Alfred Marshall on big business

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The purpose of this article is to explore Marshall’s perspective on the changes of size and organisation of firms in his time and, more generally, the environment of monopolistic tendencies. It examines the Marshallian evolutionary approach to business organisation as already presented in his Principles of Economics and identifies the quality of this approach as responsible for the keen perceptions made in Industry and Trade, the book in which business organisation and monopolistic tendencies are investigated. The consideration of Industry and Trade includes a comparison that identifies similarities between propositions about big business by Marshall and Alfred Chandler, the author whose work stands as the paradigm for the study of the genesis and development of big business. As an exploration of Industry and Trade, this article contributes to the assessment of a still very little studied book and draws attention to Marshall’s method of combining theory and history.

Key words: Marshall, Joint-stock companies, Big business, Business organisation

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This article is about the way Alfred Marshall, the champion of the family-owned and family-managed firm, approached the phenomenon considered by Alfred Chandler as the emergence of a new kind of capitalism and enterprise, characterised by the presence of corporations (Chandler, 1990, p. 13).

The examination of the theme involves history and theory. Following Marshall’s judgement that history is not a purely inductive practice, nor is theory a purely deductive one, it is an opportunity to reflect on the historical and institutional content of Marshall’s analysis of firms’ nature, size, organisation and coordination. And, as Alfred Chandler’s works still stand as the paradigm for the analysis of the genesis and development of big business,¹ the quality of Marshall’s approach is illuminated by the identification of similarities between the works of the two Alfreds.²

1 The importance of Chandler’s works for business history cannot be minimised. In fact, his works are the most influential in the field. There have been criticisms that point out limitations in Chandler’s approach, such as Lamoreaux et al. (2003), Langlois (2004) and Scranton (2000), but they do not disqualify it, especially for the present purpose.

2 In a private conversation in 2002 with Alfred Chandler in Cambridge, MA, I asked him about similarities I perceived between his and Marshall’s works. I learned that Marshall was not a source for his work. Nevertheless, Chandler acknowledged and explained the similarities by expressing, informally, that ‘Alfred Marshall was an economist who was concerned with the real world’.

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The main objective of this article is to explore the theme of big business in *Industry and Trade* (Marshall, 1919), the book in which Marshall discussed business organisation in depth, exposing the main tendencies he identified, and historically and institutionally analysed. Besides Marshall's exploration of big business, the article develops the ideas that the general framework for understanding business organisation devised in *Principles of Economics* (Marshall, 1961) is the same as that employed in *Industry and Trade*, and that it enables fertile perceptions of the capitalism of big concerns.

*Industry and Trade* is still largely an unexplored book, and it is not merely a historical and descriptive one: ‘The very applied character of the book tends to mask its theoretical approach, which can be discerned only vaguely’ (Whitaker, 2003, p. 154). Maybe the difficulty is aggravated by our modern economics-trained minds, unprepared to perceive the Marshallian method of combining history and theory. In the face of the huge task of mining the veins of *Industry and Trade*, this article pursues one of the ways in which the exploration can be conducted.

The article is organised in two sections. The first is an introduction to Marshall's approach to business organisation, referring to *Principles of Economics* and reflecting its perspective. The starting point is a methodological discussion of the classical issue of the dilemma of increasing returns and competition. Although working out this issue can be considered part of Marshall's approach to business organisation in the *Principles*, the methodological discussion of the dilemma presented here minimises it as a theoretical problem. The methodological standpoint, in turn, clears the way for the exposition of Marshall's evolutionary approach.

The second and main section of the article is focused on *Industry and Trade* and its approach to corporate capitalism. Central issues are selected for examination from the wide scope of the book. For some of these, Marshall's appraisal and Chandler's widely known and accepted perceptions of corporate capitalism are compared. The selection of issues and the comparison are oriented to reveal the fertility of Marshall's evolutionary approach exposed in the first section when applied to the specific context of the great transformations of the moment.

### 1. Marshall's approach to business organisation

The historical economic context of Marshall's writings is the second industrial revolution, which began during the final quarter of the nineteenth century. This revolution consisted of new technologies and economic activities that involved massive scale economies, giving birth to large firms and monopolistic tendencies. The typical English business unit in the nineteenth century and its corresponding business organisation, centred on small industrial firms owned and managed by families and partnerships, was giving way to the capitalism of large German and American corporations, owned by shareholders and professionally managed, which would become the leading agent and characterise a new capitalist production environment.

The transformation in the business environment accentuated a question that had been latent in economic theory at least since Adam Smith: the conciliation of competition and increasing returns (Stigler, 1951). This problem is normally presented as a dilemma, consisting of the need to choose between increasing returns and competition.

#### 1.1 A methodological introduction starting from the dilemma of increasing returns and competition

If increasing returns are statically approached, increasing returns and competition can effectively be the elements of a dilemma. Considering only the forces that are present at
a point in time, and assuming that every firm has the same access to opportunities and capabilities, the first firm to adopt the most economic scale in relation to the size of the market takes the whole of it and becomes a monopolist. To maintain equilibrium analysis of competition, it is theoretically necessary to ban increasing returns.¹

A full-blown static representation of the problem can be found in the following passage from Marshall’s Principles, in which he critically refers to others’ concerns:

Some, among whom Cournot himself is to be counted, have before them what is in effect the supply schedule of an individual firm; representing that an increase in its output gives it command over so great internal economies as much to diminish its expenses of production; and they follow their mathematics boldly, but apparently without noticing that their premises lead inevitably to the conclusion that, whatever firm first gets a good start will obtain a monopoly of the whole business of its trade in its district. While others avoiding this horn of the dilemma, maintain that there is no equilibrium at all for commodities which obey the law of increasing return; and some again have called in question the validity of any supply schedule which represents prices diminishing as the amount produced increases. (Principles, V, XII, 2, fn 1).²

This passage is better understood in view of Marshall’s methodological proposition that ‘The function [. . .] of analysis and deduction in economics is not to forge a few long chains of reasoning, but to forge rightly many short chains and single connecting links’ (Principles, appendix C, 3). The method he advocated was a combination of induction and deduction, so that immediate logical implications would be balanced with experience.³

According to this methodological procedure, Marshall did not push the logical implications of increasing returns and size to their ultimate consequences. This is an explanation for the statement ‘they follow their mathematics boldly’ in the passage above.

