

Book Review: 'Knowledge, Scale and Transactions in the Theory of the Firm'

by Jackie Krafft¹

Morroni, Mario (2006): *Knowledge, Scale and Transactions in the Theory of the Firm*, Cambridge : Cambridge University Press, 358 pages; Hardback ISBN: 0521862434 £50

The theory of the firm is certainly one of the most prolific fields of research today. Even if the origins of this domain of investigation trace back to the late 30s, and especially to the seminal contribution of Ronald Coase (1937), the past two decades have been marked by an explosion in the number of contributions. As an illustration, the editorial platform JSTOR notifies 4506 articles containing the exact phrase 'theory of the firm' over the period 1986-2006. Though very dynamic, the domain may be considered in the meantime as relatively young, still far from reaching a maturity phase. This is certainly why the debate and potentially the conflicts between alternative theories is so intense, and why even the object of study - the firm - may be captured in so many different ways.

Mario Morroni considers that the fragmented development of the theory of the firm observed so far is not necessarily beneficial. More crucially, he argues that it is now high time to think about an integrated framework for the theory of the firm. The original idea of the author is thus to overcome the usual conflicts between capabilities, transaction costs and scale and scope approaches to the theory of the firm, and explicitly consider the possible complementarities between them. In the same vein, though the literature provides extensive studies on particular kinds of firms, the author argues that it is possible to build a theoretical framework designed to describe and understand the multifarious and changing nature of the firm.

The key question analysed in the book, providing a common ground for the elaboration of an integrated framework, is how (i) basic conditions, (ii) de-

cision making mechanisms, and (iii) organisational coordination influence the performance of the firm. In examining this question, and important related issue raised by the author is that the interplay between capability, transactions and scale/scope aspects in moulding the individual firm's performance and growth occurs whenever learning processes, complementarity and uncertainty matter. The interaction is even more important when technical and transactional knowledge are costly, inputs are indivisible and complementary and, more generally, when knowledge is tacit, non transmittable, and characterized by set up processes and high fixed costs. The structure of the book is very coherent with the problem analysed. The author first clarifies the key question in a simple setting, showing that this question effectively necessitates the combination of different approaches of the firm, and not the exclusion of one by the other. Then in a more complex setting, the author analyses how uncertainty, complementarity and learning processes reinforce the connection between capability, transactions and scale/scope approaches, and what is the impact on the performance and the growth of the firm. The contribution is essentially theoretical, but refers regularly to empirical results obtained in the literature from case studies and historical archives.

In a central introductory chapter, Mario Morroni decomposes the basic elements of his reasoning, and proposes some key definitions that will structure the different chapters. He argues that a causal chain can be elaborated, as a toolbox to characterize the strengths and weaknesses of the firm, and derive some conclusions about how and why strategies and policies can contribute to increase competitiveness. The causal chain relates thus (i) basic conditions, such as the characteristics of information and knowledge, the characteristics of techniques and equipment, the individual motivations and aims, the indi-

¹CNRS-GREDEG, University of Nice Sophia Antipolis, France, e-mail: Jackie.Krafft@gredeg.cnrs.fr.

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vidual abilities, uncertainty, structural change, institutional and market conditions; (ii) decision making, such as property structures, control rights, aims of the firm, incentives and rationality; and (iii) organisational coordination, and essentially capabilities, transaction and scale and scope issues. The interaction between these different conceptual blocks have an impact on the competitiveness of the firm, namely on its efficiency (in terms of input requirements) and efficacy (in terms of matching current and potential market needs), and furthermore on the growth of the firm. The author advocates that with weak uncertainty, costly knowledge and perfectly rational agents, the interaction among competence, transaction and scale considerations may be significant. But, the interaction described from the causal chain is significantly reinforced in the presence of cognitive limitations that prevent individuals from computing all possible pay-offs of their actions, thus obliging them to operate under radical uncertainty. The outcome is that, for the author, as soon as we look for a comprehensive theory, we need to consider both situations of radical uncertainty and farsightedness.

Chapter 1 then characterises the role of the 'basic conditions' that structure the integrated framework proposed by Mario Morroni in the introductory chapter. These basic conditions influence the firm's decision making in two ways. Basic conditions defined as "external" create an objective set of opportunities and constraints for the firm but, in the meantime, decision making mechanisms are shaped according to the subjective "image" of the environmental conditions that entrepreneurs and managers have developed in their mind. Consequently, basic conditions influence decision making, organisational setting and competitiveness, but there are important feedbacks to consider on how basic conditions are themselves affected by changes in the domain of decision, organisation, and performance. Here, the author provides an interesting discussion on how the transfer of information (and potentially the non transferability of tacit knowledge), and the characteristics of production processes shape these influences and feedbacks. He analyses especially how production processes that are characterized by indivisibility, non saturability, and complementary play a role in shaping organisational settings, in 4 different contexts of uncertainty (complete and incomplete forecasting, incomplete theoretical framework and incomplete information-processing abilities).

Chapter 2 clarifies the author's notion of processes of decision making. He defines them as an outcome of a complex combination between property structure, power and control, the aims of the firm and the relationships between shareholder, manager and stakeholder; the incentives and motivations schemes implemented, and the degree of rationality of the different actors involved. Here the author's contribution is to provide an analysis of this

complex combination in a context of perfect rationality, cognitive rationality, and multiple rationalities.

