. Mill had voiced this concern before him. My point in recalling this is that while we credit Mill with introducing the term entrepreneur into the language of English political economy, he did not capture the deepest of the French economists' insights, in particular Turgot's, about the link between the entrepreneur's (i.e., capitalist's) utilization of the economy's surplus to generate increasing returns. He conceived of capital as a stock of producers' goods, which, although they have a monetary equivalent, are not linked to the capitalist's role as an entrepreneur, the source of his funding, or the mechanism by which funding is created.

The counterpart of Mill's change in focus from Smith and Babbage is his seeming acquiescence to the mid-19th century expectation of the inevitability of the stationary state ([1848], 1965, III: 752)[10]. Even more important in the context of the question being explored here, it shifts the focus from the role of the capitalist-entrepreneur from reallocating labor and capital from less productive to more productive sectors of the economy to their reallocation within the individual firm or industry, which became Marshall's view of entrepreneurship as a "coordinating" activity. Marshall's treatment of the firm relates to an "optimizer", not an entrepreneur. The "captains of industry" he envisions do not begin to comprehend Cantillon's coupling of entrepreneurship with uncertainty, innovation, and the quest for increasing returns. Thus it is not difficult to understand why the term *entrepreneur* became substantially obsolete after Alfred Marshall published his *Principles* (1890).

The most forward-looking post-Marshallian interpretation about the relationship between increasing returns and market competition came from Allyn Young's return to Adam Smith's theme of division of labor in his 1928 Presidential address to Section F on the subject of "Increasing Returns and Economic Progress". The essence of Young's argument was, harkening back to Smith, that economic progress is secured principally by division of labor to more fully realize the economies of capitalistic or roundabout methods of production. His was a significant reservation for a scholar coming out of Marshall's tradition. Thus Young understood the economy's potential for realizing increasing returns, and anticipated the endogenous growth theory subsequently developed by his LSE student, Nicholas Kaldor. Kaldor noted that Young's anticipation of an endogenous growth model went substantially unnoticed. As Kaldor put it, *"Economists ceased to take any notice of it" (Young's article) because "it was so many years ahead of its time that the progress of economic thought has passed it by . . . partly because its criticism of general equilibrium theory could not be appreciated at a time when that theory itself was not properly understood"* (1972, p. 1243, italics added). What followed from Kaldor's dissent from mainstream economic theory, was his concern with explaining differences in the growth performances of dynamic capitalist economies. The point of departure of Kaldor’s growth theory is his inference that the industrial sector operates under conditions of increasing returns, while land based activities are subject to diminishing returns. The greater the rate of growth of manufacturing output, the more rapidly labor will be transferred from other sectors that are either characterized by diminishing returns or in which there is apparent or disguised unemployment.

Kaldor’s chief conclusion, based on the empirical study growing out of his theoretical inquiries is that in an open economy economies of scale generate improvements in a country’s competitive position so that the growth of export sales generates (via the foreign trade multiplier) further export growth. Capitalist institutions are a social mechanism for encouraging the entrepreneurial behaviors that generate economic growth. In Kaldor’s words, the institutions of capitalism embody a social mechanism for “giving expression to the individuals’ egos, optimism, and even recklessness. Growth rates are likely to be highest where these characteristics of entrepreneurship are most pronounced. Thus for Kaldor, Schumpeter’s hero has a far greater role than spearheading innovations. In a capitalistic society, i.e., in a society where investment decisions are made by a multitude of entrepreneurs in the light of profit expectations, the entrepreneur is “the purveyor of economic expansion generally, and not just of the new technique of production (1954, p. 71). The process, as the Physiocrats recognized (though without the precise articulation that this reconstruction of classical thinking about growth suggests), reflects the quest by entrepreneurs as a class to generate increasing returns by directing human and physical resources from those that are less productive to those that have a greater capability for producing surplus.