



EDITED BY

DAVID O.
FAULKNER

ANDREW
CAMPBELL



The Oxford Handbook *of*
STRATEGY

THE OXFORD HANDBOOK OF

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A STRATEGY OVERVIEW
AND COMPETITIVE STRATEGY

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ABBREVIATIONS

BATNA	best alternative to a negotiated agreement
BCG	Boston Consulting Group
CSA	country-specific advantage
DCF	discounted cash flow
EFAR	extended field anomaly relaxation
ERP	enterprise resource planning
EVA	economic value added
FAR	field anomaly relaxation
FDI	foreign direct investment
FFA	field force analysis
FSA	firm-specific advantage
IJV	international joint venture
IO	industrial organization
IP	intellectual property
IRR	internal rate of return
LB	location bound
LSA	location-specific advantages
MNC	multinational corporation
MNE	multinational enterprise
MVA	market value added
NBS	national business system
NI	New Institutionalists
NIE	New Institutional Economics
NIS	national innovation systems
NLB	non-location bound
NPV	net present value
OB	operating patterns, beliefs, and rules
OLI	ownership, location, internalization
PCM	price cost margin
P/E	price/earnings
PEST	political, economic, social, and technological
PIMS	profit impact of market strategy
PRP	performance-related pay

PUV	perceived use value
RBT	resource-based theory
RMA	resource margin accounting
RDP	resource dependency perspective
ROCE	return on capital employed
ROE	return on equity
ROI	return on investment
SBU	strategic business unit
SCP	structure, conduct, performance
SDR	strategy decay rate
SWOT	strengths, weaknesses, opportunities, and threats
TCA	transaction cost analysis
TCE	transaction cost economics
TNC	transnational corporation
TOWS	threats, opportunities, weaknesses, strengths
TSR	total shareholder returns
TQM	total quality management
VFM	viable firm matrix
VRIN	valuable, rare, inimitable, non-substitutable

CHAPTER 1

INTRODUCTION

DAVID FAULKNER AND
ANDREW CAMPBELL

INTRODUCTION

THE Oxford Handbook of Strategy is a compendium of chapters by prominent academics addressing some of the most important issues in the field of strategic management at the beginning of the twenty-first century. It is produced in six parts. All the contributors are practising academics, mostly currently researching in the area in which they have written their chapters for the Handbook. The book is part of an important new series of Handbooks that Oxford University Press is developing across the social sciences and humanities, including several in business and management. The first of these is *The Oxford Handbook of International Business* edited by Professor Alan Rugman and Professor Thomas Brewer. These Handbooks aim to address key topics in their field and to identify the evolution of debates and research on these topics.

The Oxford Handbook of Strategy is targeted at an advanced group of academics, researchers, and graduate students for whom it aims to be a useful resource, sitting between the specialist journal article or monograph and the extensive range of established textbooks in the field. It is intended to provide the graduate student, researcher, or strategy lecturer with a well-informed and authoritative guide to the subject and to the current debates taking place in the field of strategy. It aims to be a blend of mature thinking and cutting-edge speculation. For example, it revisits the

traditional issue of the boundaries of the firm in the light of the New Economy, focuses on dynamic capabilities and organizational learning as issues vital to the maintenance of competitive advantage, and considers the impact on the mainly static tools of strategic analysis of the turbulent economic conditions inherent in the globalized world of today. In addition to these 'state of the art' issues, the Handbook also deals with the more traditional subjects of competitive analysis, the role of the corporate centre, and international strategy amongst others. Teachers of strategy will find both much of the traditional material for their presentations contained in the Handbook, as well as illustrations of how to introduce the newer issues of debate into their teaching.

WHAT IS STRATEGIC MANAGEMENT?

Strategy or strategic management applied to business problems evolved from a number of sources, including those of the taught case study and the discipline of economic theory. In the view of some writers (e.g. Kay 1993), it evolved as a theoretical discipline in response to the frustrations of managers at the limited help the study of economics was able to give them in running their businesses. Economics, even the industrial organization field, still operates on a very restricted set of assumptions, many of which are somewhat unrealistic in many areas of actual business life. Examples of these assumptions are that markets tend inexorably to move towards equilibrium; that decision-takers are always rational and try to profit-maximize all the time, and that decision-making is always based on all available information and is necessarily rational. Economics, especially in its neo-classical form, also holds that in the long run supernormal profits are not sustainable, except where there are unscalable barriers to entry, and that the differences between products in a given market, and between companies, tend to become minimal over time. Finally, and this is perhaps the key factor, economic decisions are taken deterministically in response to economic forces, and not as a result of discretionary management judgement. One unit of management becomes therefore much like another, and the concepts of entrepreneurship or even idiosyncratic management style do not sit easily even in modern economic theory.

Clearly, operating under such a set of assumptions, economists were of limited help in assisting managers in building profitable companies. However, the need was clearly there to help the entrepreneur tackle the complexity of the present, and the uncertainty of the future, by providing theories against which they could measure their decisions, when tackling strategic problems concerning the survival and

prosperity of the firm. This is where the discipline of strategic management found its *raison d'être*.

However, despite the emergence of strategic management as a subject in its own right, and the self-imposed limitations of traditional economics, the academic discipline of economics in the sense of the study of the allocation of scarce resources and the analysis of supply and demand still underlies many of the frameworks that strategic thinkers have developed. Their aims are different, of course, in that economists are ideologically inclined towards the admiration of perfect markets, whereas strategists actively seek market imperfections to help them in their unending search for the perfect product that no competitor can touch. Yet the economic underpinnings of much strategic thinking are clearly visible in many of the contributions to this Handbook.

However, the degree to which economics should be regarded as the one fundamental intellectual discipline informing the study of strategic management is still a key issue engendering heated discussion amongst theorists from varied background disciplines. Much of the thinking behind the papers in Part I of this volume reflect the unwillingness of psychologists, technologists, sociologists, and demographers to concede too much intellectual hegemony to the economists. For example, the current most popular approach to achieving strategic change tends to focus more on cognitive and psychological barriers to change than on the structural or organizational difficulties of implementing plans for change. Similarly the thinking of evolutionary biology and Darwinist survival theory is increasingly becoming influential in the determination of views of the future of particular industries.

Strategic management is about charting how to achieve a company's objectives, and adjusting the direction and methods to take advantage of changing circumstances. It was taught in the 1950s and 1960s under the title of Business Policy. This often involved ex-senior executives teaching case studies with which they were familiar and attempting to draw out lessons with more than idiosyncratic relevance. Out of this developed the Long-Range Planning movement of the 1970s, which became a fashionable process, but often involved little more than the extrapolation of recent trends, or in negative situations the development of the optimistic 'hockey stick' approach to future performance. Not surprisingly, most long-range plans either gathered dust on shelves or merely failed to meet their declared targets.

The focus then switched to the portfolio matrix as a corporate tool to evaluate the health of the corporate portfolio of Business Units. The Boston Consulting Group, McKinsey & Co. and Arthur D. Little were the consulting companies in the vanguard of developing the most popular of these tools in the 1970s. However, it soon became apparent that the use of such tools was very mechanistic and a somewhat unsubtle approach to attempting to develop a corporation, and the stage was set for academic contributions to strategy development to be provided in the form of intellectual frameworks, and not merely in the form of case study

anecdotes. Michael Porter (1979) soon arrived on the scene thereafter, and began turning what had by now come to be renamed Strategic Management into a subject with some claims to being an academic discipline with a degree of the required academic rigour. It soon became an established part of the Business School MBA curriculum replacing Business Policy courses, and came to be seen by many as the central core from which all other subjects fanned out. Thus, a generic strategy was chosen, e.g. focused differentiation, which, in order to achieve the detail necessary for implementation, then needed to be developed into a financial strategy, a marketing strategy, an operations strategy, an R&D strategy, and so forth.

Porter's background was in industrial organization economics and his most famous framework, the five forces competitive intensity of industry tool (1980) has considerable affinities with that discipline, as a means of assessing the importance of key factors in the industry environment as determinants of the potential profitability of that industry. He followed his industry analysis book *Competitive Strategy* (1980) with a subsequent one focusing on company analysis, *Competitive Advantage* (1985), which introduced the value chain as a key tool for the internal analysis of a company. Although the subsequently named 'Resource-based Approach' is more commonly traced back to Penrose (1959) or Selznick (1957) rather than to Porter, it is interesting to note that in his 1985 book on competitive advantage Porter does move away from the traditional economists' emphasis on the dominance of markets, and focuses on the actual make-up and activities of the firm seeking such advantage. This internal analysis side of strategic management was to come increasingly to the fore in the 1990s as the limitations of the market positioning approach for achieving differentiation and hence advantage became apparent, and the work of Prahalad and Hamel (1990) and of Teece, Pisano, and Shuen (1997) became particularly salient in taking the thinking beyond simple value chain analysis, and focusing on what the firm could do better than others and which was difficult to imitate.

Setting the strategic direction for a business is the most complex task facing any top management team. The complexity arises for a variety of reasons that are peculiar to strategy-making. Strategy is about the future, which is unknown and unknowable; there are many paths that a firm could follow, and firms operate in dynamic competitive environments. But because strategy-making involves people, complexity is compounded, since each executive involved has his/her own views and motives, which may or may not be explicit, and in deciding upon a particular strategy, individuals are constrained by their past experiences, taken-for-granted assumptions, biases, and prejudices (Bailey and Johnson 1992).

There are, of course, ways of dealing with these layers of complexity. One is to avoid the problem of strategy altogether by running the business on an ad hoc, day-to-day basis. This can work as long as the things the firm is doing continue to be relevant to the markets it operates in. Another might be to engage in some form of

long-term planning, extrapolating known trends and discovering their numerical resource and profit implications. This can be a more or less elaborate process: at the simpler end of the spectrum, planning can be merely a form of extended budgeting. More elaborate planning systems would involve scenario building; extensive market, competitor, and company analysis; generation of options; evaluation and selection from a range of possible strategies; and detailed action plans, budgets, and control systems. Planning processes do not eliminate complexity, but they can provide a structured way of coping with an uncertain future.

Complexity can be dealt with by taking a broad view of what the organization should look like some time in the future. This can be captured in a mission and/or vision statement of intent, and allowing people to evolve strategies within these broad guidelines. This approach might be favoured in organizations facing more turbulent environments in order to provide at least some benchmarks for judgement. The development of broad-based organizational learning capabilities aims to deal with this issue to some extent as John Child emphasizes in Chapter 15.

Knowing that the company has a strategy is important for employees to feel that at least up to a point they know where they are going, and how they are trying to get there. In this sense, it is essential to the management of successful businesses. A shared understanding of where the firm is trying to go can be liberating and empowering. Some view of where and how the firm is trying to compete gives confidence to managers from the top downwards. It assists managers in making resourcing decisions, and it can instil a sense of purpose. Because the future is uncertain, it is impossible to analyse the firm's situation completely rationally, in a way which produces a single 'correct' strategy for the business. However, faced with uncertainty and complexity, some sense of direction is better than no sense of direction. A well thought through and well argued strategy will not necessarily be the optimal strategy for the business, and there may be several viable alternatives, each with their advantages and disadvantages as a real options approach (cf. Kogut and Kulatilaka in Chapter 30) is set up to acknowledge. The future may indeed be different from that envisaged at the outset, nevertheless a shared and agreed view of where the management is trying to take the firm is an essential ingredient for the successful management of today's activities.

Strategy-making can be approached from a descriptive and a theoretical perspective. In the last two decades a number of excellent academic books have ably set out the major issues involved, and have comprehensively reflected the ever-widening range of theoretical perspectives that have been brought to bear on strategic management (cf. Johnson and Scholes 1989; Grant 1991; de Wit and Meyer 1994; Kay 1993; Quinn, Mintzberg, and James 1988). Insights from economics have now been augmented (and sometimes contradicted) by contributions from cognitive psychology, social anthropology, organization sociology, and political theory. The problems of 'rational planning' are by now all too evident, and why it often does not lead to successful change.

However, senior managers do have to make strategic decisions. They are not in the comfortable position of an academic observer, who whilst being able to point out how complex everything is, can always walk away from the problem. The essence of senior management work is to wrestle with the problems of strategy. The concepts, models, and techniques presented by the chapter authors in this book should be regarded as tools for thought, and aids to decision-making. None of them gives the certain right answer to the strategy problem. They are designed to help executives to structure a strategy debate; they do not take the place of the debate.

The tools and techniques have evolved over the last two decades. Some are slight adaptations of existing methods. Others have been newly created to address a particular problem encountered in facilitating strategy debates with top teams. Benefits are derived from the thinking and discussion involved in applying the tools, as well as from the insights generated through the analysis. None of the techniques is a substitute for the exercise of judgement. The techniques covered force important questions to be asked which are not routinely discussed. This prompts a search for better information (e.g. on customers' real needs), and it usually provokes a more critical evaluation of the firm's situation.

