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## DEBATES

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### *Chandlerism, the New Orthodoxy of US and European Corporate Development?*

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Chandler's work on the development of the modern business corporation is widely admired, and the recent publication of his *Scale and Scope* (1990)<sup>1</sup> is the crowning achievement of a research programme which stretches back to the 1950s. He has added enormously to the detailed record of business history whilst providing novel and important insights into the process of modern corporate development. Yet some of the major claims made by Chandler in his recent work and, more especially, by his most ardent admirers, are much stronger than his analysis can support. There are signs, moreover, that Chandlerian concepts are becoming part of a new orthodoxy on the development and functioning of modern capitalism.<sup>2</sup> It is in this context that the following critique should be placed.

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The framework of analysis developed by Chandler is clear and well-known. The first constructs he formulated were those of strategy and structure and they form the central theme of his book by the same name published in 1962.<sup>3</sup> He traced the evolution of certain large firms in major manufacturing industries and

<sup>1</sup> Alfred D. Chandler Jr., *Scale and Scope. The Dynamics of Industrial Capitalism* (London, 1990).

<sup>2</sup> See T.K. McCraw (ed.), *The Essential Alfred Chandler: Essays Toward a Historical Theory of Big Business* (Boston, Ma., 1990); William Lazonick, *Business Organisation and the Myth of the Market Economy* (Cambridge, 1992)

<sup>3</sup> Alfred D. Chandler Jr., *Strategy and Structure: Chapters in the History of American Industrial Enterprise* (Cambridge, Ma., 1962)

railroads in the USA during the late nineteenth and early twentieth centuries. From this evidence he concluded that business strategy (decided by boards of executives) in response to market and technological opportunities, determined the structure of business organisations. Structure thus followed strategy and both were integral to what was seen as the evolving form of US business enterprise; an evolution which followed a path from personal enterprise through the centralised functionally departmentalised company to the modern multidivisional corporation. The operation of the business structure was elaborated in *The Visible Hand* (1977)<sup>4</sup> in terms of managerial hierarchies and the internalisation of markets within the corporate organisation. This process was the mainspring of growing industrial concentration and monopolistic markets.

Most recently this elaborate edifice has been capped in grand fashion with the over-arching concepts of scale and scope. Thus in Chandler's words: 'Economies of scale may be defined initially as those that result when the increased size of a single operating unit producing or distributing a single product reduces the unit cost of production or distribution. Economies of joint production or distribution are those resulting from the use of processes within a single operating unit to produce or distribute more than one product. (I use the increasingly popular term "economies of scope" to refer to these economies of joint production or distribution).'<sup>5</sup> In this way Chandler aims to consolidate his earlier concepts and extend his analysis in two main ways. First, a procedure for measuring corporate performance is devised and, secondly, performance is evaluated within an internationally competitive framework made up of the USA, Britain and Germany.

The next step is the selection of evidence. This is based on the assertion that the dynamic of modern capitalism was dependent on a core of firms in manufacturing industry, the 200 largest in each country to be precise. The period covered is nominally from the late 1880s to 1948/1953. Detailed information on these firms is drawn very largely from secondary sources, and it is worth noting that variations in the quality of these sources are apparently not of significance, because what is derived from them is largely descriptive accounts of the growth of firms and developments in their organisation. The specific test of successful performance is whether a company achieved what is called three-pronged investment in production, marketing and managerial practices. When all this is brought together at the economy-wide level, three distinct forms of capitalist development are identified: competitive managerial capitalism, personal capitalism and cooperative managerial capitalism. In turn, these three forms are held to characterise the USA, Britain and Germany, effectively for the period under review.

<sup>4</sup> *Idem.*, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, Ma., 1977).

<sup>5</sup> Chandler, *Scale and Scope*, p. 13.

