head on; classifications are introduced or borrowed but not justified. In the early part of the book, the nearest the author gets to an argument is to take issue with the Braverman-inspired work of Philip Kraft although this is weakened by tackling at length only the seriously outdated 1977 book *Programmers and Managers*; later work appears in the references but I could not find this in the text.

The literature review is kept for the penultimate chapter, and whilst offering a tidy summary on the literature on models of the learning process (in particular the work of David Kolb), it makes no connection whatsoever with the evidence presented in the rest of the book. The eleven-page chapter of Conclusions and Recommendations revisits five rather bland questions introduced on page two, and provides a series of vague and inconclusive answers. The last of these concerns the relationship between learning style and workplace design, and the author takes space to point out that 'I did not have sufficient information to answer this question'. The recommendations for both research and practice that follow are all plausible, but, having no force of argument or logical consequence from the data, are little more than folksy platitudes.

Two other limitations weaken this book. Despite its subtitle, the book says nothing of consequence about corporate culture. The vast literature on this is untapped; an opportunity was lost here. Secondly, the book provides little hint as to what might happen as the technological basis of the computer industry develops. The author cannot be blamed for not dealing with today's 'live' issues, such as object-oriented languages, graphical programming and systematic software re-use, but the research gives no clues to the impact new developments may have on the programming function and learning. The weakness of doing such highly 'situated' research is that it can tell us little about what might be important in the future.

However, the book does have its uses. Firstly, it provides a good example of how too superficial a reading of ethnomethodology and 'grounded theory' can lead research down a black hole. Secondly, it reminded me how much I enjoyed Douglas Coupland's *Microserfs,* which is a much better vision of software culture, and is also funny.

Steve New
UMIST.
Manchester, UK

Coordination and Information: Historical Perspectives on the Organization of Enterprise *edited by Naomi R.Lamoreaux and Daniel M.G.Raff* (University of Chicago Press, Chicago, 1995), pp.viii + 337, £stg. 17.95, ISBN: 0-226-46820-8 (cloth), 0-226-46821-6 (pb)

This National Bureau of Economic Research conference report builds on an earlier volume[1] which brought together business historians and economists in order to achieve an exchange of ideas. Economists are moving beyond black-box conceptions of the firm and their elaborate body of theory can, in the editors' judgement, enhance work in business history.

In the earlier volume, authors looked at what actually goes on inside firms: at the ways in which entrepreneurs combine capital, labour and raw materials and how firms handle information. The firm as an institution was presumed, its organizational tasks, boundaries, priorities and menu of control mechanisms taken as given. In this follow-up, all these are explicitly questioned.

Part I focusses on coordination problems within the firm: employment relationships in the early twentieth century automobile industry; the diffusion of new coordination and compensation schemes within the firm; and the ways in which different perspectives within a firm can prevent the managerial hierarchy from functioning smoothly.

Part II turns to definition of the boundaries of firms and so to the location and porosity of those boundaries; the alternatives to the large integrated firm; the coordination of technological change; and the effect of the regulatory environment on the boundaries of the firm and the institutional mechanisms firms choose to coordinate their activities.

Part III turns to problems of coordination in financial markets where imperfect information posed severe problems for attempts to coordinate interregional lending in the mortgage market. It proved necessary for government intervention in order to solve underlying problems of asymmetric information.

Interesting general issues emerge: e.g., asymmetric information; transactions cost; the nature of organizational capital; lock-in. The influence of Alfred Chandler's work is very evident and the approaches adopted can with advantage be carried into the study of contemporary networks, systems, standards and the wide range of associated innovations.

While it is good to see these comprehensive efforts to bring together economics and business history and, even more important, to have clarification of the role of information in coordination processes, there would seem to be plenty of scope for a more focussed attempt to bring together information economics and the study of business organizations. Much has been published in recent years, in, e.g., *Information Economics and Policy*, that suggests new ways of analyzing networks, invisible assets and institutional change. There was a special issue of that journal (December 1994) devoted to "The Economics of Standards".

As always there is a good deal of room for division of labour. This volume and its predecessor can help research in information economics. All too often the work of the economists suffers from the lack of historical perspective.

NOTES AND REFERENCES

1 P.Temin (ed.), *Inside the Business Enterprise: Historical Perspectives On the Use of Information*, University of Chicago Press, Chicago, 1991.

D.McL.Lamberton
Australian National University

Multinationals and governments: Issues and implications for Australia *by Bureau of Industry Economics*, Research Report 49 (Australian Government Publishing Service, Canberra 1993), pp. xv + 197, A$16.95, ISBN not available

Foreign Direct Investment (FDI) is a topic of increasing interest as markets and industries are becoming more and more globalized and internationally oriented. The comparison between inward FDI to the country and outward FDI (conducted by domestic enterprises) is of importance. The net difference between outward and inward FDI is often used as a way of