The theory that results from the Marshallian method looks very different from what has been the standard in economics since the 1930s. Principles of Economics, considered to be Marshall’s magnum opus, presents much more than the static value theory: the book is filled with rich institutional and sociological material, left aside by the later development by other economists of the study of firms and markets as a partial equilibrium problem.

Compared with the Principles, the content of Industry and Trade is considerably more historical and institutional. However, it can be argued that if there are differences in the mix of induction and deduction, there is no change in methodology, values or vision of capitalism. The general framework for understanding the business organisation devised in his most famous book is in operation in Industry and Trade, as discussed later.

To return to the problem of competition and increasing returns with the above methodological considerations in mind, bigger size does not merely mean a choice of quantities located towards the right portion of the cost curve of an individual firm. In the Marshallian formulation, market shares and capabilities are arduously acquired and accumulated, and growth modifies the firm; size is the outcome of a growth process. It is in this context of growth and transformation that the Marshallian formulation of increasing returns must be understood: ‘Although greater efficiency is a consequence of increased scale, its direct cause is improved organization’ (Loasby, 1990, p. 113). Moreover,

¹ Still, if the premise of same access to opportunities is relaxed by assuming consumer preferences for the products of specific producers, Sraffa’s (1926) solution can follow. However, I do not consider this static solution here because it entails a restricted introduction of marketing issues. I want to emphasise the many-sided nature of entrepreneurship, production and marketing that is part of the issue, as Marshall did.

² Reference to specific parts of Marshall’s books throughout this article will be given in the following manner: work, book, chapter and chapter section.

³ See Coase (1975) for details on Marshall’s method.
improved organisation does not refer to selecting from available techniques of production, but rather to changes in both techniques and factor proportions (Loasby, 1990, p. 113).

Improved organisation and innovation were difficult to incorporate into mechanical depictions of equilibrium, because of ‘irreversibilities associated with time specific economic processes’ (Hart, 1996, p. 296), and this was part of Marshall’s difficulty, known as the conciliation problem between Marshall’s evolutionary book IV and the equilibrium analysis of book V of Principles.¹ This matter, important as it is in itself, will here be left aside: the path of investigation of this conciliation problem, that is, the representative firm, the analytical construction of supply curves and the equilibrium framework, would require specific efforts. These are superfluous in relation to the objective of exploring Industry and Trade, because it does not have the equilibrium framework as the favoured analytical apparatus.²

Besides this, Marshall’s work is better understood if, instead of considering the analytical pieces, which were exclusively selected by the mainstream for posterior development, one reflects on his overall project of building a dynamic approach to the capitalist functioning, in the sense of one that would contribute to the ‘understanding of the process of economic development, a process which was essentially evolutionary in nature’ (Hart, 1996, p. 286). Proceeding this way, I consider his value theory, i.e., the theoretical piece incorporated into the partial equilibrium branch of mainstream economics, in the same way as Marshall himself did—as a static analysis, which is only a first approximation to economic problems (Principles, V, V, 3; V, XII, 3 and V, XIV, 4).

The fact that the second volume of Principles, planned as a significant stage of the project, was never completed may leave the impression that Marshall died without bringing his work to completion. Besides the conciliation problem mentioned above, participation in governmental commissions and public service, illness and deviations such as the study of history are the reasons found in biographic works that hindered Marshall from writing the second volume (Groenewegen, 1995, pp. 428–30; Whitaker, 1990).³ In the last years of his life, he organised the writings accumulated after the publication of Principles in two books, the first of them being Industry and Trade. The dynamic theory of the capitalist system could not be formulated. Industry and Trade, however, besides being a study of business organisation, can be understood as a historical-institutional analysis of capitalism. Moreover, one must consider its still unexplored theoretical potential mentioned before. Nowadays, with new perspectives and important evolutionary, institutional and methodological issues arising, it is worth considering Marshall’s achievements in his analytical treatment of business organisation.

1.2 The approach

In this section I address Marshall’s view of the business environment and of the firm and its nature as the business agent. From the perspective of his lifetime work, the Marshallian firm is not an element of a static world of resource allocation, but rather an element of an evolving business environment.

² I thank an anonymous referee for pointing out the problem of conciliation and also for inspiring the last argument.
³ See also Whitaker (2003) for Marshall’s willingness to deal with the conciliation problem as he became old.
1.2.1. **The evolutionary framework.** A general rule of development of organisms either from the social or the physical world is the point of departure for Marshall’s evolutionary approach: development ‘involves an increasing subdivision of functions between its separate parts on the one hand, and on the other hand a more intimate connection between them’ (*Principles*, IV, VIII, 1, p. 241).

In the social world of industrial organisation, the subdivision of functions manifests itself through division of labour and specialisation of workforce, knowledge and machinery; and integration occurs through means and habits of communication and the development of credit. Institutions take part in the process, with organisation and customs providing patterns for human behaviour and interaction. In the context of the ‘modern organisation of the Western world’, when plasticity and quickness of change replace rigidity and stereotype, progress is accelerated through thought and work and by education (*Principles*, IV, VIII, 3, p. 245): besides custom, human behaviour can also be caused by deliberation, choice and competition. Instead of conflicting, forces of permanence and change such as customs and competition are presented as interacting. Schlicht (2006) proposes that ‘custom and competition can be conveniently phrased in terms of his moving equilibrium method’.