In this generalised form, the analysis is thus extended to provide an explanation of comparative international economic performance. As one commentator has pointed out, the Chandlerian model is neither deterministic nor endogenous in the sense that mistakes may be made and opportunities missed.<sup>6</sup> But the implication is clear. The ideal form is US style competitive managerial capitalism and the degree to which this has been matched has determined the economic fate of nations. On this criterion, Britain has not performed well, whereas, Germany comes somewhere in between but nearer the US than to Britain. As Supple has pointed out, however, for Chandler these dynamic relationships are asserted rather than seen as requiring theoretical support<sup>7</sup>. Yet it is by no means self-evident that a minor fraction of the economy activated and propelled the remainder. Such an assertion echoes the now much discredited cry: 'Too Few Producers'. Similarly Hannah has drawn attention to the biased nature of the 200 firms sampled.<sup>8</sup> It includes major variations in firm size between the countries being compared and, furthermore, it implies the reliability of the survivor technique as a measure of the competitive efficiency of large firms, in circumstances in which market and institutional conditions varied considerably, as will be considered below.

It is not just the method of sampling, however, which gives rise for concern over the nature of the statistical data contained in *Scale and Scope*. The bulk of it consists of descriptive lists of the 200 largest firms at different dates in the three countries under examination. In terms of analytical statistics there is an unacceptable paucity of data in relation to the central claims being made. A few tables are provided which focus on changes in sectoral shares in the economy in terms of output and employment during the period. According to Chandler, these measures demonstrate the leading importance of industry and the manufacturing sector within it because their shares grew by more than those of services and agriculture (the last, of course, actually declined). Such changes are important but so are the absolute sizes of sectors, since highly dynamic changes in organisation can occur within the elements which make up a sector without any change, or even with a fall, in its overall size. On these terms services was at least as important as industry and it was much larger than manufacturing. Moreover, the bench-mark years chosen by Chandler are somewhat misrepresentative, and for the later period tend to overstate the importance of manufacturing.<sup>9</sup> And the failure to draw a clear distinction between industry

<sup>6</sup> Barry Supple, 'Scale and Scope: Alfred Chandler and the Dynamics of Industrial Capitalism', *Econ. Hist. Rev.* XLIV, 3, 1991, p. 501.

<sup>7</sup> *Ibid.*, pp. 510-11.

<sup>8</sup> Leslie Hannah, 'Scale and Scope: Towards a European Visible Hand?', *Business History*, 33, 2, 1991, pp. 298-9.

<sup>9</sup> Chandler, *Scale and Scope*, pp. 3-5. The point being that no allowance is made for the distortions of the second world war and the immediate post-war period. Table 3 is particularly difficult to interpret in this context because of the variety of base years used.

and manufacturing, on the grounds that a number of the enterprises examined entered into a range of activities in the industrial sector, has the effect of significantly overemphasising the representativeness of the sample of firms in terms of the economy as a whole.

Furthermore, Chandler defines growth in terms of the increase in percentage points in a given sectoral share. But if the concern is with the dynamics of capitalism then surely attention needs to be given to rates of growth. On this basis the picture looks very different from that sketched by Chandler. For example, the increase in the size of manufacturing in the USA between 1889/99 and 1953 is given as 8.5 per cent as compared with 5.3 per cent for utilities and transport. But as a percentage of the base-year shares the comparative increases are 40 per cent and 65 per cent.<sup>10</sup> And Chandler does not attempt to calculate the share of his 200 manufacturing firms in total output. In short, this analysis of aggregate data does not support the claim: 'Just as the industrial sector led the way in economic growth, so industrial growth was concentrated in the manufacturing sub-division'.<sup>11</sup>

Despite such severe limitations it might still be claimed that Chandler's analysis provides clear demonstration of the failure of neo-classical economic analysis to explain economic development over real time in the real world. Monopolistic competition is a fact of life and whilst, by the very nature of the term neoclassical economists recognise this form of market power, they see it as a form of market failure to be rationalised in terms of the mis-allocation of resources. What Chandler shows, as much by implication as explicitly, is that such control is a necessary condition of successful economic development. In this respect he is building on the approach developed somewhat earlier by Galbraith.<sup>12</sup> Thus, it is only through large corporations that high fixed costs of development can be transformed into low unit costs of output, by complex means of managerial structure and labour recruitment. To this extent, markets are the outcome and not the determinant of economic development. In this analysis it is, moreover, the focus on the creation of resources over real time which contrasts so sharply with neo-classical theory that takes resources as given and which operates in an abstract world of comparative statics.

