Book Review

Andrew Tylecote and Francesca Visintin
Corporate Governance, Finance and the Technological Advantage of Nations

The formation and development of organizational capabilities and the ability of firms to innovate and, hence, encourage economic growth have been the focus of much recent research (Nelson 2005; van Waarden 2001; Whitley 2007). By focusing clearly upon issues of finance and corporate governance, which is broadly defined to encompass, potentially, the ability of employees or their representatives to influence companies’ strategic decisions, Tylecote and Visintin’s book provides a useful complement to other studies of innovation systems that are concerned primarily with either government policies or labour market issues. In addition, by linking micro-level assumptions to macro-level institutional and innovation patterns, their research constitutes a rich resource for scholars in this area.

Their main contention is that groups of countries exhibit different patterns of innovation largely as the result of significant variations in their financial and corporate governance systems. Moreover, within a group of countries that otherwise have similar financial and corporate governance systems, differences between them in, for example, the amount of control that shareholders exercise over companies can account for significant divergence in innovation patterns. They buttress their arguments with data drawn from a variety of sources including the US Patent Office, the UK’s Department of Trade and Industry, and the OECD. Their book, in short, may represent a number of important theoretical and empirical contributions.

The introductory chapter sets out their theoretical framework. Drawing on arguments espoused within the literature on comparative business systems, transaction cost economics, systems of innovation and evolutionary theories of economic change, Tylecote and Visintin begin from the premise that technological regimes – defined as sectoral knowledge and learning environments – have a number of key dimensions. It is along these dimensions that types of innovation are likely to vary. Whilst three of these key dimensions (competence destruction, technological opportunity and stakeholder spill-overs) may be common, in one guise or another, in much of the literature in this area, the fourth – visibility – is one that the authors have introduced.

These dimensions of technological regimes are then related to the characteristics of national financial and corporate governance systems and, in particular, their ability to promote certain skills and organizational resources. For instance, technological regimes that are associated with competence destruction and, hence, the need for firms to reconfigure their structures are likely to be promoted by financial and corporate governance systems that either make expert finance
readily available to new firms or are characterized by pressure from expert owners for the higher levels of value added that are linked to competence destruction. This is because established firms are likely to encounter internal resistance to radical change. Such resistance may be obviated by start-ups or by pressure from well-informed investors for a significant shift in the firm’s focus.

Firms that operate in technological regimes with high levels of technological opportunity – i.e. there is a greater likelihood of innovating in a commercially successful way for a given amount of investment – are likely to require either expert risk capital or relatively high levels of management autonomy from investors. In such circumstances, R&D expenditure is likely to be substantial, and investors must have sufficient knowledge to make assessments about the chances of success. Such investors must accept, however, that their spending is inherently risky: a rival may make the breakthrough first and, hence, capture the majority of the commercial benefits. Alternatively, managers in established firms with sufficient cash flow and autonomy may be able to undertake such investments. Such managers will rely on their own expertise and the firm’s financial resources to make what are likely to be risky investments.

The requirements that arise from those technological regimes that are characterized by stakeholder spill-overs, which are defined as the extent to which other stakeholders benefit from, and contribute to, the firm’s innovation, are more likely to be met by financial and corporate governance systems that facilitate stakeholder inclusion. If stakeholders, including the company’s employees and its suppliers, cannot benefit from an innovation that they helped to accomplish, they are unlikely to make that initial contribution. Similarly, firms may be unwilling to undertake innovation efforts that include a large number of stakeholders, if they fear being ‘held-up’ by one or more of those groups at a key stage in the process.

If the visibility of innovations within the firm’s technological regime is low, this requires either shareholder/financier engagement or management autonomy. In other words, if it is difficult for outsiders to assess developments in, and the likely success of, the innovation process in firms, this will require – if such innovations are to be funded – either greater engagement by shareholders/financiers than might ordinarily be the case or higher levels of managerial freedom that allow them to decide how to allocate the firm’s resources. The inclusion, inter alia, of an innovation’s visibility in their analysis, therefore, enables the authors to consider the influence of management autonomy on the innovation process. Whilst this may seem a relatively minor step, it is not something that is usually considered in analyses of firms’ innovation capabilities.