VARYING APPROACHES TO STRATEGY

During the early crystallization of the strategic management field of study, the only approach to the creation of strategy was the rational approach. This was generally embodied in a sequential process of strategy formulation which involved setting objectives, analysing the external environment, identifying the company's strengths and weaknesses and those of its competitors, generating a number of possible strategies, selecting the best one, and proceeding to implement it. This process was associated in the early days of Strategic Management with the names of Learned, Christensen, Andrews, and Guth (1965), and with Ansoff (1965), all significant figures in the US business school world dating back to the 1960s and 1970s. Along a different track but equally important to the history of strategy was the work of Chandler (1962), who linked together the selection of a strategy with the subsequent organization of the company to implement it.

However, two problems developed with this somewhat determinist and very rational approach to the development of strategy and organization. First, it was observed that companies rarely implemented strategies formed in this way. Secondly, many companies did not form their strategies in this way anyway. It was

much more common for strategies to emerge through a fine-tuning process of trial and error with subsequent adjustments to meet the needs of changing circumstances. The name of Henry Mintzberg (1973; Mintzberg and Waters 1985) became closely associated from the 1970s and onward with the movement to question the idea and practice of rational strategic planning and indeed what a manager actually did in his job, as opposed to what the traditional writers on organizations claimed that he did. Mintzberg proposed the replacement of the rational well thought out approach to strategy formulation with the more pragmatic, trial and error process of emergent strategy, and so stimulated writers to focus on the actual strategic process rather than merely the content of strategy, assuming a rational process as was the traditional case.

Since then a number of authors have published 'definitive' taxonomies of planning schools including: Bailey and Johnson's (1992) rational, political, visionary, ecological, interpretive, and logical incremental approaches with as many hybrids as companies employing them; Whittington's (1993) classical, processual, evolutionary, and systemic styles; Chaffee's (1985) linear, adaptive, and interpretive schools; and ultimately the tenfold strategy schools taxonomy of Mintzberg, Ahlstrand, and Lampel (1998), namely the design school, the planning school, the positioning school, the entrepreneurial school, the cognitive school, the learning school, the power school, the cultural school, the environmental school, and finally the configuration school. Clearly many of these supposed schools overlap in concept. We would defy anyone, for example, to distinguish between Bailey and Johnson's rational, Whittington's classical, Chaffee's linear, and Mintzberg's design schools. Similarly, it is commonsense that a strategy put together in a linear, rational, classical way will then be adapted and emerge as something at least slightly different over time.

Without wishing to add to the confusion over strategic planning schools, we would opt for a broadly conceived taxonomy of four strategic methods which can be used by a company without risk of self-contradiction when it is developing its strategy: the rational planning process, the logical incremental process, the evolutionary imperative, and the cultural constraint.

The Rational Planning Process

Many companies, especially the larger ones, do indeed have strategic planning departments and processes during which they review past plans and develop new ones on a rational analytic basis. The planning cycle is normally carried out on a regular basis during the year, and both line managers and planning staff spend considerable time in market analysis, and in formulating appropriate strategies for the future. They identify planning gaps between the firm's numerical objectives and

the results believed likely to emerge if present strategies are continued with. They then devise new strategies to fill the supposed planning gap, and develop action plans with timetables and responsibilities to make sure the plan is carried out correctly and on time.

The Logical Incremental Process

Due to such thinking as real options theory (Dixit and Pindyck 1994), companies often do not take actions on plan implementation until they absolutely need to, thus keeping their options open until the last minute, and taking decisions based on the latest available information. This enables the implementation of plans to be adaptive, and to emerge to meet an existing situation, rather than one forecast earlier, and no doubt different in actuality from what was expected when the original plan was developed. The logical incremental approach also leads to a more flexible mindset than might be the case with a strict classical planning process. However, a key issue in the use of this approach is the degree to which major schemes involving complex and high fixed cost planning can be embarked upon by means of it. If everyone were logical and incremental, would the major periodic ‘punctuating of the equilibrium’ (cf. Tushman and Anderson 1986) ever take place; would competence destroying changes ever happen or would all progress be based eternally on minor competence-enhancing efficiency improvements?

The Evolutionary Imperative

Whatever is planned, only what works will succeed, so a natural selection element enters into the interaction between all planning and subsequent decision-making. Thus, although a company may plan to achieve certain targets, this may be beyond its abilities, and if it is sensitive to what happens to it as it pursues its business, it will soon adjust its strategic behaviour to enable it to achieve results that are within its compass. This requires its strategic management approach to include some elements of evolutionary adjustment behaviour in the interests of survival. Evolutionists, however, frequently raise the issue of whether major changes in companies in response to evolving forces are really possible (Hannan and Freeman 1989), or whether path dependency is dominant in constraining the actions companies can and will take (Ghemawat 1991), thus inhibiting firms from achieving major strategic change. There is certainly ample evidence to suggest that the market leader with an existing technology rarely finds it possible to make the necessary adjustments and remain market leader when a new technology takes over (cf. the history of IBM and of Microsoft for interesting case studies on this subject).

The Cultural Constraint

Whatever the company's espoused planning system, it will inevitably include cultural constraints in its thought processes and strategic behaviour. Executives in Shell behave differently from those in say the old-style Hanson and have different value systems at work; a Japanese company typically behaves differently from an American or a British one. The reasons for this are to be found in the corporate and national cultures of the companies, and these are reflected in their strategic management systems whether or not the decision-makers are aware of the fact. So the cultural element enters into strategic management in providing a set of implicit, and often only subliminally perceived constraints to a firm's strategic management. A key issue in the field is therefore the issue of *convergence*. To what extent is there a best practice worldwide for the performance of particular activities, and to what extent are companies constrained by their national origins and their administrative heritage (Bartlett and Ghoshal 1989), and therefore doomed to exhibit only such limited strategic behaviour as those constraints allow?

Thus, strategic management in the modern age can be characterized as frequently having a strong rational aspect to it, at least at the planning stage, and then, due to the increasing turbulence of many markets, to be likely to take on aspects of the logical incremental philosophy to avoid errors due to the unpredictability of the movements of market. Evolutionary forces will inevitably operate on it, exhibit aspects of natural selection, and constrain the range of possible decisions made, and company and national culture will exercise different but probably equally powerful constraints.

More recently we face the problem of the growing turbulence in world markets as globalization, or at least regionalization makes a small percentage change in demand or supply lead to strongly fluctuating national fortunes. In such circumstances the strategies appropriate to stable conditions, and even the methods of strategy formulation become questionable in turbulent ones, and the need for a dynamic approach and for robust strategic flexibility become necessary for survival, rather than a narrowly defined focused strategy. The issue of what the boundary of the firm should be in such circumstances is a key one. To what extent does it make sense to regard the integrated legal entity as the firm, or is the enterprise in business reality from many viewpoints that composed of the core firm, its strategic allies, and its subcontracting suppliers?

Part I: Approaches to Strategy

The Handbook opens with a chapter by John Kay, Peter McKiernan, and David Faulkner on the history of strategy in which they concentrate on the last thirty years in which strategy has been a distinct subject of theoretical and empirical study. They

deal with the 1960s growth of corporate planning through the 1970s with its emphasis on diversification by means of portfolio planning to the late 1980s when the concept of the core business began to become predominant. Finally they come up to date with the consideration of the application of chaos and complexity theory to strategic issues and the problems for strategy of facing an increasingly turbulent business environment. The authors emphasize the need, if the study of strategy is to be effective in outcome, to develop a fruitful blending of deductive logic, game theory, and empirical observation.

In Chapter 3 Martin Slater goes to the core of the difference between the study of economics and strategy in identifying the firm and its logical boundaries as critical to the work of the strategist. In so doing he unearths the economic roots of this investigation in the early work of Coase (1937) and the continuing line of enquiry in the work of the transaction cost economists, notably Oliver Williamson (1975, 1985). In all this, it becomes very apparent that it is the firm, its boundaries and its essential nature, differentiated from one firm to another, that is the true study of strategic management.

Chapter 4, contributed by David Barron, illustrates the importance of evolutionary forces in the development of firms in markets. He emphasizes the important work of Hannan and Freeman (1989) in this regard and of Nelson and Winter (1982) in demonstrating how Darwinian, and indeed Lamarckian, theories of evolutionary development, through fit and adaptation, provide a strong force in determining the way in which markets and firms develop irrespective of the more newsworthy role of great industrial leaders.

Not only is the development of strategy constrained by evolutionary forces, but also by the forces of institutionalism, as Ray Loveridge points out in Chapter 5. Regulative, normative, and cognitive pillars of social order exist in society in the form of organizational rules that we accept in a utilitarian way; principles that we feel we ought to be committed to, and cognitive values that become part of our 'taken for granted' views of the world. These factors limit the degree to which we have effective free choice in our selection of strategies.

In Chapter 6 David Teece tackles the increasingly important area of technology strategy and the question of how to profit from innovation. He stresses the three prime requirements, if one is to make profits and hold market share as a result of a technological innovation. First, you need a strong appropriation regime to protect your innovation from would-be pirates; then you need your new product or service to be adopted as the dominant design paradigm in its niches; and thirdly, you need sufficiently strong complementary assets to ensure that you can produce the product at lowest cost, to a sufficient volume, and distribute it effectively. If you lack any of these three factors, a strong technology strategy may well lead to a weak profit performance, as some stronger company steals your innovation.

Strategy rarely leads to valuation in the conventional books on the subject. Peter Johnson remedies this omission in Chapter 7. He outlines the relevance of financial

theory to strategy formulation, describes the major developments in valuation techniques, commenting on their strengths and weaknesses. He then proposes a new valuation framework for assessing the strength of specific competitive strategies in financial terms, so providing the decision-taker with the necessary financial information to decide whether to adopt the proposed strategy or not.

Robert Grant describes in Chapter 8 how the knowledge-based approach to the firm allows corporations to be looked at in an entirely new way to the traditional fixed asset approach; one which may be more relevant to the modern knowledge-dominated economy. He emphasizes the importance of ensuring that decisions are taken where the knowledge is, and in setting up systems for retaining knowledge in the firm. The development of a modular approach to organizational structure also helps to identify where knowledge needs to pass from one part of the firm to another, and where the module is knowledge self-sufficient, in which latter case the possibility of running that part of the firm as a separate unit arises.

Part II: Competitive Strategy

Competitive strategy is what business was about before the development of the multi-SBU corporation. It is about finding a strategy that is better than that of your competitors, and that thus enables you to make repeatable profits from selling your products or services. Whereas the corporate strategist need never see a product or a customer, such matters are the lifeblood of the competitive strategist, and the achievement of sustainable competitive advantage with his products is what he dreams about.

Competitive strategists concern themselves with such issues as how to configure their value chain optimally, what products and services to offer to what specific market segments, how to achieve differentiation from the offerings of their competitors, and how to control costs in order to be able to be price-competitive. They also need to identify what is the business idea that distinguishes their company from others, and to appreciate early what are the forces for change in the industry, so that competitive strategy can be adjusted in time to accommodate them. A business can survive with a mediocre corporate strategy, and even if it has a poor one, the individual business units may still survive under new ownership, when the poorly performing corporation is taken over and broken-up. A company cannot survive with a poor competitive strategy however. In that event it will make no profit and eventually cease to exist.

The overriding strategic issue at the level of an individual business unit or firm is how can the firm gain sustainable competitive advantage over other firms producing similar products or services. This is not a new argument. However, there is a great deal of debate in the competitive strategy literature that stems,

largely, from two different economics-based traditions. On the one hand, there are theories of competitive strategy that derive from industrial organization (IO) economics (Caves and Porter 1977; Caves 1980; Porter 1980, 1985). In these theories superior profits stem from the firm positioning itself well within the structure of the industry. Where firms face few competitors, and where it is difficult for firms to enter the industry, the incumbent firms should make reasonable profits. An individual firm's profit performance can be further enhanced where it can successfully implement a strategy of either cost leadership or differentiation (these are Porter's 'generic strategies'). The lowest cost producer in an industry must earn above average profits if he prices at industry average levels. Above average profits can also be achieved where the firm can successfully differentiate its products. Here superior profits are generated because the successful differentiator can charge premium prices.

More recently, a competing school of thought (which actually can be traced back to Penrose 1959) which focuses attention on the firm's unique resources has emerged. This resource-based theory (Wernerfelt 1984; Barney 1991) holds that above average profits stem from resources controlled by the firm that not only combine to deliver valued products, but that are also difficult for other firms to imitate or acquire. Both sets of theories get a very adequate airing in the book, and they are by no means mutually incompatible, and many theorists and practical strategists attempt to combine both approaches.

In Chapter 9 Robert Pitkethly outlines the first stage of the rational planning process of developing a competitive strategy, namely environmental analysis. He starts with a description of the by now traditional Porter five forces model (1980) used for estimating the competitive intensity of a specific market, and describes its strengths and limitations. He then introduces the value net of Brandenburger and Nalebuff (1995) in which a game theoretic approach is taken to the other actors which interact with the planning company in a market. Pitkethly also alludes to the existence of evolutionary forces in competitive markets building on the views of David Barron in Chapter 4.