Such a claim has much force but, equally, it carries with it the acute danger of replacing one set of simplicities with another. That this is a significant problem with Chandler's analysis can be exemplified by focusing on three crucial issues. These are timescale, corporate performance and external conditions.

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To begin with timescale, it is important to recognise that the great weight of

<sup>10</sup> *Ibid.*, p. 6.

<sup>11</sup> *Ibid.*, pp. 3-4. This kind of statement adds to the confusion between manufacturing and industry.

<sup>12</sup> J.K. Galbraith, *The New Industrial State* (1967).

Chandler's evidence is drawn from the period between 1890 and the early 1930s, a span of fifty years at most. It would, of course, be foolish not to recognise that this was a crucial period in the process of modern industrialisation. But when the emphasis of analysis is so much on providing an explanation of the dynamics of industrial capitalism, it is seriously mistaken to isolate this phase from the longer-term record of industrial and more general economic development. If the period of reference is extended to the end of the twentieth century, questions about the comparative international economic performance of the USA must surely arise? Between 1956 and 1973, for example, GDP per person employed in the USA grew on average by 1.9 per cent per annum as compared with 3.5 per cent for the OECD countries, and the corresponding figures for 1973-90 are 0.6 per cent and 1.5 per cent.<sup>13</sup> Perhaps the competitive managerial capitalism of the USA is not ideal after all.

Chandler anticipates this issue in broad terms in the latter stages of his discussion of scale and scope and he attempts to meet it on two levels. First, he suggests that from the 1940s onwards British, and to a lesser extent German, companies had steadily adopted US business practices, not least as a consequence of transatlantic investment, the growth of US multinationals and the activities of US management consultants hired by European firms.<sup>14</sup> In effect, he suggests an explanation in line with the broader catch-up and convergence theory of comparative international growth pioneered by Abramovitz.<sup>15</sup> According to this view, since 1945 Western European economies and Japan have steadily caught up on US levels of economic performance as a consequence of a challenge and response mechanism, in which technological change and the impact of the second world war are the major dynamic elements. But in so far as corporate development bears on general economic performance, Chandler's explanation appears simplistic when seen against the plain fact that major differences have persisted between US companies and their European (and Japanese) counterparts. The direct and indirect role of governments in business performance in these countries in the long boom of the post 1950 period, in contrast to the USA, was of major importance. Other reasons for these differences are considered a little later.

Secondly, Chandler is well aware of big changes which have occurred in

<sup>13</sup> O.E.C.D., *Economic Outlook, Historical London, 1967 Statistics* (Paris, various dates).

<sup>14</sup> Chandler, *Scale and Scope*, pp. 618-19.

<sup>15</sup> M. Abramovitz, 'Rapid Growth Potential and its Realisation: the experience of capitalist economies in the postwar period', in E. Malinvaud (ed.), *Economic Growth and Resources*, Proceedings of the Fifth World Congress of the International Economic Association, Vol. I (London, 1979), pp. 1-51. *Idem*, 'Catching Up, Forging Ahead and Falling Behind', *Journal of Economic History*, 46, 1986, pp. 385-406. B.W.E. Alford, 'British Economic Performance in the European Perspective — A Case of Catch-Up and Convergence?' in Clemens A. Wurm (ed.), *Wege nach Europa. Wirtschaft und Aussenpolitik Grossbritanniens in 20. Jahrhundert* (Bochum, 1992).

corporate development in the past decade, or so. He lists six new developments of importance: the movement of companies into markets where their organisational capabilities do not give them competitive advantages, the separation of top management in the corporate office from middle management in operating divisions; the divestiture of operating units; the buying and selling of corporations; the role of portfolio managers and investment markets; 'the evolution of capital markets to facilitate the coming of what has been termed a market for corporate control'.<sup>16</sup> Hannah has described much of this more graphically as 'a wave of demerger, divestment, buy-ins, buy-outs, privatisation, and de-regulation'.<sup>17</sup> But what it all amounts to is a description of the real world of business change and development in which the analysis of scale and scope appears as less an explanation of the dynamics of modern capitalist development and more as a description of leading US manufacturing firms during a specific period.