Chapter 3 deals with organisational coordination. Here, the issue is to develop the integrated framework that links directly the three approaches to the firm, i.e. capabilities, transactions and scale/scope. To do so, the author examines different situations: (i) there is no significant weight of these three aspects, namely capabilities, transactions and scale/scope, and therefore no interaction among them, leading to an organisational coordination oriented towards full decentralisation; (ii) there is no interaction among the three aspects because one aspect clearly dominates, here a tendency toward vertical integration or cooperation is likely to appear; (iii) there is a significant weight of all three and interaction among them, involving a tendency towards vertical integration through unified ownership or forms of collaborations within and among firms; (iv) there is significant weight of all three and intense interaction among them, generating a strong tendency towards an expansion of the boundaries of organisational coordination within and among firms.

Chapter 4 goes back again on the central issue of uncertainty, with new results. The author argues that uncertainty may be tempered in different contexts. Within markets, for instance, when autonomous parties are present, there may be some special contracts implying screening, signalling, monitoring, incentives that reduce uncertainty. Within firms, also, one should think about organisational devices that ensure information, enforcement, regulation and dispute resolution activities. Finally between firms, the virtue of hybrids or networks of firms is to decrease uncertainty.

Chapter 5 investigates the last two points. Firms, by keeping reserves and by designing long term relational agreements, may be apt to manage appropriately situations of high uncertainty. In addition, employment relationships, division of labour and learning processes contribute to limit uncertainty.

A conclusive chapter draws some new lines on the growth of the firm as the interplay between the three aspects of organisational coordination. Here the author identifies the potential advantages that are derived from the cross-linked effects between the development of capabilities, arrangement of transactions and design of the operational scale. When capabilities and scale/scope issues are significant, economies of scale imply the development of capabilities necessary to solve problems of scaling up processes. In the meantime, an increase in dimension of scale allows an increase in division of knowledge that, in turn, potentially involves changing individual skills and increasing returns of scale. Finally, in producing specific goods, firms may develop capabilities that turn out to be useful for producing new goods in complementary technology, generating then economies of scope. When capabilities and

transactions are taken into account, then outsourcing and co-specialisation requires the development of internal and external capabilities in order to mitigate transaction costs deriving from costly productive and transactional knowledge. Alternatively, internalising requires the development of the firm's capabilities. Finally, when unified governance favours learning, the firm has a strong incentive to integrate. When transactions and scale/scope issues dominate, then the integration of some intermediate processes could involve economies of scale in other intermediate processes at different operational levels. But there are also counteracting forces to consider, that may limit firm's growth, including market and institutional constraints limited market dimension or downward sloping demand curve, errors of strategy due to cognitive inertia and myopia, and rising organisational costs.

In summary, Mario Morroni develops a convincing argument on the necessity to move towards an

integrated framework on the theory of the firm, including capabilities, transactions and scale and scope issues. The book is thus an interesting read for experts in the theory of the firm who might either be looking for a progressive definition of common assumptions, or at least willing to know more about how such a progressive definition might be generated. One of the key values of the book lies certainly on how the author, first, decomposes the mechanisms that justify the emergence of the firm and its changing boundaries in different frameworks and, second, articulates these distinct mechanisms within an integrated framework. It certainly is also an interesting base for empirical work, as it provides a lot of key assumptions to test, and a lot of significant issues to solve, such as for instance how the growth of the firm may be a reliable indicator of its performance. Finally, the book provides a rich background on the theory of the firm, making it valuable to Master and PhD students as well.

A review of three essays on European integration

by Angelo Reati¹

- * Miroslav N. JOVANOVIĆ (2005) *The Economics of European Integration. Limits and Prospects*, Cheltenham (UK): E. Elgar, 918 pp., Paperback ISBN 1 84376691 4, £35.00.
- ** Marco BUTI and Daniele FRANCO (2005) *Fiscal Policy in Economic and Monetary Union. Theory, Evidence and Institutions*, Cheltenham (UK): E. Elgar, 320 pp., Hardback ISBN 1 84542 017 9, £69.95.
- *** Jörg HUFFSCHMID (Ed.) (2005) *Economic Policy for a Social Europe. A Critique of Neo-Liberalism and Proposals for Alternatives*, London: Palgrave Macmillan, 308 pp., Hardback ISBN 13: 978-1-4039-4354-0, £65.00.

1. These three books form a set of complementary contributions to the study of economic policies of the European Union. The first one - written by a civil servant of the U.N. Economic Commission for Europe - is a textbook that can be used as main reference for a one-year course on the political economy in European integration. The second book is more specialised: it offers a thorough analysis of fiscal policy - the most important and constraining dimension of economic policy of the Union. Its main value

added comes from the combination of a solid theoretical background with the practical experience of policy makers. In fact, M. Buti is a senior official at the Directorate general for Economic Affairs of the European Commission, with direct responsibilities for the macroeconomic policy of the Union, while the second author (D. Franco) - who is currently director at the Research department of the Italian Central Bank - has also had policy responsibilities as advisor in the same Commission's department.

The third volume balances the mainstream approach of the previous books by presenting, first, a penetrating critique of the current neo-liberal drift in European policies and, secondly, by suggesting feasible alternatives for a social-democratic Europe. The book is the outcome of the work of a research network on "Full employment and social cohesion" financed by the European Commission (6th Research Programme) as well as by the activity of the "Euro-memorandum group", a group of economists coordinated by Jörg Huffschnid that, since 1995, produces every year a critical assessment of the European economic policies (the "Memorandum"; see <http://www.memo-europe.uni-bremen.de>).

2. The non-specialist reader will find in Jovanovic's thick volume a good initiation to the com-

¹av. Emile de Beco 55 - 1050 Bruxelles, e-mail: angelo.reati@skynet.be.