One of the limitations of the five forces model is the difficulty in determining the boundaries of the market that is relevant for the analysis. In Chapter 10 John McGee shows how an analysis of the strategic group to which the planning company belongs helps in this definition. He also shows other ways in which the analysis of strategic groups can help the strategic manager in focusing his attention in the areas where the competitors important to his company are to be found, and in identifying areas of strategic space where the strategist may find switching the focus of his strategy to be advantageous.

In Chapter 11 Geoff Coyle shows how by means of scenario planning the limitations of single point forecasting can be overcome. By developing a number of alternative scenarios a wider range of options and possibilities can be considered and a greater understanding of what might happen developed. The advantage of

scenario planning is that it enables the planner, whilst still selecting one future, to also build contingency plans to cope with some of the possible alternative futures that may come about.

Chapter 12 by Ron Sanchez focuses on the internal analysis of a firm and its competences. It describes the way in which the company needs to develop core competences that are difficult to imitate or substitute for, and that thereby provide the foundation for sustainable competitive advantage. In this chapter Sanchez clarifies the roles of resources, capabilities, and management processes in creating such organizational competences.

In Chapter 13 Stephen Tallman builds further on the capabilities needed by a company for competitive advantage particularly in high technology markets. He introduces the concept of basic processes needed to build and exploit dynamic capabilities, emphasizing that, since such capabilities are concerned more with process than specific performance, they are thereby more difficult to imitate than other capabilities, and also more likely to continue to be valuable and a source of competitive advantage even in volatile changing markets.

Having analysed both the external environment or market and the internal capabilities of the firm, the time has arrived in Chapter 14 to formulate a competitive strategy. Cliff Bowman introduces the customer matrix as a tool to aid the strategist in the selection of a strategic direction that is likely to succeed in relation to his competitors in delivering higher perceived use value at a competitive price. This chapter deals with strategy formulation for existing products in current markets, and does not consider the options for product or market diversification. This, as a corporate strategy, is dealt with in Volume II of the Handbook.

One of the dynamic capabilities discussed in Chapter 13 is that of being able to learn as an organization faster and more effectively than your competitor. John Child analyses the nature of organizational learning in Chapter 15. He indicates the different forms of learning, and how they can be achieved. He stresses the critical importance of organizational as opposed to merely individual learning, if a company is to stay ahead of its rivals even when key personnel leave. This builds on the ideas of Rob Grant in Chapter 8 on the knowledge-based approach to the firm, where he emphasizes the need for knowledge-integrating mechanisms in the firm if all learning is not to remain individual and to disappear with the departing executive.

Much of the book so far has implicitly dealt with strategic management in relation to product-based organizations. In Chapter 16 Susan Segal-Horn considers what changes need to be made to the strategic mindset when running a service organization. She concludes that the traditionally held differences between service and manufacturing organizations are diminishing as high technology is fast entering the service sector and leading to scale and scope economies and other cost advantages not generally associated with services. The remaining critical difference, however, will always be that services are an 'experience', and hence recognition of the dominant importance of strategic implementation is the key to success.

Part III: Corporate Strategy

So far as corporate strategy has existed as a topic separate from business-level strategy, it has had a chequered existence. Only in the last ten years has a rigorous consensus emerged.

Chapter 17 by Goold and Luchs provides a valuable scan of thinking in the corporate strategy area over the last forty years. The topic rises to prominence with the arrival of the conglomerates. Before the creation of highly diverse companies such as Harold Geneen's ITT, the issue of multi-business companies was only addressed in passing. In the 1960s the topic of strategy itself was only just taking form and there was little understanding of the distinction between strategy at the marketplace level and strategy at the firm level.

The concept of general management skills that could be applied across a range of businesses did exist as did the concept of synergy. In fact for the next thirty years these two concepts were two paths along which thinking developed, with very little attempt at integration. In trying to understand conglomerates, the Boston Consulting Group developed the BCG Matrix, Boston Box, or growth/share matrix. Its elegance, managerial language (cash cows, dogs, etc.), and simplicity caused the Boston Box to dominate the teaching of corporate-level strategy. This tool was followed by other major consultancies with their own variants, notably McKinsey and Arthur D. Little, who were determined not to be left behind in the race to acquire prestigious multinational clients.

With hindsight the ideas spawned by the matrix—portfolio balance and diversification—proved to be disastrous. Many companies in the 1970s and 1980s set off on the path of diversification eager to create a portfolio that could finance itself while delivering a stream of 'quality earnings growth'. The strategy was attractive to managers, because it suggested that they could create a portfolio that would not be subject to the vagaries of the capital markets. But they also believed that this was the right thing to do based on the best academic thinking.

The story of failure is best illustrated by the major oil companies, who energetically entered new businesses starting with the first oil crisis in 1974/5. Having tried almost every industry, these companies spent the last years of the 1980s and the early part of the 1990s licking their wounds and returning to the only business they had proved competitive in—the oil industry.

While the world was experimenting with diversification, the synergy logic was still alive. The frustration was that it continuously failed to submit to the rigours of academic thinking. Rumelt (1982) showed that 'related' diversification outperformed 'unrelated' diversification, demonstrating a critical flaw in the Boston Box. But the results were hard to replicate. The case for relatedness had the same tautological attractiveness as the case for portfolio balance, but, since neither could be demonstrated to be superior to the satisfaction of the academic world, they existed alongside each other, allowing managers to find a theory

to support whatever they wanted to do and academics to teach whatever they wanted to.

Enlightenment was slow in coming. It was given a huge indirect boost by the re-emergence of the resource-based view of strategy after a gap of twenty-five years from its first introduction by Penrose in 1959. Picked up by Wernerfelt (1984) and later by Prahalad and Hamel in the form of ‘core competencies’ (1990), the synergy school now had some managerial language and better theory with which to fight the portfolio school. Prahalad and Hamel were pushing on an open door. Managers found that their diversification efforts were underperforming and desperately needed a new logic for guiding their decisions.

The merging of the synergy and portfolio schools came in the early 1990s. The three leading teams working on the topic (Prahalad and Doz, Goold and Campbell, and Collis and Montgomery) came to the same conclusion: that corporate-level strategy was about achieving a fit between three elements:

- (1) the value creation logic for having multiple businesses under one management team;
- (2) the choice of businesses to have in the portfolio; and
- (3) the skills, processes, and structures used to manage the portfolio.

The portfolio school did not make sense if the logic was balance or risk spreading. These rationales were demonstrated not to be a value-creating logic. The shareholder is in a better position than managers to balance and spread risk. The portfolio school did make sense if the logic was based on added value.

The synergy school was also challenged. Instead of looking for relatedness in the nature of the businesses, synergy could depend on skills, processes, and structures of the parent company. Success occurred when the businesses were ‘related’ to the skills of the parent, which were themselves built on an understanding of how to create value. Each team inevitably developed its own language and framework, but a robust intellectual framework had finally been agreed.

In Chapter 18, Prahalad and Doz explore the different kinds of economic logic that can sustain a diversified company and link these to different governance mechanisms. One of the messages from this work is the importance of the CEO, a theme that also runs through the work of Goold and Campbell. Since the economic logic for the company must come from the top, there is a tough strategy demand put on the CEO. Moreover, since the economic logic must fit with the skills of the corporate centre, the skills of the CEO being a dominant element, the economic logic is often constrained by the CEO’s personal skills. Corporate strategy starts to look almost like career strategy for the CEO.

This tight link between the concept of corporate strategy and the skills of the individuals in the corporate parent is taken up in Chapter 19 by Andrew Campbell—‘The Role of the Parent Company’. This chapter summarizes the contributions made by Goold and Campbell to the theory of corporate strategy. This

version—parenting theory—places equal emphasis on value destruction and value creation. The task, Campbell argues, is not only to develop a value creation logic but also a logic for avoiding ‘value destruction’. There must not only be a fit between the businesses in the portfolio and the skills of the parent, there must also be an absence of major misfit.

This might seem like playing with words. But the theory is based on many years of observation, which pointed out that parent companies have a big impact on the decisions made in the businesses they own. This creates the potential for value creation and destruction. In fact value neutrality is the one state that is most rare. Value destruction is avoided by ensuring that parent managers have ‘sufficient feel’ for the businesses they own. The most engaging analogy is that of the specialist doctor. He or she develops some medicine or way of interacting with patients that have a particular health issue. Value is created when this medicine is applied to a patient with the health issue. Value is destroyed if the medicine has side effects and is applied to patients without the health problem or if the side effects are more severe than the beneficial effects in certain patients. The best doctors only give the medicine to patients who will experience a net gain, and the ideal situation is to give the medicine only to patients for whom the net gain is greater than that available from other solutions to their health problem. Parenting theory is, therefore, built on the concept of ‘parenting advantage’ just like competitive strategy theory is built on the concept of competitive advantage.

With agreement about the integrated view of corporate-level strategy, much of the interesting work currently underway takes these evolving theories and applies them to particular issues such as acquisitions, alliances, organization design, and organization renewal.

Schoenberg’s ‘Mergers and Acquisitions’, Chapter 20, provides further evidence for the integrated view. Acquisitions frequently fail. In fact the numerous studies on success rates come to a remarkably consistent view that less than half of acquisitions succeed. Much of the blame can be laid at the feet of ambition, hubris, and incompetence. But for many it is a lack of a sufficient understanding of the rules of the game—of the integrated view of corporate-level strategy.

To add a business to the portfolio through acquisition, the buyer must believe that he or she can outbid other interested buyers without overpaying for the business. Assuming the other bidders are rational, they will be prepared to pay a price close to the value of the business to them. To outbid others, the buyer must believe that the target business is worth more to the buyer than to any other bidder. In the language of parenting theory, the buyer must believe that he or she has parenting advantage. The 1999 fight between Royal Bank of Scotland and Bank of Scotland for National Westminster Bank was a classic. The Royal Bank won because it was able to convince the institutions that it could do more with the National Westminster assets.

Schoenberg also describes the importance of integration management. Integration is the mechanism by which the buyer creates additional value from the acquisition. But too much integration can destroy value and too little can leave value on the table. Knowing the appropriate level of integration is an essential part of a parent company's skill set—a skill that the parent must be better at than others at least for certain kinds of acquisitions. As Schoenberg points out, the handling of employee resistance following an acquisition is one part of integration management that requires particular attention.

A similar logic can be used to address cooperative strategies, such as alliances and networks: only network or ally with businesses where the combined value is greater than that available to any other combination of partners. However, as Faulkner points out, in Chapter 21, there are other forces at work. In acquisitions, the buyer typically pays full value plus a premium for the target company. In alliances and networks there is often no payment as such, just an agreement to commit to work together. Advantage can, therefore, be gained by choosing partners with as much attention on how to deprive competitors as on how to maximize value from the partnering. In fact a game theory perspective as illustrated by Powell in Chapter 29, is a useful one not only in understanding the rationale for cooperation but also in thinking about partners.

Faulkner notes the rapid growth in popularity of alliances in response to the increase in globalization of markets in recent years. The growth of international strategic alliances has in fact been one of the phenomena of the last decade. Apart from finding a partner with complementary assets able to realize synergies, he emphasizes the importance of trust and commitment by the partners to the enterprise, if the alliance is to be successful in the longer term. The chapter also considers the allied but distinct area of strategic networks, and their importance in assisting the globalization of enterprises. This view leads us to the next section of the book—international strategy.

Part IV: International Strategy

International strategy can be viewed as being a subset of corporate-level strategy, on the one hand, and competitive strategy, on the other. As a part of competitive strategy, international strategy is about situations where the international sources of advantage make it impossible for locally focused businesses to survive. In most cases this is because the economies of scale from serving multiple markets are critical to competitive success. For companies in small countries, most businesses need to be international to survive. For companies in the United States or Germany the number is much smaller.

Viewed as part of corporate strategy, international strategy is about diversifying into other countries in order to create additional value. The operations in the other

countries are additional units in a portfolio and can be analysed with the same framework as corporate-level strategies. Is there a value-creating logic for having multiple units in one portfolio? Does the parent organization have skills, resources, structures, and processes that are well designed to exploit the value opportunity? Do the businesses in the portfolio benefit significantly from the medicine the parent organization is offering? Finally, does the benefit exceed that available from any other parent company?

Unfortunately, the field of international strategy has developed largely independent of corporate strategy. Hence few writers in international strategy are attempting a synthesis. When this comes, it will give a big boost to the topic of corporate strategy, because there are many more academics studying international issues than corporate issues.

In Chapter 22, Faulkner attempts to provide some answers to the question of how multinational corporations configure and coordinate their international strategies, by examining various approaches to internationalization as a strategy process. This analysis includes considering the stages models of internationalization, studies of the link between strategy and structure in MNCs, and more recent organizational models of multinational organizational forms, including that of the most modern, the transnational. Finally Faulkner introduces a model to summarize and discuss the four basic multinational forms described.