Moreover, the inclusion of, firstly, a visibility dimension within the technological regime and, secondly, the associated management autonomy aspect of finance and corporate governance systems enables the authors to take a more nuanced approach to national varieties of capitalism that are often considered to be highly similar. For example, Tylecote and Visentin note that, although the financial and corporate governance systems in the US and the UK are, in many respects, alike, they vary to a significant degree in the amount of autonomy that they afford to managers. Thus, they suggest that this – along with variation in industrial expertise, shareholder/financier engagement and the availability of
ventures capital – is likely to have important ramifications for explanations of the
ability of companies in both countries to carry out certain forms of innovation.
In particular, lower levels of management autonomy in the UK compared to the
US stem from corporate governance regulations in the former that make
takeovers easier (and intervention by shareholders in company decisions more
straightforward) there (see also Franks et al. 2005). This, so Tylecote and
Visentin contend, severely hampers the ability of UK managers to invest in inno-
vation projects that have low visibility. This is an important contribution to the
literature.

Before examining empirically the implications of their arguments, the authors
set out, in Chapter 2, the ways in which the requirements that different types of
innovation place on financial and corporate governance systems vary. Drawing
on the OECD’s classification of manufacturing sectors by research and de-
velopment intensity, Tylecote and Visentin focus on ‘high technology’ and ‘medium
high technology’ industries. Lamenting the fact that the data for most service
sectors are ‘simply not good enough’ (p. 33) and, therefore, must be left out, the
authors, nevertheless, include software and IT services in their study. Within the
various sectors in these industries, the dimensions of the technological regimes
are said to differ. For instance, the visibility of (potential) innovations in the
pharmaceutical sector is relatively high, as the innovation process is formalized
and regulated, and knowledge is often codified. In addition, spillovers to other
firms in the same sector are likely to be lower as patents provide a reasonably
robust way of defending, and obtaining the commercial benefits from, innova-
tions. By contrast, the innovation process is not as formalized in other sectors,
and patents may be more easily ‘invented around’ in, for example, the motor
vehicle industry.

The subsequent chapters examine the extent to which the arguments put for-
dward by the authors are borne out by the technological specialization of various
countries, including China, Italy, South Korea, Switzerland, and Taiwan as well
as more frequently studied countries (France, Germany, Japan, Sweden, the UK
and the US). Laudably, the inclusion of the former group of countries in the
analysis marks Tylecote and Visentin’s work out from many others in the field.
In addition, the assessments of the evidence from France and South Korea illus-
trate, as the authors are well aware, the weaknesses – as well as the strengths –
of Tylecote and Visentin’s approach. For instance, whilst their framework can
cogently account for similarities in the performance of both countries in machin-
ery and vehicles, explanations of the divergent outcomes in aerospace and
telecommunications should include references to history and existing industrial
configurations, respectively.

As noted above, Tylecote and Visentin draw on an extensive range of sources
and measures to assess their arguments. Possibly the most important measure for
them is revealed technological advantage based upon data from the US Patent
Office. They also calculate and examine trade balances, product specialization
measures, and research and development intensity using DTI and OECD data.
This is a more extensive array of data than is often adduced. This, arguably, leads
to a highly detailed assessment of the arguments espoused in the book. It also
contributes to making the book a valuable resource for other innovation scholars.
Although the UK and the US have often been studied within related literatures, the evidence presented by Tylecote and Visentin on their divergent innovation performance levels has a highly important implication. As they show, the UK lags the US in many high-technology industries. This poses a problem not only for those who often regard the two countries as highly similar in their institutions and, hence, innovation capabilities, but also for those who call for companies to pursue ‘shareholder value’. In key respects, the UK can be viewed as more ‘shareholder friendly’ than the US; this does not, however, result in a superior innovation record. Their work, therefore, challenges relatively widely held views of best practice in corporate governance. Indeed, some practices that are designed to promote ‘shareholder value’ may, paradoxically, undermine it by hobbling innovation efforts.

As this review has hopefully shown, Tylecote and Visentin’s book has a number of attributes to commend it: its theoretical innovations, the geographical and historical scope and depth of the empirical analysis, and the reflexive and engaging way in which both theory and evidence are discussed. Given this contribution, it seems churlish to ask for more; however, the book, arguably, would have benefited from the inclusion of a greater number of detailed discussions of individual companies. (Rolls Royce and Vodafone are, for instance, covered in the book.) This would have enabled the authors to discuss important theoretical and empirical issues in this area. For instance, by drawing on the concept of ‘institutional entrepreneurship’ (Crouch 2005), the authors may have been able to add to the already impressive dynamism of their diachronic research. In addition, the inclusion of more detailed assessments of individual companies may have enabled important differences between the innovation processes in sub-sectors within the same sector (Casper and Whitley 2004) to have been scrutinized yet further. These are, however, minor misgivings. Overall, Tylecote and Visentin’s book makes a significant contribution to the literature and it should help to stimulate further, highly nuanced accounts of innovation patterns across sectors and countries.

References

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