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Corporate performance, albeit of 200 manufacturing companies, is at the heart of Chandler's analysis; it is identified as the generating core of modern capitalist economies. The problem, however, is that Chandler's test of performance is highly generalised and, more seriously, has a strong flavour of *post hoc ergo propter hoc*. Thus successful companies were those which made the three-pronged investment in production, distribution and management. This involved the application of advanced techniques of throughput and marketing, and the development of professional managerial hierarchies. By definition, those companies which failed to do one or more of these things could not succeed. But it must be asked: precisely how are they to be identified? In one sense the answer appears to be that they were those companies which failed to achieve at or near best practice in terms of US corporate organisation. On this measure UK firms are generally judged not to have made the grade. Yet what of those firms which consciously made the effort to achieve the three-pronged investment? Would they succeed automatically, by definition as it were? If not, then how, precisely, is the degree and quality of their performance to be measured? Profitability is clearly not the answer since Chandler pays only scant attention to this factor. If it is market power, then this raises quite separate issues as to whether it represents efficiency, which we shall return to below.

Clearly, timing is important for Chandler, which is why he introduces the concept of 'first movers' — which is another way of saying that once a large company or small number of large companies become established, markets become non-contestable. Hence his implicit assumption of the validity of the

<sup>16</sup> Chandler, *Scale and Scope*, p. 621.

<sup>17</sup> Hannah, *Scale and Scope*, p. 299.

survivor technique, which justifies the sample of the 200 firms as representative not just of manufacturing but of the economy as a whole. External factors, however much they changed, are largely taken as given, almost to the point of being irrelevant. Corporate success is then explained by describing what successful companies did and, in particular, how they organised themselves.

This concentration on the internal development of firms is at best a form of *post hoc* description, at worst it comes dangerously near to tautology. One of the more obvious points is that at least some of those companies which achieved dominant market positions were able to do so because, for various reasons, the industries in which they operated were susceptible to monopolistic control, and the organisation and management structures which emerged were a consequence of those conditions and not a necessary feature of superior efficiency. Chandler provides no independent means for testing these outcomes.

Even on its own terms of concentrating on what is defined as the *internal* history of firms, *Scale and Scope* is manifestly biased in describing corporate organisation and control in detail, whilst paying hardly any attention to costs of production and distribution and pricing policies. And for a study concerned with the dynamics of capitalism there is a staggering absence of analysis of rates of return on capital.

There is, too, no clear distinction made between ownership and control on the one hand and the unit of production on the other. The result is an unsatisfactory discussion of economies of scale which are so central to the thesis in terms of the costs of throughput. Where is the statistical evidence? Certainly there are various references to plant size, and in some cases technical evidence is provided in support of a claim that a particularly large plant size was necessary for maximum efficiency. Nevertheless, in reviewing *The Visible Hand*, substantial doubts were raised by Du Boff and Herman (1980) as to the validity of such evidence as applied to a number of leading US companies.<sup>18</sup> But these strictures appear to have had little or no influence on Chandler's subsequent work. Quite independently, modern research indicates that economies of scale in production are achieved at low levels of output in relation to total output for an industry.<sup>19</sup> Consequently, very large scale organisation has to be explained in other terms, and these might encompass such things as marketing and financial economies. Whatever the case, detailed examination of costs, profits and return on capital is necessary. Alternatively, high business concentration may simply result mainly from conditions external to the firm.