Since the terrorist attacks on the World Trade Center in September 2001 and the protests at Summits of world leaders, much has been written about the pros and cons of globalization. What Faulkner's chapter shows is that the forces of globalization are simple economic ones connected with scale and skill benefits. The result is greater value creation, which should make it possible to benefit all stakeholders. The tragedy of the anti-capitalist and anti-internationalist forces is that they may slow the process of value creation.

We should recall that challenges to economic forces have been made many times before. The market economy was viewed with great suspicion as recently as the 1940s. In 1942, Joseph Schumpeter, along with other economists, commentators, and even industrialists, forecast the demise of capitalism. In *Capitalism, Socialism and Democracy* Schumpeter wrote in the preface: 'a socialist form of society will inevitably emerge from an equally inevitable decomposition of capitalist society'. Later in the book he reinforces the thought: 'Can capitalism survive? No, I do not think it can. One may hate socialism or at least look upon it with cool criticism, and yet foresee its advent.' At the time, there was a strong view that capitalism = competition = waste.

Yet we have learned since that competition is the engine of progress: the fuel of value creation. We should hold faith with globalization for the same reasons.

Rugman and Verbeke, in Chapter 23, criticize Porter by showing that his generic global strategies are 'neither global nor generic'. In their place Rugman and Verbeke offer a new framework of four generic strategies based on distinguishing between location bound and non-location bound sources of value on one

dimension and the number of home bases on the other. There have been many attempts to develop generic strategies and Rugman's certainly has value. However, like the others, there is a danger of oversimplifying. In practice each company needs to understand the sources of internationalization value, and develop strategies that are stronger the more they are uniquely tailored to the company's specific resource endowment.

Rugman and Verbeke also develop a framework for understanding the role that transnational networks can fulfil in a context of global competitiveness. This framework distinguishes between intra-organizational and inter-organizational networks. It also looks at the number of home bases. The weakness in the Porter frameworks is the assumption of only one home base, whereas 'most of the interesting research issues in international business stem from the complexities of organizing a multinational enterprise across multiple home bases'.

Buckley, in Chapter 24, uses standard economic theory to examine the impact of multinational companies on the global economy and vice versa. He notes that the global economy has more shocks than it used to have, and these shocks are more rapidly distributed around the world system. Multinationals play a role not only in responding to these shocks, but also in generating them and transmitting them. The implication for the multinational is a need for increased flexibility in strategies, organization, and firm boundaries. The issue of flexibility is picked up again in the last section of this book.

First, however, there are four chapters on the subject of change.

Part V: Change

Change is a topic of such importance to strategy that it is almost synonymous with management itself. If management is anything other than the creation of bureaucracies, it is about the management of change. Change is not, therefore, a topic limited to corporate-level issues. It is central to almost all strategy. If all changes were possible, there would be very few constraints on the strategy development process. At the business level, it would be possible to analyse the needs of each marketplace, identify what competencies are needed to succeed, and put the competencies in place. At the corporate level, it would be possible to analyse the needs of each business, determine what parenting skills are needed, and put them in place. Unfortunately, resources and competencies are hard to change and the marketplace is competitive. Hence the management of change is about the implementation of strategy; how to build the resources and skills needed to outperform competitors in the marketplace or other parent companies seeking to own similar businesses? If the changes needed are too difficult, the strategy will fail. If the strategy is not ambitious enough, competitors will get ahead. The problem is

never ending and, as such, never completely solvable. This is why, despite huge improvements in the management of change, the task does not appear to get any easier. Managers still find it difficult to achieve the changes they need. In fact they always will. However good our change technology, the challenge is fundamentally a competitive one. Unless a company has major advantages over its competitors, it will find the management of change to be a tough challenge.

Whipp, in Chapter 25, underlines this point with the words, 'It is apparent that managers continue to regard strategic change as an area fraught with problems, notwithstanding the rhetoric on some book covers which would seem to indicate otherwise.' Whipp argues that those trying to understand change need three perspectives. First, the discipline has a long and intertwined history. It is important to locate authors in their contexts, if the reader is to understand and use their insights. Second, the reader needs to be aware that many writers fail to distinguish sufficiently between different points on the continuum of change—from the status quo at one end to transformational change at the other. Prescriptions and observations of one type of change are often of little use if applied to another type of change. Third, the reader needs to be sensitive to the process view of change.

This view has become the bedrock of many of the most notable examinations of strategic change. The main benefit has been to show that a step by step approach to change is not relevant. It is a much more serendipitous and chaotic activity. Managers can be ambitious to nudge the change process and even provide conditions favourable to the direction of change desired. But managers cannot be ambitious to be in control of change.

McKiernan, in Chapter 26, addresses the question of change in the specific conditions of a turnaround situation. He is interested in change when the survival of the company is at stake. He develops a six-stage model for the turnaround process—causes, triggers, diagnosis, retrenchment, recovery, and renewal. Stage process models are now a generally accepted approach to the subject. McKiernan adds causes, triggers, and renewal to the more normal diagnosis, retrenchment, recovery model.

McKiernan gives particular attention to the behaviour of the dominant coalition, explaining what actions to expect and when, but, more importantly, why they occur. He uses the lenses of learning systems and complexity theory. He points out that each situation needs a unique solution. Corporate cultures and learning systems differ for each firm calling for a different approach to turnaround, a theme at the root of most good thinking about strategy as well.

Whittington, in Chapter 27, tackles the issue of organization structure. Whittington's chapter illustrates the limited state of theory on the subject of structure. Contingency theory is the bedrock of structural analysis, but contingency theory says very little in theory terms. It denies the idea that there is one right structure for all organizations. But it fails to define the variables that managers should use to design their organizations. Whittington identifies some of the variables that are commonly cited as relevant—size, technology, environment, strategy, degree of

internationalization—but all of these variables are too imprecise and unquantified to give specific guidance to a manager faced with a tough design decision.

Certainly there are plenty of models of types of organization, but there is as yet no generally agreed theory. It is generally agreed that organizations should be less hierarchical, more networked, and more customer focused, but not why. We do not have a theory that explains why these variables are the right ones to focus on.

Whittington's discussion of future organization structures underlines the problem. Unable to predict the direction of organizational development from an understanding of the theory, he focuses on current trends: 'If present trends provide at least a hint about the future...'. One might speculate that some of the problems encountered in the field of change generally may lie in our poor understanding of what is often referred to as one of the 'hard Ss'. If we do not know how to design the hard Ss, how are we going to manage the soft ones?

Williamson, in Chapter 28, tackles the topic of strategic renewal. He demonstrates that strategies decay, and provides four measures of strategic decay:

- (1) divergence between revenue growth and earnings growth;
- (2) rising ROCE but falling P/E multiple;
- (3) a high ratio of rents to new value creation; and
- (4) convergence of strategies in the industry.

Avoiding strategic decay is about having a portfolio of options to expand both capabilities and markets. While the work on corporate strategy and international strategy emphasizes value creation logic for expanding markets or capabilities, Williamson's logic is that of strategic renewal. Unless the company grows in some direction it will die. The synthesis between the two ways of thinking is missing, but some of the ideas from the strategic renewal school are compelling.

One such idea is the innovation pipeline. Companies it is argued need a pipeline of options at different stages of development. The concept fits well with the financial tool of 'real options pricing'. The options are valued either with financial tools or using management judgement. As their value increases, more can be invested in them, the objective being to avoid investing too much in creating the options that will provide the solution to the renewal problem. The pipeline consists of:

- (1) a portfolio of ideas;
- (2) a portfolio of experiments;
- (3) a portfolio of ventures;
- (4) a portfolio of businesses.

These four portfolios match the four stages that take an idea from 'imagination', through 'testing', 'launching', and 'investing'. The skill is to move the options through the pipeline at the right speed, so matching the investment with the rate of customer acceptance and technical development.

Part VI: Flexibility

Part VI contains three chapters associated with the concept of flexibility. Like the management of change, flexibility is a topic that seems always to be receding rather than arriving. As companies learn to be more flexible, the demands for flexibility seem to increase another notch, so that the prize is always out of reach. Flexibility also has a cost. Undoubtedly the best way of exploiting today's environment is to choose a strategy and build an organization that best fits with it. Unfortunately, the strategy and organization quickly become less than perfect as the environment, competitors, or strategic priorities change.

Powell, in Chapter 29, demonstrates how a successful strategy depends not just on what makes marketplace sense, but also on the response of competitors. Game Theory recognizes that a game takes place between the main players. In economist terms this is a theory that applies only to oligopolistic situations. In perfect or commodity markets there is no game. A game only exists where a few players can influence the decisions that the others take. Since success in oligopolistic situations is determined as much by the behaviour of competitors (remember that one of Porter's five forces is 'rivalry'), strategies need to be developed for the game as much as for the marketplace. Developing an advantage over competitors is only part of the battle. The other part is persuading the competitors to act sensibly.

Kogut and Kulatilaka, in Chapter 30, deal with real option theory. This is about decision-making in the face of options. It has been developed from finance theory and it involves analysing when to make a decision, rather than keep options open. Since new information is arriving all the time, there is a strong logic for avoiding choices until the last possible moment. Flexibility is gained by waiting. Investment decisions should not be made according to a planning cycle, but only when necessary. The trick is to calculate when a decision needs to be made.

Chapter 31 is by Volberda. He points out that 'there are several equally good ways to match high variety and speed of managerial capabilities with an adequate organization design to resolve the constructive tension between developing capabilities and preserving stability within the organizational conditions'. He develops a strategic framework of flexibility that identifies three drivers of the choice of flexibility solution. The drivers are the 'managerial task' (variety and speed), the competitive forces (dynamism, complexity, and unpredictability) and the organization design task (controllability). This leads to four types of organizational form—rigid, planned, flexible, and chaotic. The ideal is to have a mix of planned and flexible solutions. He claims that there are four ways of achieving this mix—the network corporation, the dual corporation, the oscillating corporation, and the balanced corporation. All of these are acceptable solutions to the flexibility challenge.

It is appropriate that we end with a discussion of flexibility. Few issues can be more perplexing. Probably the biggest source of flexibility is the market economy. It

provides for birth and death in a way that ensures value destroying firms do not hold us back for too long, and new ideas and forms can quickly gain support. Are we even asking the right question as we pursue flexibility within the firm?

An alternative view is to rely much more heavily on the market. An analogy is that of the theatre business on Broadway. Each play is written, cast, and presented. Adjustments may be made to the script or the casting, but the basic play does not change: there is only incremental not transformational change. The play may have a run of a few weeks or several years, but at some time the audiences start to decline and the play is withdrawn. At that point the cast disperse, the director looks for a new script, and the theatre for a new play. The resources are put back into the marketplace and a new combination is created. In this way New York presents a stream of excellent theatre.

We could aim for a similar solution in business in general. Each organization would be built around a strategy and designed to fit that strategy as closely as possible. Once the strategy starts to fail, the organization should be dissolved and the resources recombined into other organizations. Flexibility within the firm would not even be a management preoccupation.

The purpose of this last example is not to try to undermine the work of all those mastering flexibility, but rather to point out that we are in the very early days of this particular topic. We should expect some radical twists in the road ahead, before we can claim to understand how to design an economic system that is nimble and responsive to the needs of all the stakeholders involved.

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PART I

APPROACHES
TO STRATEGY

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CHAPTER 2

THE HISTORY OF STRATEGY AND SOME THOUGHTS ABOUT THE FUTURE

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2.1 HISTORY

MUCH has been written about the strategies that firms, aiming at corporate success, should adopt. Our objective in this chapter is to describe the evolution of thinking about business strategy over the nearly forty years in which it has been identified as a distinct subject of study, and make some suggestions about its possible future development. We begin from the 1960s perspective in which strategy was largely equated with corporate planning, describe the 1970s emphasis on diversification and portfolio planning, and observe concern in the 1980s for concentration on the

This chapter is a revised and expanded version of John Kay, 'A Brief History of Business Strategy', in id., *Foundations of Corporate Success* (Oxford: Oxford University Press, 1993), 337–63.

core business and the development of less analytic, more people-orientated approaches to management. We finish with thoughts for the future. We outline the conventional, now unfashionable, but nevertheless still dominant rationalist approach to strategic thinking—scan the environment, assess your strengths and weaknesses, formulate the strategy, and then go on to secure its implementation. But we also register the principal criticisms made of that approach. A common view today is that the formulation of strategy is easy, but the real issues and problems are those of implementation, and that the conventionally prescriptive approach to strategy ignores the degree to which strategy in real businesses is emergent rather than directed.

We accept that this is a justified critique of standard approaches to strategy, but that these approaches are themselves based on a misconception of what strategy for a business really involves. Such criticisms are appropriately directed at a wish-driven view of strategy which emphasizes leadership, visions, and missions. If this is strategy, then it should be no surprise that formulation is easy and implementation difficult, and also unsurprising that such ‘strategy’ has limited impact on what operating businesses actually do. Meaningful strategy is not a statement of corporate aspirations, but is rooted in the distinctive capabilities of the individual firm. When strategy is emergent in this sense, the distinction between formulation and implementation becomes far less.