Marshall warns, in many ways, that there is no guarantee of virtuous development, as when he proposes that ‘the fact that a thing is beneficial to its environment will not by itself secure its survival either in the physical or in the moral world’ (*Principles*, IV, VIII, 1, p. 242) and that it is an error to argue that ‘whatever is, is right’ (*Principles*, IV, VIII, 4, p. 246).

As to the parts identified in the economic system and the way they interact, Marshall did not analyse production as a simple combination of capital, labour and natural resources. Firms, markets and economies count on organisation and knowledge in addition to those resources (*Principles*, IV, 1, 1). Knowledge and organisation are privately and publicly developed and held. At private levels, there are the capabilities, experience and solutions internally developed by individual firms; at public levels, there are the secrets of production and trade, practices, relationships, institutions shared inside sectors and specialised industrial districts, and those that result from the interaction between different sectors of economic activity; there is still governmental activity providing a legal framework for the entire economy.

The evolutionary perspective allows for conceiving different paths of development, with increasing returns unfolding through external economies shared among small firms in industrial districts, or through internal economies from which big firms individually benefit.

1.2.2. **‘The nature of the firm’**. In the environment of family firms, the Marshallian examination of the nature of the firm takes the form of the role and capabilities of the ‘business man’. A good point for departure is his assertion that

[... ] in the greater part of the business of the modern world the task of so directing production that a given effort may be most effective in supplying human wants has to be broken up and given into the hands of a specialized body of employers, or to use a more general term, of business men. They “adventure” or “undertake” its risks; they bring together the capital and the labour

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1 For a clarification of the influence of Darwin and Spencer on Marshall’s thought see Tezel (2006).

2 The importance of knowledge and organisation is carefully analysed in Loasby’s work; see, for example, Loasby (1990).
required for the work; they arrange or "engineer" its general plan, and superintend its minor
details. Looking at business men [ . . . ] we may regard them as a highly skilled industrial grade
[ . . . ]. (Principles, IV, XII, 2, p. 293)

This passage proposes that ‘business men’ are endowed with specific abilities that enable
them to bring together capital and labour in the form of carefully planned and supervised
activities; it also stresses the ‘risky’ nature of the enterprise, which will be commented
below, after another citation in which ‘risk’ also appears.

Marshall details businessmen’s capabilities, grouping these under two classes. One of
them is the

[ . . . ] role of employer [in which] he must be a natural leader of men. He must have a power
of first choosing his assistants rightly and then trusting them fully; of interesting them in the
business and of getting them to trust him, so as to bring out whatever enterprise and power of
origination there is in them; while he himself exercises a general control over everything, and
preserves order and unity in the main plan of the business. (Principles, IV, XII, 5, pp. 297–8)

That is, the leader of men function parallels the modern issue of envisaging incentives and
monitoring; though with a more human content because this ability leaves plenty of room
for idiosyncratic character in the Marshallian presentation. It also includes internal
coordination of the business unit, both in terms of planning and execution.

Besides organisation and supervision of the internal activities, the business man must

[ . . . ] have a thorough knowledge of things in his own trade. He must have the power of
forecasting the broad movements of production and consumption, of seeing where there is an
opportunity for supplying a new commodity that will meet a real want or improving the plan of
producing an old commodity. He must be able to judge cautiously and undertake risks boldly;
and he must of course understand the materials and machinery used in his trade. (Principles, IV,
XII, 5, p. 297, italics added)

This passage shows the operation of knowledge, not only related to technical issues, but in
the form of capabilities related to the decision process. This citation is one of many
passages in his works in which decision occurs under uncertainty, because of the need to
deal with the future through conjectures. The matter is not clear cut, because Marshall
does not specify the difference between risk and uncertainty, as Knight and Keynes would
later do. Hence, from the modern point of view, Marshall uses the word risk in a loose
manner. However, the citation connects risk and knowledge, through the act of judgement.
This connection indicates that in Marshall’s use of the term ‘risk’, judgement can be
associated with incomplete information about the future, as would later be the case of
Knight’s use of ‘uncertainty’. To be sure, the qualification ‘thorough’ that precedes
‘knowledge’ can be interpreted as implying carefulness instead of completeness.

The capabilities described are set in motion in Book IV, Chapter XI, §5 and Chapter XII,
§6 of Principles of Economics (Marshall, 1961). A life cycle begins with the ‘energetic
undertaker’ opening his way from the lower ranks of industry, and ends with the loss of
energy due to age and to the fact that his heirs receive an organisation and its solutions, but
do not inherit the qualities (mainly the attitude) that originated them. Decay is not merely
a matter of becoming worse as an entrepreneur; it is also or mainly a matter of inability to
keep pace with new competitors that bring innovations (Pesciarelli, 2006, p. 348).

The Marshallian businessman recalls classical economists’ capital accumulation because
his activity is envisaged through a firm in expansion. Yet, Marshallian growth is not mere
capital accumulation. It is also accumulation of skills and knowledge, development of an
internal organisation (including hierarchy and labour relations), establishment of trade
connections and creation of clientele. This makes Marshall a forerunner of the Penrosian (Penrose, 1959) and the modern organisational capabilities approaches to firms.  

Skills and knowledge are developed in a competitive and innovative environment, so that Marshallian family firms' survival and growth depend on their ability to introduce new solutions for business issues, and on coping with problems brought about by growth. Solutions emerge in many areas of entrepreneurial activity, such as technical capacity, labour organisation, relationships with suppliers and customers and forecasting market trends.