The tobacco industry, which is one of Chandler's main examples, is a case in point. By the early twentieth century Imperial Tobacco accounted for 70 per

<sup>18</sup> R.B. Du Boff and E.S. Herman, 'Alfred Chandler's New Business History: A Review' *Politics and Society*, 10, 1980, pp. 87-110, reprinted in B.E. Supple (ed.), *The Rise of Big Business* (London, 1992), pp. 300-23.

<sup>19</sup> C.E. Pratten, *Economies of Scale in Manufacturing Industry* (Cambridge, 1971)

cent of UK production. The two most important conditions which sustained this dominance were patent law which protected crucial methods of manufacture (though this was rapidly weakening) and, even more important, the high excise duty which imposed large capital requirements on tobacco firms. At a certain level of output the latter created threshold problems that acted as an effective barrier to entry.<sup>20</sup> Other excised commodities (which figure quite prominently among Chandler's examples) may well have presented similar conditions.

Chandler's admiration for the big company and the charismatic entrepreneur is evident, allied to which it seems to be a case of what is judged good for America is good for the capitalist world at large. But the assumption that it is valid to base judgments on the performance of an economy as a whole on an analysis (however detailed) of the internal history of 200 companies is the most serious weakness of the whole exercise. Thus the issue of external conditions is the third which must now be examined.

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Chandler's history of American business, as has been pointed out, covers a relatively short period within the development of industrial capitalism. The period does include, however, the biggest crisis in American capitalism, namely, the Great Crash and its aftermath. The abysmal performance of the US economy in the 1930s is well recorded. So, what of the relationship between the depression and US corporate structure? There is a large literature on this subject which cannot be considered here. Nevertheless, there is, for example, a widely held view that an important cause of the collapse was that capital had been gaining too much from the prosperity of the 1920s and labour too little.<sup>21</sup> Excessive profits led to an inadequate level of effective demand to support the full employment of highly productive resources. But were not excessive profits the consequence of monopolistic forces and an institutional system which allowed them to operate largely unimpeded? Or does Chandler have an alternative explanation of this long depression in which his 200 firms suffer as the victims of the malign manipulation of economic forces, maybe by greedy bankers and corrupt speculators?

Whatever the explanation of the American depression, it is hard not to accept that an important part of it turns on the inter-relationship between big business and other elements in the economy. On Chandler's own terms, the top 200 firms in manufacturing were the core of the American economic dynamo — so what went wrong in the 1930s? Chandler's handling of these events is surprising:

<sup>20</sup> B.W.E. Alford, 'The Chandler Thesis — Some General Observations', in Leslie Hannah (ed.), *Management Strategy and Business Development* (London, 1976), p. 63.

<sup>21</sup> J. Potter, *The American Economy Between the Wars* (New York, 1974).

'Until the Great Depression sharply reduced demand and so created a vast amount of over-capacity, the output and productivity per worker in many of the capital-intensive industries appears to have been greater in the United States than was the case in the same industries in other nations.'<sup>22</sup>

In this and the other 40 references to the Great Depression in *Scale and Scope* there is no hint of any causal relationship flowing from big business to economic crisis.

In an earlier paper (1976) I drew attention to a number of factors, external to but interacting with firms, which determine business organisation and performance.<sup>23</sup> Moreover, it was illustrated that conditions varied between countries in ways which helped to explain different forms of organisation. Among other things discussed were demographic change, patent law, taxation regimes, the impact of war, government interference and production/supply possibilities. And to add to this list, very recently Hannah and Supple have emphasised the narrow and single-minded nature of Chandler's approach, most sharply revealed in his comparative analysis.<sup>24</sup> Here his method is to compare British and German company organisation with that of the USA as the ideal type. The work of Gershenkron and others, who have argued that there were alternative paths to successful capitalism depending on timing and national characteristics, is totally ignored, if not dismissed.<sup>25</sup>

