Book Review


This book does not, as one might imagine from the title, attempt to develop a theory of innovation. Rather it traces the emergence and historical development of three theories of innovation, attempts to place them within the context of long waves of economic development, and argues that the three theories are competing for dominance as we move into the 21st century. The analysis is often methodological and epistemological, and while sociology and economics are the principal disciplines, the former heavily predominates.

In essence, Sundbo’s thesis can be reduced to three assertions. First, since the nineteenth century there have been three main theories of innovation: the entrepreneur, the technology-economic, and finally the strategic. Secondly, each of these can be linked to a respective stage in the third, fourth and (current) fifth Kondratiev wave, and paradigm shifts occur at key stages in these waves. Finally, the strategy theory of innovation is now competing with the other two for dominance, and may become the new paradigm of innovation. Innovation is defined relatively conventionally as the first business use of something new which results in commercial gain, and includes product, process and organizational innovation as well as “a new type of marketing or overall behaviour on the market, including a different relationship with the state and other official regulation systems, societal organizations or specific consumers” (p. 21).

The starting point for the book is not, however, innovation itself, but the concept of long waves of economic development, or Kondratiev waves. Sundbo argues that there is now convincing evidence for the existence of such waves, and that innovation is important to these waves because extensive innovation activity occurs in the recovery phase, helping to propel the economy into the period of prosperity. In many ways this is the weakest part of the analysis, and the emphasis on long waves so early in the book rather serves to dilute the message. Kondratiev waves have what can be generously described as a mixed press among economists, and making the thesis of the book dependent on their existence and importance is risky. Sundbo uses this element to sustain the argument that economic activity is linked to paradigm shifts in innovation (i.e., changes in the accepted, shared view of how
innovation occurs). But Kondratiev waves are really only used here as a device on which to hang the notion of paradigm shifts: the analysis could be developed just as effectively in the absence of such waves, without the accompanying loss of credibility.

The first of the key theories is that of the innovative entrepreneur, which Sundbo dates not merely to Joseph Schumpeter but to the earlier work of French sociologist Gabriel Tarde. Here innovation derives from the activity of a single individual rather than a collection of individuals or an organization. But as the fourth Kondratiev wave began (an event which Sundbo dates to the late 1930s) a paradigm shift occurred in economic and sociological writing on innovation which put the emphasis squarely on technology as the driving force behind economic development. This “technology-economics” paradigm, which emphasises technological development as the instigator of growth and largely ignores the role of the market place in innovation, has been dominant ever since. However, Sundbo argues that this paradigm entered a crisis phase in the 1980s as technology-based innovation failed to deliver a “growth wave”: technology is now seen as failing to deliver sustained economic growth, suggesting a change in theoretical emphasis away from technology as the dominant element of innovation. This has been reinforced by the rise of the service sector, which, it is argued, does not depend on technology for its growth and innovative potential. Instead, attention is shifting to “organizational, market-related and strategic innovations” (p. 90), with the potential for the development of a new “strategic” theory of innovation which may in turn become the accepted paradigm for the fifth Kondratiev wave.

The strategic theory of innovation has its roots in the marketing, service management, and (resource-based) strategy literatures. Sundbo puts heavy emphasis on the work of Hamel and Prahalad’s *Competing for the Future* as key element of the new theory. The precise nature of this potential new paradigm is a little vague, but appears to involve the following, *inter alia*: an acceptance that innovations can be of many kinds, not merely product and process; a commitment to understanding the future wishes of consumers and matching this to the internal resources of the company; an understanding that technology and R&D are but two resources among many which may be involved in the innovation process; and finally, a belief that “organizational learning” is important. Sundbo then concludes that the three theories outlined above are competing for paradigmatic dominance, and that it is by no means clear that the strategic theory will prevail.

This book tackles a large subject and is commendably wide-ranging in its review of relevant literatures. But this is also in some ways its failing, because the overall feeling is one of lack of focus and a rather hollow centre. As mentioned earlier, the link between economic long waves and paradigm shifts in innovation theory appears largely as a convenient device, and the link between the two is never convincingly made. There is certainly some merit in the argument that the prevailing view of innovation within economics has tended to put an excessive emphasis on technological elements of the innovation process and correspondingly little em-