Giving birth to solutions and coping with growth involves a mix of structure and change, of routine and innovation, of custom and flexibility under the Marshallian evolutionary perspective of forces of permanence and change. While the businessman preserves his energy, flexibility and initiative, growth can be the result of refining organisation; passing the undertaking to the next generations implies loss of power, because ‘energy cannot be inherited’ and ‘reliance on [. . . ] beaten tracks’ is now accompanied by ‘incapacity to pursue innovation schemes’ (Pesciarelli, 2006, p. 348):

His sons find a firmly established trade connection, and what is perhaps even more important, a well-chosen staff of subordinates with a generous interest in the business. [. . . ]. But when a full generation has passed, when the old traditions are no longer a safe guide and when the bonds that held together the old staff have been dissolved, then the business almost invariably falls to pieces [. . .]. (Principles, IV, XII, 6, p. 300, italics added)

This corresponds to an implicit assertion that Marshall sees the business environment as heterogeneous and in constant flux. Some firms appear and survive by opening their way with forceful solutions to particular aspects of business, whereas others are growing and coping with the problems of reaping increasing returns and selling increasing quantities and still others are ossified and decaying, using old solutions that once were innovative. As a consequence, in no part of Marshall’s works is it possible to find a belief in knowledge convergence and diffusion in such a way as to render markets as arrays of identical firms.

A comparison of Marshall to Schumpeter shows that both develop perspectives of capitalism in which competition is a dynamic force. But Marshall’s view was conceived from the investigation of how firms are created, decide, evolve, differentiate from each other, compete and cooperate. In this context, innovation is piecemeal and characterises an environment of ‘continuous flow of incremental changes from ordinary enterprising businessmen’ (Loasby, 1990, p. 114), or ‘a subtle and intriguing analysis, where routines and innovations are closely intertwined’ (Pesciarelli, 2006, p. 346). It contrasts with the radical Schumpeterian ‘creative destruction’, brought by a ‘hero entrepreneur’ (Loasby, 1990, p. 114), whose choices ‘depend solely on creativity and innovative attitudes’ (Pesciarelli, 2006, p. 346).

1.2.3. The wider business environment (the industry and beyond). Knowledge and organisation are not only developed inside the firm but also in the outside environment, as already noted. The evolutionary perspective considers institutional diversity, so that business environments may present different types of relationships among firms either from the same or different sectors. For example, market making can be diversely performed. Marshall considers the role of intermediaries, advertising and brands.

1 For a recent appraisal of the organisational capabilities approach (including the possibility of its integration with the neo-institutional), see Langlois and Foss (1999). Chandler (1992) also discussed the theme.
In this way, business environments are not only approached from the standpoint of competition. Cooperation is also considered, because business occurs in a community of interests. So, self-interest and profit do not exclude institutional analysis. This perspective, which would have unfolded in the second volume of the Principles, was of great importance in Industry and Trade (Marshall, 1919).

To conclude this general presentation of Marshall’s business organisation approach, it is clear that competition was not treated by Marshall as a market structure, but instead as an activity, a process with evolutionary dimensions. He offered no set of hypothetical deductive models for market structures; extreme or pure forms of competition did not work as a normative ideal. Besides, competition was not for him the fundamental characteristic of modern industrial life. Instead, he held these to be deliberation, self-reliance and the shaping of individual courses of action with reference to distant aims. If these characteristics bring competition, they can also lead people to cooperation and combination (Principles, I, I, 4, p. 5; Kerstenetzky, 2006).

2. Industry and trade

Industry and Trade (Marshall, 1919) is the work in which Marshall focused his analysis on the business organisation of his time and on its origins. It is the place where big business receives his full attention.

As mentioned earlier, Industry and Trade analyses big business historically and institutionally. The historical origins of what we now call varieties of capitalism are investigated; the nature of business concerns is updated with institutional and historical material, relating to commercialisation, administration, entrepreneurship, ownership and control; monopolist developments are brought to the centre of the discussion as historical tendencies. In this context, welfare is a delicate issue. Marshall reflected on these historical transformations and tendencies as objects for investigation and regulation, instead of contrasting them with a normative ideal as perfect competition.

2.1 National historical cases of development

Industry and Trade begins with a first book on the most relevant cases of national business organisation development at that time: Britain, France, America and Germany are identified by their national style of development. He seeks the roots of each country’s development in history, institutions and geography. The characterisations raised in the first book are used in the two following ones. The next paragraphs present a brief selection of aspects that are not only pointed out as decisive by the author, but are still addressed today.

England’s industrial and business organisation is presented as the first industrial case (Industry and Trade, I, chs III, IV and V), drawing on other countries’ experience and achievements in commerce and finance in the process of building a commercial society. England’s ascent to economic preeminence was achieved through the improvement of internal and international communications and transportation by using mercantilist

On the contrary, the British environment of freedom of enterprise and rapid change at the beginnings of the Industrial Revolution was seen by him as unbridled competition, not ideal for business, nor for welfare, a ‘huge untrained monster’, ‘set loose to run’ with ‘abuse of . . . power’ and ‘evils on every side’ (Principles, I, I, 5, p. 11; Kerstenetzky, 2006).

This includes the reception, as a source of skills, of the Huguenots and other religious groups who fled from religious persecution.
policies externally oriented to enhance national merchants’ power, by benefiting from wars, first as protection from external products and later as a stimulus for military exports. Its development is presented as a virtuous circle, in which one achievement is succeeded by another: in broadening commercial area, increasing the scale of production, enhancing the initiative and adventure spirit and the practice of innovation. England reaped the benefits of pioneering the enlargement of commerce with the use of enhanced forces of nature applied to production and trade, with increasing returns.