A recent study has shown in some detail in respect of the USA and Great Britain how legislation and legal interpretation had a major influence on corporate structure.<sup>26</sup> In the USA company law and its implementation was greatly influenced by so-called republican values, which placed emphasis on the rights of the individual and thus resulted in an anti-trust (though not anti-monopoly) stance on the part of government and the law, especially at the federal level. By contrast, it is claimed, *laissez faire* ideology in Britain created an atmosphere in which companies were allowed to regulate themselves, such that holding companies and combinations became a pronounced feature of big business. And it is not difficult to imagine how this kind of investigation could be extended to reveal further variations in respect of other major economies. However, whilst Chandler recognises the importance of the legal framework for corporate development, he does not sufficiently allow for the obvious way in which this might determine the possibilities of three-pronged investment. Even more interesting are the links between the opportunities within the law and the

<sup>22</sup> Chandler, *Scale and Scope*, p. 232.

<sup>23</sup> Alford, 'The Chandler Thesis', pp. 52-84.

<sup>24</sup> Hannah, 'Scale and Scope'; Supple, 'Scale and Scope'.

<sup>25</sup> Most obviously in Alexander Gershenkron, *Economic Backwardness in Historical Perspective* (New York, 1962).

<sup>26</sup> Tony Freyer, *Regulating Big Business. Anti-Trust in Great Britain and America. 1880-1990* (Cambridge), 1992.

desire for market power among businessmen, for its own sake and/or for the rich tribute it can bring.

The entrepreneur's desire for power and the possible negative welfare consequences of big business were the subject of an exchange between Chandler and the American sociologist, Charles Perrow.<sup>27</sup> Chandler's response in terms of his concern with outcomes rather than with motives is unsatisfactory, since in the absence of more stringent and independent measures of business performance it cannot be assumed that the one is thus distinct from the other. Moreover, the apparent separation of ownership from control, on which he places considerable stress, does not meet the case. For much of the period, family interests remained a powerful element in US companies and top executives shared directly and indirectly in the profitability which was achieved. And with the subsequent demise of family control, top executives have shown ample skills in stock manipulation and corporate control. It is not necessary to subscribe to a robber baron view of the world in order to have major doubts concerning the allocative efficiency of and the development need for monopolistic organisation on the scale achieved in some sections of US manufacturing industry.

Chandler places company executives and managers at the centre of his analysis and, for example, he stresses their role in relation to the labour force: '... the recruitment, training, and capabilities of the workforce and the evolving relationships between managers and workers in both production and distribution are, indeed, central to the history of the industrial enterprise'.<sup>28</sup> Yet the 'labour story' is omitted on the grounds that it would have required a second volume. At all events this must be counted an important omission which might have been avoided at an acceptable cost of less detail on individual company histories. More serious is the implication that the 'labour story' is wholly part of the internal history of firms. Within an international comparative framework it should be glaringly obvious that this was not the case. Differences in educational systems, cultural values and labour organisations account for major differences in labour recruitment, training and capabilities between firms in Britain, Germany and the USA.<sup>29</sup> Indeed, this external factor is held by some to be a major reason for Britain's lack of corporate efficiency over a very long period.

The importance of Chandler's work is the emphasis it places on the institutional nature of business, but the focus is severely narrowed by its concentration on the 'internal history of the central institution in managerial

<sup>27</sup> Charles Perrow, 'Markets, Hierarchies and Hegemony', in Andrew Van der Ven and William F. Joyce (eds.), *Perspectives in Organisation in Design and Behaviour*, reprinted in T.K. McCraw, *The Essential Alfred Chandler*, pp. 432-64.

<sup>28</sup> Chandler, *Scale and Scope*, p. 13.