We also comment more generally on the nature of research and thinking in the field of strategy, and suggest that the inability to distinguish sufficiently clearly between taxonomy, deductive logic, and empirical observation is responsible for the limited progress which has been made in the development of an organized framework for the study of business behaviour.

2.2 AN EXAMPLE OF STRATEGY DEVELOPMENT: GENERAL ELECTRIC

If the evolution of business strategy in the West was to be told by reference to the history of a single company, that company would be the General Electric Company of the United States (GE). GE has both led and followed every major development in strategic management over the last four decades. This evolution is closely associated with the four chief executives of the company over the period, each of whom has imposed his own personal sense of strategic direction on the company.

GE emerged from the genius of Thomas Edison, who made electricity a commercial product. By 1900 the company was involved in every aspect of the electrical

business. Throughout the first half of the century, GE was responsible for an outstanding range of technical and product innovations, which led to the development of national broadcasting, the peaceful application of nuclear power, and the creation of a market in domestic electrical appliances. Today the company is a widely diversified conglomerate. Its largest business is aircraft engines, but it is also a major bank and financial services firm and is owner of one of the major US television networks, NBC.

In the 1950s and 1960s, GE's philosophy was one of decentralization to individual operating businesses. The departments, the critical unit of this decentralized management, were to be of 'a size that a man could get his arms around' (Ralph Cordiner, chief executive, 1953–60). GE established a large management training centre at Crotonville, designed to create general managers who would transcend functional specialisms, and the principles of general management were enshrined in the company's famous 'blue books'.

Towards the end of the 1960s, some weaknesses in this system were identified. In particular, the planning functions of the corporate centre were poorly related to the activities of the operating businesses, the centre's capacity to review their plans effectively was very limited, and the attempt by each departmental head to expand the size of his own empire was seen as having led to profitless growth for the corporation as a whole. Following a McKinsey report in 1969, GE created 'strategic business units' (SBUs). A smaller number of operating businesses were each to be responsible for their own strategic planning.

The central function was now to be portfolio planning—the allocation of resources between strategic business units. GE became one of the first diversified businesses to divest as well as to acquire, although the purchase of new businesses was also a key part of the portfolio planning approach. In 1976 GE made what was then the largest acquisition by a US company, with the purchase of Utah International, itself a diversified energy and resources business. With strategic planning at the centre of the agenda for each of forty-three business units, the day of the strategic planner, and the strategy consultant, had truly arrived. Slightly later this process was to become known as Corporate Strategy and distinguished from its brother Competitive Strategy, the prime concern of which was to identify and help the achievement of 'sustainable competitive advantage' for an SBU.

But there were still limitations on the capacity of GE's corporate centre to review forty-three strategic business units. Nor was it clear where in the organization major new business opportunities were to be identified. So in 1977 the strategic business units were consolidated into six sectors. The centre was to take more responsibility for corporate planning, layers of planning staff were removed, and 'arenas' of business development were identified. In acknowledgement of the force of Japanese competition, the international arena was given particular emphasis.

For Jack Welch, who became chief executive in 1981, vision was central to strategy. 'Good business leaders create a vision, articulate the vision, passionately own the

vision, and relentlessly drive it to completion' (Tichy and Charan 1989: 113). The key elements in Welch's own vision were two: 'We will run only businesses that are number one or number two in their global markets', and 'In addition to the strength, resources and reach of a big company... we are committed to developing the sensitivity, the leanness, the simplicity and the agility of a small company' (GE annual report 1988). In pursuit of these objectives, GE rearranged the corporate portfolio. 'We started out with 411,000 employees. We acquired an additional 111,150 employees. Through divestitures, we reduced by 122,700 employees. We restructured, or down-sized to get more efficient, reducing by some 123,450 employees. Now we have 276,000. Enormous in and out' (Welch, quoted in HBS 1989). Welch acquired the nickname 'Neutron Jack' after the neutron bomb, which destroys people but preserves property.

In 1988, however, Welch felt that the stock market was insufficiently appreciative of the company's performance. 'We're not sure why this is the case, but it occurs to us that perhaps the pace and variety of our activity appear unfocused to those who view it from the outside' (GE annual report 1988). The company began a programme of repurchasing its shares, but more important for strategy was a new Welch initiative, 'Work-out at GE'. 'Work-out is allowing self-confidence to flourish around our company. As that self-confidence grows, the boundaries are beginning to fall; and as they fall, GE is picking up speed, and with that speed a competitive advantage. Some people are uncomfortable with this soft stuff and press us to quantify it.' 'In a boundaryless company, suppliers aren't outside. They are drawn closer and become trusted partners in the total business process... in a boundaryless company, internal functions begin to blur' (GE annual report 1990). Behind the florid metaphor and business buzzwords, there is a recognition of the role of relational contracting in facilitating flexible response and the development of organizational knowledge.

These themes that run through GE's development—the cycles of centralization and decentralization, the shifting role of the corporate centre, the steady move from 'hard', quantified concepts of planning to looser, organizationally based ones, are exactly paralleled in the literature of business strategy. Has the result been a more successful company? There are two perspectives on GE's performance. Over a long period, the GE share price tracks the Standard and Poor's index extremely closely, but on balance there is evidence of slight outperformance. As managers of a diversified portfolio of US businesses, GE is ahead of the market and the executives of GE have beaten the average mutual fund.

There is a different view. Computers and consumer electronics have been among the fastest growing and exciting new business opportunities of the last fifty years, and GE, once dominant in US markets for all kinds of electrical equipment, has failed in both of them. Perhaps the company enjoyed no relevant distinctive capabilities; or perhaps, despite the unquestioned abilities and sophistication of its managers and management systems, it failed fully to identify and exploit them.

‘When Japanese managers come to visit us, they don’t ask to see our research centers or manufacturing facilities. All they want to know about is our management systems’ (anonymous GE executive, quoted in HBS 1981). This chapter describes the thinking behind the management systems that GE has successively adopted.

2.3 THE RATIONALIST SCHOOL

The sheer volume of information which a company can assemble, both about its environment and about itself, is daunting. The first problem which the descriptive phase of strategy formulation must confront is how to organize this mass of data. The earliest processes of strategy formulation were closely linked to corporate planning.

2.3.1 Assessing the Environment

Formal planning procedures typically grew out of the budgeting process, which is a key control mechanism in most firms. The budget normally covers revenues and expenditures, cash incomes and outgoings, requirements of labour and of materials. The plan extends these projections forward. In the earliest days of planning, this was often done by simple extrapolation. More sophisticated planning procedures were then developed to take account of the firm’s expectations of economic growth, the probable development of its markets, and its own established plans and intentions.

Any well-run firm must have some planning process of this kind. Many important corporate inputs—people, plans, accommodation, finance—cannot be turned on and off as markets evolve, but have to be projected, determined, negotiated years ahead. The firm needs forecasts of these requirements and these forecasts are an essential input to management decisions (Argenti 1965). But planning is not strategy, and those firms which believed that by describing the future—often in very considerable detail—they had taken major steps towards making it happen, often found the results of their planning rounds a disappointment. Elaborately quantified corporate plans lay gathering dust on the shelves of managers who went on making the decisions they would have made had the plan never existed. Increasingly sceptical appraisals can be found in Ansoff (1970) and Lorange (1979), amongst others.

The 1960s, the heyday of such corporate planning in business, was also the time when similar processes were adopted by governments in many countries. French planning was widely admired, Britain adopted a National Plan for its economy, and every newly independent country saw economic planning as the key to future development. The results were, in the main, as unsatisfactory for governments as for corporations.

Planning goes beyond forecasting and begins to become a basis for strategic choices when it encompasses a variety of possible outcomes. One very deliberate approach to this issue is scenario planning (Wack 1985), a widely used technique but one particularly associated with Shell. The company invites its group planners to speculate freely on diverse, internally consistent views of the future of the business within the world economy. For Shell, as for other corporations which adopt similar approaches, often in a less formal way, scenarios are a means of organizing their thinking about the environment they face, and of beginning to formulate an agenda of strategic alternatives. What would the company do if the oil price fell to \$10 per barrel? How would it react if economic growth were much slower in the 2000s than in earlier decades?

The development of a model of the business environment is a means both of forecasting the future of the business and assessing how that future might be influenced by internal or external developments. These types of model, which are designed to simulate the functioning of a complete system, may describe an operating business, or the firm itself, or, as with large macroeconomic models, even a whole economy. The objective of these models is to describe a more complex set of interactions and feedback than can be handled intuitively or with the aid of analytic models. In this way a simulation model can allow the free-ranging speculation of alternative scenarios to be combined with the apparent precision of outcomes associated with the corporate plan. The relationships of the model may be deterministic, as in a financial planning model, where many of them will be dictated by accounting identities. They may simply be imposed, as in the style of modelling associated with System Dynamics (Forrester 1961). They may be estimated, statistically or econometrically, from extended time series of data, as in macroeconomic models and their business counterparts.

Such modelling began in the 1960s but has become increasingly widespread as databases and spreadsheets, sophisticated specialist modelling languages, and the universal availability of computers have made it possible for every executive to be his own model builder. But these models are no more than ways of assembling data and analysis as a background to strategic decisions. Models cannot be relied on to forecast the future and even large econometric forecasting models, whose results are widely used even if widely disparaged, are essentially systems of managing information and making judgements rather than true representations of real economies.

The technological optimism of the 1960s—the belief that management was a process which could one day be defined with sufficient precision to be entrusted to a

computer—has now sharply diminished. Yet the role which information technology in general and modelling in particular can play in business is still widely misunderstood. The world of business is too complex ever to be adequately described by any model. This observation, trite and obvious as it is, prompts two opposed, but equally mistaken, reactions.

The simpler response is to reject the analytic model altogether. But intuitive responses and judgements are not always right, and whether they are right or wrong they are always the product of some implicit model. Typically that model or theory is based on a previous experience of an analogous situation, or series of situations, or some incompletely articulated view of competitive behaviour or supplier response. The merit of the model—the explicit process of deductive reasoning—is that it forces this process into the open, spells out the assumptions on which it is based, and identifies those features of reality to which its conclusions may be sensitive. This process may reinforce or reject the initial judgement, or more often facilitate a better appreciation of what it involves.

An alternative, and more subtle, error is the successive complication of the model in an endeavour to capture a larger fraction of the complex reality. The weakness of this approach is that beyond a certain, quickly reached, point the additional descriptive value is slight while the cost in terms of the real objective—a better appreciation of the analytic structure of the relevant relationships—is high. The model, which requires many hours to run and which neither forecasts reality in a way which users find credible, nor describes a set of relationships which they can readily understand, falls squarely, and uselessly, between two stools.

Such formal approaches to analyse the environment proved unattractive to many managers. Some were simply frightened of the technique, others sensed its limitations. Corporate plans seemed sterile documents, irrelevant to daily operating decisions, scenarios the province of distrusted eggheads, models the playthings of computer buffs. More qualitative ways of organizing relevant data were needed (Mintzberg 1973). Many of these techniques were provided by consultants.

The portfolio planning matrix (Hedley 1977) and the product life cycle (Levitt 1965) are examples of these tools. They enable managers to categorize their business as cash cows, dogs, or stars, to identify phases of growth, maturity, and decline. They are organizing frameworks which facilitate comparison of the different businesses in a corporate portfolio or different products in a business portfolio. Portfolio planning and the product life cycle are means of organizing information about markets and about demand. Other tools are relevant to production and supply. The McKinsey business system, later to be developed as Porter's value chain (Porter 1985), is a means of describing the successive phases of a production process and analysing the determinants of costs (cost drivers) in a framework whose objective is support for commercial decision-making rather than accounting allocation. Such techniques were used to identify key success factors—points in the production process at which the firm might succeed, or fail, in adding value to its output.

The corporate planners of the 1960s and 1970s were much concerned with issues such as the market and macroeconomic environment, the product portfolio, and the product life cycle. All of these emphasize characteristics of industry or sector and market. They tended to underplay the role of competitors and competitive behaviour in influencing outcomes. Indeed, it is still common to see plans which base output growth on forecasts of the market, or to observe industries in which each individual firm extrapolates its own experience to give overall results which everyone knows are incapable of realization.

Porter's (1980) 'five forces' of competition—rivalry, entry, substitution, suppliers, and customers—offered a more comprehensive checklist of environmental factors. By the early 1980s, competitor analysis had often replaced, or at least supplemented, environmental analysis. The BCG portfolio matrix, whose dimensions in the 1970s were market growth and relative market share, was transformed in the 1980s into the strategic environment matrix, which mapped the number of sources of competitive advantage against the size of that advantage.

2.3.2 Formulating a Strategy

Having reviewed the business environment and its competitive position, the firm must go on to formulate its strategy. The rationalist school sees the definition of the objectives of the firm as the key element in strategy formulation. That view, which owes much to the continuing influence of Drucker on management thinking, is in itself relatively uncontroversial, but the subject of considerable operational difficulty. A firm needs both corporate objectives—what business should we be in?—and business unit objectives—how should the firm position itself relative to its competitors in its chosen markets?