Britain’s industrial strength was based on small businesses. The constitution of a capitalist industrial organisation with small businesses as elements was spontaneous (‘almost inevitably grew up’, in Marshall’s words), and was made possible by the slow change of the techniques of production and the character of goods (Industry and Trade, III, XI, 2, p. 581). But the pace of innovation was sufficient to make the son of a wealthy manufacturer find himself ‘undersold by rugged but powerful men’ (Industry and Trade, I, IV, 2, p. 63), giving form to a life cycle of firms working against the monopolisation of markets. The division of labour among small firms was characteristic of England’s industrial districts.

In the last quarter of the nineteenth century, England began to lose ground, not only as other countries caught up, but mainly through the emergence of productive activities in which scientific content was important. In chemicals, electricity, pharmaceuticals and explosives Germany took the lead, because of its educational investments and research activities in universities and great firms. Organisation, discipline and skill applied to industry are the qualities Marshall points out in Germany. These are combined with associative practices traditionally developed since the middle ages, appearing in the form of restrictions on competition of cartels. Lastly, Marshall points out the participation of German banks in the institutional arrangements that enabled the huge investments in research and fixed capital that characterise the second industrial revolution, cross-membership on boards of directors and cartel promotion included. It is noteworthy that Marshall sees the hierarchical character of German society as both strength and limiting factor at the same time. The strength is seen in the systematic and massive investment and effort; the limitation is seen in the lack of flexibility and stimulus for creativity (Industry and Trade, I, VII).

In the case of the USA (Industry and Trade, I, VIII), Marshall points out the size of the country, the homogeneity of lifestyle among a huge population favouring standardisation and scale economies, the supply of immigrant labour, the use of railways to integrate the market and the wealth and variety of natural resources. These conditions enabled development independent of international trade, in contrast to the European experience, and favoured the use of machinery, division of labour and development of the American standardisation of products. In sum, all this brought the mastery of mass production. Other institutional conditions are related to moral aspects brought by the immigrant condition of the builders of the nation, with thrift and toleration towards different values as positive factors. He also notes education suited to business interests.

The above summary of national cases of development is demonstrative of how important history is for the Marshallian vision of capitalism. It makes clear that development is not seen as a mechanical process to be followed by every country, because institutions, geography and culture matter:

Of course, suggestions derived from the experiences of any one country cannot safely be applied to the problems of another, until account has been taken of the degree in which each experience depends on circumstances that are not found in the other. (Industry and Trade, III, XI, 1, p. 579)
Thus, in the last concluding chapters of *Industry and Trade*, when discussing what England should do about its loss of pre-eminence in world business organisation, Marshall does not suggest that it should copy solutions from the experience of the USA and Germany, but instead should look to its own roots. He points out ‘strong individuality [. . .] [as England’s] most important asset’, but in need of being supplemented by readiness to cooperate in ‘tasks that are needed for the proper development of industry but are too large for a single business’ (*Industry and Trade*, III, XI, 2). In four chapters dedicated to the issue, Marshall details, for each sector or instance analysed, the importance of knowledge and organisation at work at the private and public levels.

2.2 Dominant tendencies in business organisation: entrepreneurship, production and commercialisation

At the end of the historical comparative of Book I, the chapter ‘Transition to Present Problems of Industry and Trade’ introduces the central transformations in course in the business organisation of Marshall’s time. These are detailed in the second book, called ‘Dominant Tendencies of Business Organization’. Besides the indication of technical and scale transformations, Marshall pointed out commercial, managerial and financial changes.

An examination of *Industry and Trade* in light of the historical operation of the two sources of increasing returns offered in the *Principles* (internal and external economies) shows that in the first phases of industrialisation the enlargement of the market and the availability of material resources and initiative helped the development of skills and secondary industries, with small-scale businesses having access to external economies regionally sharing them in industrial districts (*Industry and Trade*, I, IX, 2, p. 167, and II, VI, 6, p. 288). This was the predominant situation during the first industrial revolution, led by England. However, Marshall observed that further accumulation of capital and the improvement of communications and transportation amplified the importance of internal economies, at the same time weakening the sources of external economies. The author characterises the conditions that led to the second industrial revolution: Powerful firms were able to begin production by attracting labour from other places and railways, automobiles, telephones and the telegraph made local procurement no longer obligatory. In addition, supplementary services could be internally performed inside great firms, huge industrial capitals began to promote the development of technology, and new products were sold through the marketing activities of industrial firms, blurring the borders of industrial and commercial activities. Lastly, labour was organised by administrative leadership in firms that brought together thousands of employees. In sum, between the two sources of increasing returns, internal economies were the most important force pushing the development of business organisation in the beginning of the twentieth century, in Marshall’s view. But lest small business units not be forgotten, in spite of all that Marshall believed that small firms would always have their role in business organisation; he believed that their space is even recreated by the growth of big units as their suppliers.

The relative importance of technical and commercial transformations as sources of internal economies is an important detail of the operation of increasing returns in the transformations of the second industrial revolution:
Thus, so far as the “productive” side of business is concerned, it may be concluded that—though the volume of output required for maximum efficiency in proportion to capital is increasing in almost every industry—yet, at any given time and, in any given condition of industrial technique, there is likely to be a point, beyond which any further increase in size gives little further increase in economy and efficiency. [. . .]

But this conclusion does not extend to the “marketing” side of business: for we shall find that, on that side, the advantages of large capitals in competition with capitals of smaller size are constantly increasing almost everywhere. (*Industry and Trade*, II, IV, 4, p. 249)

The passage illustrates the importance of Marshall’s perspective of business as a many-sided activity, so that big business can have other determinants besides scale economies in production.