<sup>29</sup> See for example R.C. Locke, *The End of Practical Man. Higher Education in Germany, France and Great Britain, 1880-1940* (Greenwich, Connecticut, 1984).

capitalism, rather than analysis of the broader impact of that institution on the polity or society in which it appeared'.<sup>30</sup> How can such an approach hope to explain similarities and differences between countries? Equally serious is the implied assertion that the relationship between business and the polity is one way. Chandler goes further:

'Patents, advertising and inter-firm agreements often reinforced first-mover advantages. By themselves they almost never accounted for the rise of dominant firms in modern oligopolistic industries ... The dynamics for the continuing long-term growth of the modern enterprise or of the industries and economies in which they operated ... came from the organisational capabilities developed after the three-pronged investment and enhanced by the continuing functional and strategic competition with other first movers and with challengers who made comparable investments'.<sup>31</sup>

And 'changes in the broader economy' are defined as those 'indicated by economic statistics'.<sup>32</sup>

It is, moreover, hard to see how this position can be squared with Chandler's explanation of why concentration (or clusters as he terms it) was greater in some sectors than in others. Thus we are instructed:

'... technological and market changes explain why the institution appeared and continued to cluster in certain industries and not in others, why it came into being by integrating units of volume production with those of volume distribution, and finally, why this multi-functional enterprise continued to grow (though not in all cases) by becoming multi-national and multi-product'.<sup>33</sup>

Or again:

'Thus the revolution in transportation and communication created opportunities that led to a revolution in both production and distribution'.<sup>34</sup>

And,

'Although the barriers to entry into an industry that were raised by a first-mover's investment were intimidating, challengers did appear. They came most often when rapid demographic changes had altered existing markets and when technological change had created new markets and diminished old ones'.<sup>35</sup>

<sup>30</sup> Chandler, *Scale and Scope*, p. 13.

<sup>31</sup> *Ibid.*, p. 227.

<sup>32</sup> *Ibid.*, p. 9.

<sup>33</sup> *Ibid.*, p. 18.

<sup>34</sup> *Ibid.*, p. 26.

<sup>35</sup> *Ibid.*, p. 35.

So much for an exclusively internal history of corporate development. What is surely the case is that corporate structure was at least as much a response to the opportunities for profit maximising as it was part of the driving force of modern capitalism. Its formal operations were by no means as free of the sins of capitalism as Chandler implies. Or to put it in technical jargon: private and social rates of return frequently diverged. Clearly Chandler does not espouse any kind of Marxist explanation of the dynamics of industrial capitalism, and thus his failure to address the political economy of the process is a striking case of absence of the Prince.

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The claims which Chandler makes are bold and comprehensive. He presents '... concepts and generalisations ... to develop an *explanatory theory* [my italics] concerning the beginnings and continuing evolution of the modern industrial enterprise ... [and to] draw together ... underlying themes — particularly those which explain the dynamics of industrial capitalism ...'.<sup>36</sup> For each of the countries examined the 'historical environment' is outlined and 'each nation's financial, educational and legal systems' are reviewed, 'in so far as they impinge directly on the institution under study'.<sup>37</sup> But these are no more than faint genuflections to a half recognised but fundamental analytical problem. And no such inhibition troubles Chandler in the body of his study in which the corporation in the form of US competitive managerial capitalism is portrayed as the fundamental driving force of economic success.

All this is to claim far too much. What Chandler effectively offers is not a theory, in terms of scientific logic, but a typology. More accurately, three typologies, one for each of the United States, Great Britain and Germany. They describe changes in business organisation in the top 200 manufacturing companies in each country over a limited period in a highly specific manner. Similarities and differences are recorded in rich detail and some of the reasons for them are adduced. But these typologies remain separate and limited in what they can tell us about business development more broadly and economic performance in general. They offer a starting point for comparative analysis but little by way of explanation of different patterns of development and levels of economic performance, particularly in the light of evidence for the second half of the twentieth century. If Chandler offers us a theory of capitalist development what, for example, is the prescription for curing Britain's corporate ills? Is the remedy that of corporate reorganisation along US lines? If so, how is it to be achieved within an already highly concentrated industrial structure? And if

<sup>36</sup> *Ibid.*, p. 11.

<sup>37</sup> *Ibid.*

some external agency such as the government is necessary, where does that leave the internal diagnosis?

The concepts of 'strategy and structure' and 'scale and scope' have a seductive appeal which should be guarded against lest they should lead us into a world as unreal as that of neo-classical economics, which Chandler and those who subscribe to his orthodoxy, are so quick to warn against.