There are two distinct historical phases in the evolution of thought on corporate strategy. Until the early 1980s, the primary aim of corporate strategy was the creation of a diversified business portfolio. Such a portfolio might encompass related diversification—motivated by synergy between old and new businesses—and unrelated diversification—supported by portfolio planning techniques. But by the early 1980s, evidence had accumulated that unrelated diversification added little value and many of the conglomerates created in these earlier decades had succumbed to financial pressures. TRW and Litton Industries were singled out for special praise in Ansoff's readings on business strategy (1969), and ITT was perhaps the most widely admired of conglomerates. By 1980 Litton was broke and TRW and ITT decidedly out of fashion and favour.

Attitudes changed. The trend of the 1980s was one for focus on the core business; 'stick to the knitting', in the graphic phrase used by Peters and Waterman (1982). Debate on corporate strategy then centred on a view of what the core business is. Is a

computer company a manufacturing business, or a provider of information management systems? Is a brewer in beer or in leisure? But experience has led railroads to no longer wish to be seen as transportation companies. Yet the criteria of relatedness have remained poorly defined. Indeed, one influential contribution (Prahalad and Bettis 1986) proffers ‘dominant logic’ as the key criterion; loosely interpreted, a business is related if you think it is and can defend this in some rational way.

In formulating business strategy, the ‘experience curve’ popularized by the Boston Consulting Group led firms to focus on the critical importance of market share. This emphasis was reinforced by the observation in the PIMS database of a strong positive correlation between market share and returns. PIMS also identified a correlation between relative product quality and return on investment. With the awakened, or renewed, emphasis on competitive issues, the choice of market position was seen as a central element in strategic decision-making. Quality, it was perceived, had been a key ingredient in Japanese success. Over time most markets moved up the quality spectrum. With the aid of phrases such as ‘quality is free’ (Crosby 1979), ‘total quality management’ became a preoccupation of the later 1980s. No one questioned the direction of causality. Was it high market share that led to high profitability, or did very profitable companies inevitably succeed in achieving high market share? And what is the appropriate way to define a market? Is Rolls-Royce in the automobile market or the luxury goods market? It makes a difference to the analysis.

Many authors offered taxonomies of generic strategies—checklists from which corporations could choose the most relevant objectives for particular markets. One early list was proposed by Ansoff (1965), who identified market penetration, product development, market development, and diversification as alternative strategic objectives. The Boston Consulting Group’s alternatives are invest, hold, harvest, divest; and Arthur D. Little offers a list of no less than twenty-four strategic options. Porter’s (1980) classification of generic strategies proved particularly influential. In Porter’s framework there are two dimensions of choice. Firms can pursue either cost leadership—the same product as competitors, but at lower cost—or differentiation. They can range narrowly, or broadly, thus generating a range of alternatives encompassing cost leadership, differentiation, and focus.

Thinking in the 1980s came to support simple crisp statements or objectives in terms of the corporate vision (Campbell and Yeung 1990) or an assertion of ‘strategic intent’ (Prahalad and Hamel 1985). Today, a debate on the content of the corporate mission is a common starting point for a discussion of strategy. Such a statement can cover objectives in both corporate and business strategy. The mission statement is intended to provide a link between the broad objectives of the firm, which may focus exclusively on profit maximization, or may assert concern for other stakeholders, and its specific commercial activities.

A rather different critique of these processes of rationalist strategy formulation—yet one still very much within the rationalist framework—is provided by the shareholder value movement. As with many shifts in thinking about strategy, this is found more or less simultaneously in the thinking of practitioners and the writings of business school academics. American business was stunned in the 1980s by the emergence of a group of corporate raiders. Figures like T. Boone Pickens and the partners of Kohlberg Kravis Roberts, with little in the way of resources of their own, but with the aid of the ‘junk bond’ financing pioneered by Michael Milken, could make credible bids for some of the largest corporations in the United States. This threat to incumbent managers led to anxious re-emphasis on major companies’ concerns for ‘shareholder value’. Academics (Rappaport 1986) were led to explain and justify it, providing both a critique of accounting earnings as a focus of corporate attention and a rationale of the public benefits of exclusive focus on the interests of shareholders.

The most important practical consequence of this activity was to give further impetus to the break-up of conglomerate firms. The grouping of unrelated businesses tended, it was argued, to conceal the potential strategic value of individual components to specific purchasers. That message for corporate strategy was clear, but for business strategy, shareholder value had few clear implications. Proponents stressed the need to evaluate investment and acquisitions by reference to their expected cash flows—but this is a theme familiar from every elementary text in corporate finance—and texts on strategy in a shareholder value framework do no more than juxtapose Rappaport’s critique with Porter’s taxonomies of competitive forces and generic strategies.

The threat to established US corporations in the 1980s came not only from changes in the capital market. American business attitudes were also transformed by the force of competition from Japan, particularly in automobiles and consumer electronics but across an increasingly wide range of products. For some writers, this penetration itself reflected the malign effect of rationalist strategy on US business (Abernathy, Clark, and Kantrow 1983). The globalization of markets was a reiterated theme and no self-respecting corporation could be without its global strategy. International management indeed became a subject in its own right.

As the 1990s began, the state of the art in rationalist strategy involved the formulation of a statement of company objectives, often encapsulated in a ‘mission statement’ and encompassing both corporate strategic objectives—what sort of business are we in—with business strategic objectives expressed in terms of plans for market share, product quality, and geographical scope. It is not surprising that attention was moving from the problems of formulating strategy to issues of implementation.

2.3.3 Copycat Strategy

There is a mechanism for formulating strategy which is apparently simpler than selecting from a menu of generic strategies in the light of a well-formulated assessment of the business environment. That is to look at what other firms do, and copy it. This strategy is more felicitously expressed as adopting best practice.

This strand of strategy has two primary threads. One is the product of Western concern, and admiration for, the success of Japan in certain manufacturing sectors. Observers are inclined to seize on some particular characteristic of Japanese practice—just-in-time management of inventories, for example—and advocate its widespread adoption. The current management preoccupation with quality owes much to this. The other thread results from the inevitable desire of the number two, or number three, firm in an industry to be number one. How better to become number one than to be like number one?

But copycat strategy encounters fundamental problems. The Japanese comparison makes one particularly evident. There are many features—some cosmetic and peripheral, some fundamental—which distinguish the functioning of Japanese and European industry. But which are which? And which superficially cosmetic factors are truly supportive of fundamental ones? Someone aspires to be a great violinist. He goes to a concert, and sees a great violinist in evening dress, with an expensive violin, drawing a bow across it. So he dons evening dress, buys an expensive violin, and draws a bow across it. The factors that truly make the great violinist great are not those which are most apparent to the casual observer.

Any attempt at imitation faces that issue, but there is also a second problem which is particular to business strategy. In most fields of human endeavour, one person can do something well without inhibiting the ability of anyone else to do the same thing equally well. You can be a good driver, or golfer, or singer without any detriment to anyone else's ability to drive, or golf, or sing. Indeed, these skills are usually mutually enhancing. But successful strategies are necessarily individual to the particular firms which adopt them.

2.3.4 Implementing Strategy

Chandler's findings addressed the implementation of strategy directly. Structure follows strategy, he argued, and since then corporation after corporation has rearranged its structure, and rearranged its structure again, in line with changes in its own strategy and in response to changing patterns of strategic thought.

Chandler drew particular attention to the development of multi-divisional forms of organization in response to the increased complexity and diversity of large corporations with multiple activities. Traditionally, firms had decentralized

functionally, to accounts departments, marketing groups, and other collections of specialist skills. The multi-divisional firm decentralized by type of business activity, so that each operating business would have its own accountants, and its own marketeers.

But if operating businesses are treated as independent units, what is the corporate centre for? There are several answers. One sees corporate strategy as the key central function. Here the task of the centre is to identify and derive synergies from the distinct divisional activities, and to satisfy the corporate needs of allocating resources and controlling the corporation in an overall sense. The corporate centre may also act, in effect, as an internal consultancy unit on business-level strategy. While Sloan's General Motors sought to exert both functions centrally, more recently, as in General Electric, business unit strategy was pushed down to business unit level. If there are also substantive interactions between these distinct divisions, the company is driven towards a matrix form of organization, in which functional groupings coexist with, and across, divisional boundaries.

The diversification of the 1960s and 1970s led many more companies to pursue multi-divisional structures. As in General Electric, the degree of central control exercised was sometimes tightened, sometimes relaxed, in ways which sometimes reflected simply a desire for change, sometimes a revised assessment of the balance of advantages. In the 1980s, the very clear tendency was to decentralize, stripping back the corporate centre to minimal levels, even to that of a passive holder of shares in operating businesses. Central functions like finance, treasury, and planning were pushed down to lower levels. These moves cast further doubt on the value of the centre, and often firms concluded that there were parts of their business to which the corporate function could add no value. Divestment of peripheral businesses became common.

But the implementation of strategy is concerned not only with the structure of a firm's activities, but with their style. Burns and Stalker (1961) associated relatively mechanistic, routinized management regimes and well-organized reporting lines with stable strategies and environments, contrasting these with more organic, confused management approaches relevant to more rapid change. These links between strategy and structure have been explored further by many other writers. Mintzberg (1983) identifies five broad organizational categories—simple structure, machine bureaucracy, divisionalized form, professional bureaucracy, and adhocracy, effectively adding simple structure (typically the small owner-managed firm) to Burns and Stalker's classification and subdividing their mechanistic style.

As these typologies became elaborated, there was increasing recognition that structure does not only follow strategy. Structure is itself a determinant of strategy. The essentially interactive nature of this relationship is a theme of Child's (1974) and is one developed in Miles and Snow (1978), who distinguish prospectors and defenders. The prospector seeks out a changing environment, the defender looks to a stable one. From a quite different perspective, the work of Nelson and Winter

(1982) reaches analogous conclusions. They envisage the evolution of business as essentially a process of natural selection, in which only structures well adapted to their environment survive.

From these perspectives, however, strategic thinking no longer runs unambiguously from environmental assessment through strategy formulation to the process of implementation. If the causal relationship between strategy and structure works in both directions, it may be as feasible to determine the strategy by defining the structure as it is to choose the structure to match the strategy. This is implicit in the 'excellence' identified by Peters and Waterman (1982), who focus on the internal attributes of the organization—shared values, 'loose-tight' organization—and anticipate that the excellent firm will find environments appropriate to the exploitation of its excellence. It is a line of thinking developed in the burgeoning literature on corporate culture. At this point, the rationalist approach in which strategy is devised for the organization gives way to a view of strategy which sees it as derived from the organization.

2.4 CRITICS OF RATIONALISM

Dissatisfaction with the rationalist school became widespread. That dissatisfaction centres, in one way or another, around issues of implementation and there is a growing literature on that topic (Hrebiniak and Joyce 1984). The agendas of fashionable consultants and trendier business schools are increasingly filled with related issues—the management of change, the evolution of corporate culture, coping with a turbulent environment, the institution of programmes of total quality management. Rationalism is in retreat, but by no means routed, principally because of the absence of equally well-articulated alternative frameworks. The management of change is important, to be sure, but there are logically precedent questions of what change, and why.

One expression of this dissatisfaction is the commonly expressed view that 'strategy formulation is easy, it is implementation that is difficult'. Such a statement reveals much about the weaknesses of the ways in which rationalist strategy has developed. This implied distinction between strategy and implementation rests on a misconception, as the military analogy reveals. Was Napoleon's defeat in Russia a failure of strategy or of implementation? It hardly makes sense to ask the question because in the hands of a skilled strategist formulation and implementation are inextricable. But if strategy is nothing more than a vision, a mission statement, an expression of aspiration—and that is often what it is—then it is hardly surprising

that it seems easy to formulate strategy and hard to implement it. One might as well say that Saddam Hussein had a fine strategy—defeat the US Army in pitched battle and so conquer the oil reserves of the Middle East—but there were failures in implementation; and that is what he did say to his unsuccessful generals before executing them. If the formulation of strategy amounts to little more than the statement of objectives, then all the interesting and important issues of strategy have been redefined as problems of implementation. But this results from a misunderstanding of what strategy is, not from a real characteristic of the business environment.

A related critique is particularly associated with Mintzberg. It stresses the need to consider the strategy process, rather than to address the choice of strategy itself. Thus, ‘One cannot decide reliably what should be done in a system as complicated as a contemporary organization without a genuine understanding of how that organization really works. In engineering, no student ever questions having to learn physics; in medicine, having to learn anatomy. Imagine an engineering student’s hand shooting up in a physics class. “Listen, prof, it’s fine to tell us how the atom does work. But what we want to know is how the atom *should* work”’ (Quinn, Mintzberg, and James 1988).