How should Marshall’s perceptions be compared with contemporary interpretations of the transformations involved in the second industrial revolution? He certainly was able to identify the main transformations in the business environment of his time. But other considerations apply here: despite having identified the main changes that characterised what is nowadays called big business, Marshall did not develop the many aspects of the transformation to the point of the integrated, explicit and seminal statement made by Chandler (1977): that big business is a three-pronged investment transformation, each of the three elements requiring and reinforcing the role of the other two, because new commercial and managerial capabilities are important for big and sustained throughput, which, in turn, is mandatory to operate on a large scale with low unit costs. Even so, following Marshall’s perception of business organisation already offered in the *Principles*, the elements of the three sides of the transformation are present, and some important connections are offered. In fact, the three elements of the transformation are the subject of specific chapters on different aspects of the development of business in the second book of *Industry and Trade*. The result is that, even if the theoretical insight of three-pronged transformation is not attained, there are many keen observations and interpretative remarks from Marshall to be highlighted. A demonstration of Marshall’s achievements in perceiving the nature of the transformations in the business organisation can be made by collecting his observations on the capabilities of the entrepreneur/business unit and comparing them with Chandler’s perceptions. This is done below.

Reproducing Marshall’s discussion of the role and capabilities of the entrepreneur already developed in the *Principles* (Marshall, 1961), *Industry and Trade* (Marshall, 1919) brings it up to date, in terms of the context of the new form of capitalism. Marshall perceived that besides the largeness of the ‘modern’ industrial operations, technical factors had become more complex, requiring a new combination of capabilities from entrepreneurs:

The stage has been passed at which a great idea is almost self-sufficing: it has to be elaborated in connection with others already in possession of the same or neighbouring parts of the industrial field; and its application is therefore not an act, but a long process, needing patience and large resources of mind and perhaps of capital. For instance, when a new mechanical idea has been created, its translation into a smoothly-working business machine generally involves a long series of experimental stages [. . .] There is therefore a large class of improvements, [. . .], which are beyond the range of anyone who does not unite the command of a great business concern, with the possession of high faculty for appreciating new inventions, if not for creating them. (*Industry and Trade*, I, IX, 3, pp. 172–3)

1 Chapters III and IV, about technical influences on the size of the business unit; chapters V, VI and VII, about markets and marketing; chapters VIII, X, XI and XII about ownership structure and management; chapter IX about financial issues.
Therefore, the new technologies require vision, time, resources and coordination in order to solve the interdependencies inherent to the development of production capabilities, until the point at which the firm can sell the products. The next citation below is from Chandler (1990), in connection with the aspect of competition between first movers and latecomers:

While the latecomer’s production managers were learning the unique characteristics of what was usually a new or greatly improved technology and while its sale force was being recruited and trained, the first mover’s managers had already worked out the bugs in the production processes. They had already become practiced in assuring prompt delivery. They knew how to meet customer’s special needs and to provide demonstrations, consumer credit, installation, and after-sales repair and maintenance. In brand packaged products, where advertising was an important competitive weapon, the first movers were already investing some of the high profits resulting from low-cost operations in massive advertising campaigns. (Chandler, 1990, p. 34)

Like Marshall’s last citation above, Chandler’s also works with the idea that innovations are worked out after a process, during which the development of capabilities occurs. The new form of business deals with knowledge and mastery of process. The important difference between the two citations is that Chandler’s interdependencies are among the productive and other sides of business, related to the throughput requirement.

But Marshall also observes a change in the capabilities connected with the merchant side of economic activity:

The great business, which is set up far from cognate industries, has to trust very much to its own resources not only on its “productive” side, but also in regard to marketing; that is in regard to buying what it needs and selling what it produces. This points to the facts, [...] , that an increasing part of the activity of a manufacturing firm is now given to marketing [...]. (Industry and Trade, I, IX, 2, p. 170)

[...] a progressive business must sometimes rouse an interest in its improved and new-fashioned products: and if they are very expensive, [...] , the marketing side of the business must be very strong and enterprising and courageous: he who can discharge these functions adequately must include among his qualities and aptitudes those of a great merchant. (Industry and Trade, I, IX, 3, p. 173)

The marketing side of business in these Marshallian citations gave greater depth to the Chandlerian analysis of the integration of intermediaries’ tasks under the new firm that verticalised market operations, one aspect of the three pronged transformation. In fact, Marshall, though still approaching some of the relevant aspects of firms’ marketing activity in the detailed analysis of Industry and Trade’s second book, puts his emphasis in the characterisation of the markets of his time, addressing the issues of speculation, the enlargement of retail trade units and the aspects of brands and advertising in a way that is not equivalent to Chandler’s argument. Still, it does not conflict with it, and we can even find some of its elements, as in the citations above.

The next issue involves managerial capabilities related to the function called, in the Principles, leader of men. Marshall sees it as more complex in a giant organisation, and it is also one of Chandler’s elements of the triple investment:

[...] the administrative head of a giant business must hold together several thousands of employees of various grades in an order which, while harmonious and disciplined, yet elicits their individual and spontaneous enterprise: and for this he must have some of the chief qualities that are required of the commander of an army. He is not a “captain” of industry; he is a “general” in control of several regiments. (Industry and Trade, I, IX, 3, p. 173)
However, in the context of the second industrial revolution, hierarchy is not merely a question of men. In a significant way, Marshall could also identify multi-division organisation and diversification, with operating divisions centrally conducted by a general office on financial issues, and the synergies that result from the new organisation:

Not very long ago a business was almost always concentrated in one place: it might have agencies and branch offices elsewhere; but they were under the control of the central bureau. Now, however, a single company frequently owns several large establishments engaged in the same or allied branches of a great industry; each of them being self-contained as regards plant, material and executive, though all are under the same supreme financial control. So far as technical efficiency is concerned, each of these establishments is a separate business. But the central control can bring the experience of each part to bear in guiding the whole: and can defray the costs of large experiments, the benefit of which will be available to the whole. Again, each may have some advantage in being secure either of a good market for its products, or of a good supply of its own requirements in half-finished products, from some of its sister establishments acting under orders from the directors of the one financial business that includes them all. Further the technique of each establishment may be indirectly strengthened by the opportunity afforded to it of keeping expensive specialized plant in nearly continuous activity on a relatively small range of work; while other parts of orders, coming to the central bureau, are told off to different establishments, which also work intensively within a narrow range. In so far as this can be done the technical efficiency of the business as a whole appears to correspond rather to its aggregate capital than to that which is invested in any one of its establishments. (Industry and Trade, I, IX, 3, pp. 173–4)