The analogy is instructive both for the elements in it which are right and for those which are wrong. It is right to emphasize that fundamental knowledge is a prerequisite to practical application. A competent engineer must first learn physics. Imagine the student who shouts, ‘Stop wasting our time with the theory of the atom, we came here to learn how to make nuclear bombs,’ and then note that equivalent statements are made every day by managers and business school students impatient for what they suppose to be practical knowledge. The position is aggravated by the high reputation of many educators who are happy to illustrate the relevance of their material by showing their classes exciting pictures of nuclear explosions, winning their approbation but communicating nothing of any value. Practical knowledge which is not based on some more fundamental analysis is usually knowledge of only the most superficial kind.

But although it contains that element of truth, the analogy above is essentially false. The views of the student, or the instructor, on what the structure of the atom should be like are matters of no conceivable interest, since neither of them has any power to influence it. It is quite realistic, however, to suppose that businessmen can influence strategy, and it is the prospect that they might do so which is their principal reason for studying it. Observation of the strategy process, and the prescriptive analysis of what strategy should be, are both proper questions, and legitimate subjects of study, but they are distinct questions. In just the same way, the issue of how the European Community makes its decisions through the mechanisms of the Commission, Parliament, and the Council of Ministers, is distinct from the issue of what its decisions should be. And while you must understand both if you are to influence policy, it is the second group of ques-

tions—what the decisions should be—which are of most general interest. The same is true of strategy.

2.5 EMERGENT STRATEGY

But the study of the strategy process does give further insight into the failings of rationalist strategy. Successful firms often seem to have achieved their position without going through the processes of analysis, formulation, and implementation that the rationalist school implies. Indeed, the story of Honda's attack on the US cycle market is often used to illustrate precisely that point. The notion that successful strategies are often opportunistic and adaptive, rather than calculated and planned, is a view as old as the subject of business strategy itself. One of the best expressions of it is Lindblom's (1959) exposition of 'the science of muddling through'. Lindblom wrote from a perspective of public administration, rather than business administration, and stressed how the political constraints on policy make a rationalist approach impossible. He argued that the range of options attainable at any time was necessarily limited, and contrasted what he called the 'branch' method of 'successive limited comparison' with the 'root' method of comprehensive optimization.

In his popular volume of readings, Ansoff reprinted Lindblom's views, but more, it appears, to expose heresy than to commend it. 'Lindblom is wrong when he claims the "root" method to be "impossible"... The TRW experience shows how one of the world's most dynamic corporations goes about a methodical exploration of wide vistas... nevertheless, Lindblom's article is instructive, since it describes a widely prevalent state of practice in business and government organisations' (Ansoff 1969: 10). Twenty years later, that widely prevalent state of practice is still with us, but the argument perhaps more open than it was. Lindblom's perspective is most extensively developed by Cyert and March (1963). They deny that organizations can sensibly be viewed as entities with personalities and goals like those of individuals. Firms are better seen as shifting coalitions, in which conflicting demands and objectives are constantly but imperfectly reconciled, and all change is necessarily incremental. In this framework, rationalist strategy, in which senior management chooses and imposes a pattern of behaviour on the firm, denies the reality of organizational dynamics.

The implications of this for strategy are developed by Mintzberg and Waters (1985), who contrast deliberate and emergent strategy. The former is the realization of the rationalist approach, the latter the identification of relatively systematic

patterns of behaviour in what the organization actually does. Essentially, the same features distinguish the adaptive mode of strategic decision-making from the planning mode. In the former, 'Clear goals do not exist... the strategy-making process is characterised by the reactive solution to existing problems... the adaptive organization makes its decisions in incremental, serial steps' (Mintzberg 1973). By contrast, planning involves, 'Anticipating decision-making... a system of decisions... a process that is directed towards producing one or more future states' (Mintzberg 1973).

As a description of how real organizations operate, this critique is so obviously compelling that at first it is hard to see why the rationalist school of strategy remains influential. But the reasons why it does are clear enough. Apart from a few disinterested scholars, people study and analyse strategy because they want to know what to do. To observe that organizations are complex, that change is inevitably incremental, and that strategy is necessarily adaptive, however true, helps very little in deciding what to do. Managers wish to be told of a process which they can at least partially control and, whatever its weaknesses, that is what rationalist strategy appears to offer.

For some, the nihilist conclusion of the critics deals with the matter. Firms do what they do because they are what they are, and the strategy process is one which one can observe, describe, but for which it is not possible to prescribe. This seems to be the view taken by Pettigrew in his theoretical argument (Pettigrew 1977) and in his massive history of ICI (Pettigrew 1985). Mintzberg offers at least a partial answer in his article on crafting strategy.

Imagine someone *planning* strategy. What likely springs to mind is an image of orderly thinking; a senior manager, or a group of them, sitting in an office formulating courses of action that everyone else will implement on schedule. The keynote is reason—rational control, the systematic analysis of competitors and markets, or company strengths and weaknesses.... Now imagine someone *crafting* strategy. A wholly different image likely results, as different from planning as craft is from mechanization. Craft involves traditional skill, dedication, perfection through the mastering of detail. (Mintzberg 1987: 66)

The metaphor has further implications. The skills of the craftsman are acquired, not from books or lectures, but from observation of the behaviour of established craftsmen. The case-study technique of the business school even finds its parallel in the minor works of the apprentices which preceded the masterpieces of the skilled craftsmen.

Yet at this point the use of metaphor has got wholly out of hand. Strategy is necessarily incremental and adaptive, but that does not in any way imply that its evolution cannot be, or should not be, analysed, managed, and controlled. Neither Lindblom nor Cyert and March had any doubts on that score, and the process of 'successive limited comparison' which Lindblom described is a highly rational process; he underplayed his argument, and perhaps misled some readers by de-

scribing it as ‘muddling through’. Indeed, it may be that we are, at least subconsciously, under the grip of a more powerful metaphor, i.e. the contrast between grand design and natural selection as accounts of the origin of species. Thus, there is an artificial polarization between a view of the world which sees it as potentially wholly receptive to rational control and planning and one in which events fall as they will. Although biological evolution is not one, the world is full of adaptive, incremental processes where that adaptation is subject to partial, but imperfect, control—processes ranging from travelling in space to boiling an egg. If we must use analogies we should look there, and learn about guided adaptation and managed incrementalism. In this framework, the false dichotomies between the implementation and the formulation of strategy, between rational analysis and incremental evolution, and between analytic and behavioural approaches, quickly fall away.

2.6 THE CONTENT OF BUSINESS STRATEGY

The subject of strategy which we have described exhibits the characteristics of an emerging discipline, not yet rigorously characterized by a widely accepted organizing structure and a growing body of consistently researched empirical knowledge. Indeed, the strongly commercial orientation of the strategy business itself conflicts directly with this objective. The traditions of scholarship demand that each author should explain carefully how his or her contribution relates to all that has gone before; the dictates of profit suggest that consultants should dismiss somewhat cavalierly the theories of their rivals and proffer their own nostrums as the one true solution.

The best and most familiar example of an organizing framework is SWOT analysis—the definition of the strengths, weaknesses, opportunities, and threats which the business faces. SWOT is simply a list. It conveys no information in itself, but it is a way of helping us to think about the information we already have. And for a busy manager, confronted by endless everyday pressures and unused to standing back to think about longer-term issues, it is a particularly useful list, as demonstrated by its continued popularity.

It is easy to generate lists, and the literature of business strategy is full of them, few of which stand the test of time. An organizing framework can never be right, or wrong, only helpful or unhelpful. A good organizing framework is minimalist—it is as simple as is consistent with illuminating the issues under discussion—and it is memorable. That is why alliteration is favoured (the seven S framework of

McKinsey, or the five forces of Porter, or the four Ps of the marketing men). A good list is usually between three and five items long (two is hardly a list, six is too many to remember).

A model is a more sophisticated organizing framework. It goes beyond mere listing of items and contains premisses and deductions. The Prisoner's Dilemma is such a model. It, too, is minimalist. It focuses starkly on the problem of cooperation, and all real life problems are more complex. Because of its deductive structure, this model, and even the simplest of models, is more complex than a list. But in a good model, such as the Prisoner's Dilemma, the additional complexity is compensated by the greater insight it conveys. A useful model is a way of learning about processes and interrelationships and so goes beyond the mere structuring of existing knowledge. The suitability of the model, like the value of the list, is determined by the extent of its application, and it is the continued and widespread use of the Prisoner's Dilemma framework across biology, economics, sociology, and psychology after thirty years which indicates that this is, indeed, a good model. Like a useful list, a useful model is also memorable, and memorability is achieved here by the colourful story of the two prisoners in separate cells.

The organizing framework provides the link from judgement through experience to learning. A valid framework is one which focuses sharply on what the skilled manager, at least instinctively, already knows. He is constantly alive to the strengths, weaknesses, opportunities, and threats, which confront him. He understands that cooperative behaviour cannot simply be assumed, or exhorted, but requires the support of an explicit incentive structure or the expectation of a continued relationship. For both, a successful framework formalizes and extends his existing knowledge. For the less practised, an effective framework is one which organizes and develops what would otherwise be disjointed experience.

Business strategy also benefits from the accumulation of empirical knowledge. Chandler's hypothesis that organizational structure follows strategy falls into this category. As framed by Chandler, reflecting the histories of a limited number of US corporations, it must remain a hypothesis. Validation can be achieved only by reference to a much wider body of data but, as subsequent research has deepened our understanding of the evolution of modern business, Chandler's hypothesis has stood up well. There are many other ways of testing arguments. The most extensive body of empirical information on strategic issues is the PIMS database, which reflects the anonymous experience of over 7,000 business units. Two empirical findings stand out from that research—the association between profitability and market share, and that between quality and return on investment.

The development of frameworks and the accumulation of empirical knowledge go together. There is simply too much information about business available for it to be interpreted without some extensive conceptual structure. So the PIMS observation on the association of high profitability with high market share cannot be interpreted without a view of what defines a market, and it is to the credit of the

PIMS researchers that they have a clearly specified view on this. The ‘served market’ is what is supplied by the group of firms which the business, subjectively, perceives as its competitors.

However, the valid interpretation of empirical data in a complex world also requires the support of a model and a theory. Certainly it would be wrong to infer from the PIMS findings that increasing market share is either necessary or sufficient to increase profitability. Here it was suggested that competitive advantage tended to be associated with both high return on investment and high market share—that the relationship was indirect rather than causal. But the same relationship could be interpreted in many other ways. The choice between these interpretations depends on specifying hypotheses and testing them by reference to other observations and further data.

Frameworks, models, and taxonomies can never, in themselves, be prescriptive. We may note that men are either fat or thin as we can identify decentralized or matrix organization, and while these are often helpful ways of describing the world, neither observation tells us what any individual or firm should do. If we add the empirical finding that fat men die prematurely, or that matrix organizations are unsuccessful in particular types of industry, then we have findings we can apply in practical situations.

These observations about the nature of knowledge are scarcely new. It is more than two centuries since the Scottish philosopher David Hume spelt them out. ‘If we take in our hand any volume...let us ask, “Does it contain any abstract reasoning concerning quantity or number?” No. “Does it contain any experimental reasoning concerning matter of fact or existence?” No. Commit it then to the flames; for it can contain nothing but sophistry and illusion’ (Hume 1748). Yet it is clear even today that there is much in the literature of business strategy that Hume would have consigned to the flames. Most of all, the view that the construction of lists—the dominant methodology of strategy—is an activity which has empirical content or can form the basis of recommendations for action is one which is widely held and clearly erroneous.

2.7 CONTINGENCY AND RESOURCE-BASED APPROACHES TO STRATEGY

Starting from the original work of Burns and Stalker (1961), contingency theory emphasizes that there is no best form of organization and that organizational success rests on matching the organization to its environment. There is a striking

congruence here between the sociological tenets of contingency theory and the financial economist's efficient market perspective, which argues that there can be no universal prescriptions for success since, if there were, their general adoption would reduce their value to everyone. These two approaches taken together lead directly to the conclusion that it is the creation and maintenance of distinctive capabilities which is at the heart of successful strategy.

The successful match of organizational structure and environment is not, in itself, a source of competitive advantage; it is a necessary, but not sufficient condition. Banking demands a mechanistic structure—the decentralized processing of millions of daily transactions under common procedures simply cannot be managed in any other way. But the sources of competitive advantage in banking are to be found elsewhere, in reputation and in the architecture of lending relationships. Mechanistic structures are, by their very nature, replicable, but certain types of organic structure, e.g. those here identified with architecture, are not. Contingency theory, given its origins, naturally stresses the organizational contribution to distinctive capabilities.

The contribution of economics to our understanding of distinctive capabilities is both to broaden and to narrow the range. It broadens it in importing factors which are not behavioural, but which nonetheless contribute to competitive advantage, emphasizing particularly the role of strategic assets. It narrows it by focusing attention on characteristics of the organization which are both appropriable and irreproducible. This latter emphasis is missing in the very wide range of distinctive competencies identified by Snow and Hrebiniak (1980).