The multidivisional firm, identifiable in the citation above, is one of the central characteristics of big business pointed out by Alfred Chandler. The next citation is an illustration:

Thus the institution under consideration, the modern industrial firm, can be defined as a collection of operating units, each with its own specific facilities and personnel, whose combined resources and activities are coordinated, monitored, and allocated by a hierarchy of middle and top managers. It is the existence of this hierarchy that makes the activities and operations of the whole enterprise more than the sum of its operating units. (Chandler, 1990, p. 15)

Both passages refer to the organisational transformation which gives the firm not only functional but also strategic competitiveness. Both stress the fact that the new organisational design is more than the sum of the component parts, and the new role of hierarchy and control.

2.3 Dominant tendencies in business organisation: ownership and control of firms

Marshall observed that large industrial firms were appearing in the form of corporations, that is, stock-owned firms managed by professionals (Industry and Trade, II, VIII). A subject raised by this transformation has been repeatedly discussed through the twentieth century to the contemporary period: the structure of ownership and management of firms or, in more recent terms, corporate governance. His own discussion of the issue emphasises the advantages and disadvantages of joint-stock companies when compared with family firms. The comparison takes into consideration the performance of individual units and of the business environment, pointing out tendencies in terms of composition of the population of firms and dynamics of the system.¹

¹ In this section corporations are large firms and family firms are small ones. Although legal form is obviously not the same thing as size, the previous sections and the historical context justify this simplification. In fact, Chandler's historical analysis of the advent of big business points out the change in legal form as one of the elements of the transformation.
The owner management of a family firm represented to Marshall the ideal form of entrepreneurship, since it combined the attributes of specific knowledge and profit seeking. Individually considered, family firms are limited in their growth by financial, market and managerial resources. Besides, as already mentioned, energy and initiative, characteristic of successful founders, do not remain strong for a sufficient time so that the firm can reap economies of size to the point of becoming a monopolist, nor are they necessarily transmitted to the next generations. However, for the benefit of the economic performance of the overall system, decaying firms end up being replaced by vigorous and innovative new firms.

Joint-stock companies, in turn, have greater capacity to hire professional managers (to pay their high salaries, because the great quantity produced dilutes the burden) and, consequently, to improve the division of labour in management. Companies also have better access to capital markets and new technologies. They can reap economies of size not only in production but also in the commercial field, which, as seen, Marshall believed to be the main locus of internal economies.

The disadvantages of joint-stock companies are related to another aspect of management, connected to the separation of ownership and control. Corporations suffer from *vis inertiae*, with difficulties in mobilising initiative and overcoming immobility, manifested as difficulty in reorganising part of the business or closing an old and obsolete plant. Salaried managers are risk averse, only accepting changes that would be successful for sure. Initiatives involving changes are avoided because they can give the appearance of criticising former administrations. Additionally, with advantages not easily proven, argumentation among scattered owners makes changes difficult.

On balance, corporations would still be more competitive than family firms, with consequences not so good for the performance of the system: not subject to the life cycle of firms, corporations would be able to behave with reduced administrative vigour without closing their doors, and routine and slack would be predominant in the business environment.

The predominance of corporations, their routine and slack and their internal economies do not necessarily imply the end of the system's creativity and of small firms. If standardised products with already improved methods are unequivocally the territory of large corporations—their businesses dispense with ‘high faculties of initiative [. . . ], overshadowed by more commonplace faculties of orderly administration and commercial skill, combined with large resources held perhaps in joint-stock ownership’ (*Industry and Trade*, II, IV, 3, p. 243)—new industries and ‘specialties’ give value to initiative, versatility and care for details, in which smaller producers excel. The space of small firms can be destroyed in one place and recreated in another (*Industry and Trade*, II, IV, 4, p. 248).

Marshall’s remarks on the performance of non-owner managers are in line with the contemporary paradigms of principal-agent relations and governance of firms. Nevertheless, the evolutionary character of his approach makes him go beyond logical consideration and resort to historical and institutional elaboration. The chapter on joint-stock companies

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1 This point can be further explored with the help of economic historians. Payne (1990) observes that English industrial family firms did not have the managerial resources to increase their sales, and were dependent on commercial intermediaries for the marketing of their goods.

2 Routine and slack are stressed in a comparison between the bureaucracy of a big firm and that of the government, in the sense that neither are the ideal environments to breed new ideas and creative experiments, according to Marshall.

3 Berle and Means (1932) is considered the work that introduced the theme of separation of ownership and control; Marris (1963) took slack in management into consideration in his appraisal of managerial capitalism; a classic reference for the agent-principal perspective is Jensen and Meckling (1976).
of Industry and Trade (Industry and Trade, Book II, VIII) introduces such a perspective in that joint-stock ownership is not presented as a logical and unchangeable model. In that chapter, as well as in chapter IX of book one, we see that Marshall would not disagree with the assertion that the joint-stock arrangement was part of the capitalist system’s solution for dealing with the size requirements of technology, mass production and marketing from the second industrial revolution on. But he certainly does not treat changes and tendencies as inevitable and desirable (Industry and Trade, I, IX, 4, pp. 174–5). In support of Marshall’s approach, the history of corporations testifies to the complexity of the issue of their governance: it reveals the changing nature of business units, and alternation between periods of good performance of the business system and others with plenty of problems associated with speculation and information asymmetries between stockholders and managers.

2.4 Monopolistic tendencies

Marshall also observed that the growth of firms and industry was assuming the institutional form of combinations, as in the case of the American trusts and German cartels, which he analysed in the third and last part of the book. As already noted, as an analyst of business organisation, Marshall saw these tendencies as historical and tried to understand the conditions that would bring a healthy economic environment, even with combinations, growth in size and growth in market power. In this respect, Marshall was an admirer of the American experience. He noted that in the USA, court judgments of antitrust cases were combined with special agencies constituted to study, propose principles and bring suit against firms that menaced welfare with their economic power (Industry and Trade, III, VII, 3 and 4). In this way, he expressed in the beginning of the twentieth century the opinion that society must deal with monopolies through institutions, that is, competition must be regulated with a well-informed choice of principles and instruments for control.

In judging what would be fair competition on the historical stage in which innovation and large scale were the rule, Marshall does not regret the lost nineteenth century ideal world of small firms, bounded in their capacity to raise prices. Marshall observed that even monopolists face pricing limits from competition (no contradiction here), because they must care for the potential competitors that would show up if prices were too high. In this way, there would be limits to high prices: factors later called barriers to entry make prices above costs possible, though within the limits of not attracting newcomers to the market. Besides, Marshall argues that trusts’ objectives are long run, and extraordinarily high prices can only be temporary (Industry and Trade, III, VII, 5).

Yet in the Principles, it was not clear at all for Marshall that environments characterised by monopolistic tendencies and increasing returns would harm the public interest in terms of prices and quantities:

[... ] where it can be made [to assume the single firm to be managed with ability and enterprise, and to have an unlimited command of capital], we may generally conclude that the supply schedule for the commodity, if not monopolized, would show higher supply prices than those of our monopoly supply schedule; and therefore the equilibrium amount of the commodity produced under free competition would be less than that for which the demand price is equal to the monopoly supply price. (Principles, V, XIV, 5, pp. 484–5)

1 Monopoly, monopolistic tendencies and market power in Marshall are examined in Kerstenetzky (2006).
Yet another limit to monopolisation is envisaged by Marshall through the notion of a competitive world in the dynamic sense. Firms that rest on their achievements, profiting from their eventual monopoly and ceasing to innovate would end by losing their market, whatever their market power may once have been.

Lastly, Marshall professed approval of some normative criteria observed in the American way of dealing with monopolistic tendencies in his time, in which courts, commissions and bureaus developed standards from their experience of judgement of fair and unfair competition. *Industry and Trade* describes this experience, indicating that an adequate institutional and legal structure can promote fair competition, making use of answers for the (implicit) questions: How should the limits to be imposed on strategic moves by agents be conceived? When should strategic moves of firms be considered as harming the wellbeing of society? The Marshallian answer, drawn from the American experience, would be that, in a world in which innovation and increasing returns favour size and market power, firms that do not cope with the pace of progress can be left to fall behind on the basis of market forces (*Industry and Trade*, III, VII, 4, p. 521); on the other hand, practices that are purposefully aimed at impeding a competitor’s performance instead of improving the actor’s should be judged unfair (*Industry and Trade*, III, VII, 3).

3. Conclusion

Since the beginning of the twentieth century, mainstream economists have, for the most part, thought of market functioning through the lens of perfect competition. In this framework, increasing returns is an aspect of economic life and a category of economic theory that causes an uneasy condition for economics, because of its irreconcilability with perfect competition.

This article made the point that Marshall had a different view about this dilemma. It was not a dilemma for him because of his specific concept of competition and his original analysis of firms. Actually, in an environment in constant change, which is a good representation of the capitalist economy, increasing returns are part of competition and are neither accessible to all firms nor instantaneously accessible to any firm. Additionally, seeing monopolist tendencies and the associated increasing returns as part of the twentieth century world, Marshall turned his focus to analysing those tendencies and thinking about their regulation instead of holding up an ideal world as an impossible guide. In his theoretical analysis and in his way of thinking, there can still be competition even with monopolist tendencies.

A methodological remark also applies. I cannot refrain from observing that the perceptions selected here were possible to Marshall because, not having in mind a highly abstract and theoretical world (such as perfect competition), he was always building bridges between theory and his observations. And so, by understanding the theoretical importance of commercial issues—making markets, the role of intermediaries, firms’ selling efforts—and most of all, the importance of knowledge and organisation, he could observe and state the differences between the English capitalism of the nineteenth century and the ‘new form of capitalism’ he was facing, if one accepts Chandler’s stress on this quality of the big business environment (Chandler, 1990, p. 13). And this can be associated

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1 This statement is more defensible and less candid than would appear at first sight. Coase (1972 [1988, p. 67]) points out that economists look for monopoly explanations when they find business practices they do not understand; in the same way theoretical propositions that depart from perfection may still have perfection as the underlying ideal.
with Marshall’s methodological procedures, of combining observation and history with theory, observation being loaded with theory and theory not developed as a long deductive chain. The Marshallian method described here stands as a historical-institutional approach to economic problems, with knowledge and organisation as the main categories of the approach.

The article also pointed out Marshall’s work as a precursor of modern approaches and modern themes. While he was the champion of the family-owned and family-managed firm (indeed, he favoured the industrial district, with its small family firms, as an environment for social and economic development), he was also able to grasp, at the very moment of incipient changes, the organisational elements of development, the problems of governance of firms and their monopolistic tendencies. He was also able to identify some general principles on the adequate way to deal with them that still have resonance today.

Bibliography


Discussing how Marshall combines this preference with his evolutionary and historical perspective goes beyond the limits of this article. In fact, this is an important and interesting issue, raised by an anonymous referee. Raffaelli (2003) is a clarifying reference for this issue.
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