The necessary irreproducibility of capabilities which yield sustainable competitive advantage has been developed by a number of authors. Teece (1986) draws particular attention to the appropriability problem associated with innovation, and with colleagues (1997) develops resource-based theory into placing an emphasis upon dynamic capabilities which will stand the test of changing environments without becoming obsolete. Prahalad and Hamel (1990) are concerned with similar issues in the context of organizational knowledge, and Oster (1990) is particularly effective in stressing the efficient market perspective in this context. Lippman and Rumelt (1982) review the issue more generally and the concept of architecture owes much to their 'uncertain imitability'—copycat strategies fail because the potential copier cannot easily identify what it is that it is necessary to copy.

An emphasis on the creation and maximization of rents as the engine of commercial activity is, of course, hardly a new idea. Elements of it can be found in Ricardo (1819), to whom the concepts of rents and quasi-rents are due, but by far the most forceful exposition of this perspective remains that of Schumpeter (1934). Yet this work has not been in the mainstream of economic thought. Industrial economics has followed broadly the traditions of Alfred Marshall, whose primary unit of analysis was 'the representative firm', and in subsequent models of competition firms differed not at all from each other or did so in essentially trivial ways (Kay

1991). It is, indeed, this perspective which justified Ansoff's rejection of microeconomics as a basis for strategy—'microeconomic theory provides for no differentiation of behaviour among firms . . . as a result, the traditional microeconomic theory is neither rich nor extensive enough for our purpose' (Ansoff 1969). Although these criticisms are much less valid as applied to microeconomic theory today, the contribution of economics to strategy has remained limited.

2.8 THE LEARNING SCHOOL

Despite the partial demise of the rationalist and dominantly market-opportunity-based approach to competitive strategy, and the dominance of the resource-based view in the early 1990s, each school has dealt with the same thing, i.e. competitive advantage. The emphasis in each has merely been different, though each has recognized the other's territory. For instance, Porter presents a thorough capabilities analysis in the context of competitor reaction, acknowledges distinctive competences as a cornerstone of strategy and relates activity analysis to strategic positioning. Ironically, he also developed one of the most useful tools for internal resource analysis in the value chain. A progressive strategy future would see adherents of the two schools seeking greater integration to build on their relative strengths. First, they need a common language.

The traditional emphasis on accounting techniques to measure internal assets has made it difficult to carry out a full resource audit. Such techniques are essentially historic and so are incongruent with the building of future competencies and capabilities. Moreover, the latter include content that is tacit knowledge, which is not measurable by such conventional means. A different language is required that can deal with 'soft' rather than 'hard' resources and a comprehensive set of new measures needs to be developed. This requires a multidisciplinary effort.

Second, they need a new theory of the firm. At the heart of the resource-based view is the concept of imitability. Competitive advantage is built on a unique bundle of assets that is difficult to imitate. Its sustainability depends on the continuous development of two key resources, one is culture and one knowledge. Culture should be the one resource that is impossible to copy. Research into culture by organizational theorists in the learning school is reasonably well developed. However, there has not yet been sufficient intellectual traffic between the schools of culture and of learning for cross-fertilization to occur. Perhaps impediments to free communication across basic disciplines between academics have impeded theory development here.

Organizationally embedded knowledge, influenced by the work of Polanyi (1962) on tacit knowledge and Nelson and Winter (1982) on organizational routines, became the focus of much resource-based research. But, our knowledge of the anatomy and creation of this knowledge is embryonic and its exploration has been hampered by measurement problems. Though fresh research in this area has broken new ground towards a knowledge-based theory of the firm, much work still remains to be done to progress this strategy future.

Any evolutionary strategy future would foster closer integration of all the major schools of strategy development (Mintzberg, Ahlstrand, and Lampel 1998). Linking the outside-in (Planning) with the inside-out (Resource-Based) approaches is one obvious route. Academic initiatives have already begun and must be sustained as they lag behind global business practice, which has followed this path for a generation.

2.9 THE CONTRIBUTIONS OF CHAOS AND COMPLEXITY THEORY

The schools of thought described above build on the relevant historic tracks and are part of a traditional evolution. They involve the development of the subject of strategy as a capstone discipline, borrowing partial analyses from social and physical sciences. This broadening should be accompanied by a deepening of already established knowledge. An alternative development for the future would break with this linear tradition and embrace a radical route for strategic management. If we accept that organizations are families of non-linear feedback loops linked to other families (organizations) by similar loops, they should be able to operate a long way from equilibrium, at the border between stability and instability, however much economists would quarrel with this theory. They will operate in 'bounded instability', at the edge of chaos. This state is difficult to manage. The need for control and integration pulls them towards stability and eventual ossification. The need for decentralization and innovation pulls them toward instability and eventual disintegration. The left and the right need to remain in balance. As Stacey (1996) states: 'The dynamics of successful organizations are therefore those of irregular cycles and discontinuous trends, falling within qualitative patterns, fuzzy but recognizable categories taking the form of archetypes and templates.' For strategic management, this means that, although some short-term control is possible through traditional techniques, long-term development must eschew the type of linear, analytic reasoning that underpins many of these techniques. Waldrop (1992) warns of the

danger of 'locking in' to sub-optimal schema; generations of strategists could unquestionably operate stage-based, linear models, becoming committed to these textbook paradigms. Without continual education, the lock-in will be reinforced for years to come. Pascale (1990) talked of the Law of Requisite Variety, demanding that any organism must develop an ability to manage conflict and paradox internally, if it wants to stand any chance of coping with external shocks with similar characteristics. In this idea for the future, we may need to throw off the baggage of a previous economic-strategy generation and embrace self-organization, transformation, and renewal.

Strategists will have to react to the phenomenon of change in contemporary society. The march towards liberal democracy, the growth of the regional economic area and opposingly of tribalism, the demilitarization of the international community, mega markets (e.g. China and India), the fight against poverty, the fight for sustainable development, the drift from national to regional government and the proliferation of privatization and deregulation provide a high level of complexity at the general environmental level.

At the operating level, the digital telecommunications revolution will continue to liberate individuals from their corporate parents through efficient personal communication systems bringing with it new work patterns. Consequent decentralization could stimulate increased activity in small cells linked together by networks, so transforming intra- and inter-company relationships, and making the need for the development of an understanding of cooperative strategy even greater than it currently is. Strategists will have to grapple with virtual organizations outsourcing, increased mobility of labour, and a need for continuous education and training as the rapidity of technology and knowledge flows quickly erode contemporary skills and abilities. The structure of industries as well as companies will change dramatically.

The challenge for strategists will be to search for patterns in this complexity; to start with uncertainty; to embrace conversation and stories; to better understand intuition and to prevent it from potential contamination from the 'engineering' toolbox; yet to strive towards the development of helpful and rigorously testable theory that works in practice in such turbulent conditions.

2.10 CONCLUSION

The development of strategic management from the 1960s has been a tortuous one. In its initial incarnation it was dominantly rational, believing hopefully that the economic world was a predictable place and that well thought out plans for the

future had a good chance of being realized. Forecasting, long-range planning, and business strategy were thought of as all part of the process of developing a business plan. However, when innumerable unforecast shocks and unpredictable events made too many plans unrealized for comfort, the rationalist school began to fall from favour. In more recent years strategy has come to concentrate on discovering how to capitalize on a firm's resources and in particular to aid the development of dynamic capabilities. To this extent organizational learning has come to the fore as a key ingredient of the successful company. Uncomfortable with the volatility of the environment and the difficulty of dealing with it, strategists have more recently come to wonder whether lessons can be learnt from the study of biological and physical sciences, notably chaos theory and complexity theory.

The future for strategy may then be both evolutionary and revolutionary. The evolutionary view predicts that we will do more of the same ourselves; integrating schools and disciplines, accepting partial analyses from further cognate areas and generally tweaking things at the margin. This may be good enough if we get the odd breakthrough. The revolutionary view is a call to drop the baggage, to accept that linearity and traditional planning cannot cope with complexity, to adjourn our deepening of generic strategies, to become analytically 'softer', to experiment and to take seriously apparently non-traditionally rational approaches to the development of a successful firm. From the viewpoint of this book, the view of the future is agnostic. The various contributors draw their material from all schools and disciplines, and the prevailing view of the future is left to the readers. At least they are provided with a vast amount of data and theory to enable them to make up their minds.

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CHAPTER 3

THE BOUNDARY OF THE FIRM

MARTIN SLATER

3.1 INTRODUCTION

THE objectives of this chapter are to demonstrate that the central concept of a ‘firm’ is more complicated than might immediately appear; to examine various explanations that have been put forward for why firms exist at all; to examine the factors which constrain the size and range of activities of firms; to compare the nature of relationships within firms with relationships between firms; and to consider how ownership of assets affects incentives.

Any discussion of business strategy inevitably presupposes the existence of a business firm, for which the strategy is intended. Furthermore, the outcome of the strategic discussion will be aimed at changing the nature of the firm in various ways: the products it produces, the ways in which it produces and sells them, the activities performed by the firm and those performed outside the firm. It may aim at expanding the firm, at least in some respects, and at contracting it in others. It may aim at fusing several firms into one (mergers and acquisitions), or contrarily, splitting the original firm into several new ones (demergers and spin-offs). Therefore it is worthwhile to give some thought to the elementary question of what a firm actually is, what determines its boundaries, and what distinguishes a firm from other kinds of activity that are not firms.

3.2 FIRST IDEAS

3.2.1 The Legal Approach

An obvious response might be simply to fall back on the legal definition: a firm is whatever is defined as a firm by the Companies Act. However, this does not really meet the question at all, for the law in these matters is often more reactive than prescriptive, as much an attempt to codify existing good practice as to lay down a template from first principles. Company legislation adapts over time, usually with a long lag; it varies from country to country; and it countenances not one but several forms of business organization, some of which are considerably more popular than others. In practice, firms are often not defined by the legal forms but use the legal forms to suit their own convenience: a typical firm often comprises many separately constituted legal entities for tax or administrative reasons, but nobody is in any doubt that the whole is a single organization. Consequently, it is sensible to ask whether there are more fundamental determinants of the existence of firms to be found in economic behaviour.

Box 3.1 Example: BP Amoco-42 Subsidiary and Associated Undertakings and Joint Ventures

The more important subsidiary and associated undertakings and joint ventures of the group at 31 December 2000 and the group percentage of equity capital or joint venture interest (to nearest whole number) are set out below. The principal country of operation is generally indicated by the company's country of incorporation or by its name. Those held directly by the parent company are marked with an asterisk (*), the percentage owned being that of the group unless otherwise indicated. A complete list of investments in subsidiary and associated undertakings and joint ventures will be attached to the parent company's annual return made to the Registrar of Companies. Advantage has been taken of the exemption conferred by regulation 7 of The Partnerships and Unlimited Companies (Accounts) Regulations 1993 from the requirements to deliver to the Registrar of Companies and publish the annual accounts of the BP/Mobil joint ventures and CaTo Finance V Limited Partnership.

Subsidiary undertakings	%	Country of incorporation	Principal activities
International			
BP Chemicals Investments	100	England	Chemicals
BP Exploration Co	100	Scotland	Exploration and production
BP International	100	England	Integrated oil operations
BP Oil International	100	England	Integrated oil operations
BP Shipping*	100	England	Shipping
Burmah Castrol	100	England	Lubricants

Subsidiary undertakings	%	Country of incorporation	Principal activities
Europe			
<i>UK</i>			
BP Amoco Capital	100	England	Finance
BP Chemicals	100	England	Chemicals
BP Oil UK	100	England	Refining and marketing
Britoil (parent 15%)*	100	Scotland	Exploration and production
Jupiter Insurance	100	Guernsey	Insurance
<i>France</i>			
BP France	100	France	Refining and marketing and chemicals
<i>Germany</i>			
Deutsche BP	100	Germany	Refining and marketing and chemicals
<i>Netherlands</i>			
BP Capital BV	100	Netherlands	Finance
BP Nederland	100	Netherlands	Refining and marketing
<i>Norway</i>			
BP Amoco Norway	100	Norway	Exploration and production
<i>Spain</i>			
BP España	100	Spain	Refining and marketing
Middle East			
Amoco Egypt Gas	100	USA	Exploration and production
Amoco Egypt Oil	100	USA	Exploration and production
Africa			
BP Southern Africa	100	South Africa	Refining and marketing
Far East			
<i>Indonesia</i>			
Atlantic Richfield Bali North	100	Indonesia	Exploration and production
<i>Singapore</i>			
BP Singapore Pte*	100	Singapore	Refining and marketing
Australasia			
<i>Australia</i>			
BP Australia	100	Australia	Integrated oil operations
BP Developments Australia	100	Australia	Exploration and production
BP Finance Australia	100	Australia	Finance
<i>New Zealand</i>			
BP Oil New Zealand	100	New Zealand	Marketing

Box 3.1 (Continued)

Subsidiary undertakings	%	Country of incorporation	Principal activities
Western Hemisphere			
<i>Canada</i>			
Amoco Canada Petroleum Company	100	Canada	Exploration and production
<i>Trinidad</i>			
Amoco Energy Company of Trinidad and Tobago	90	USA	Exploration and production
Amoco Trinidad (LNG) B.V.	100	Netherlands	Exploration and production
<i>USA</i>			
Atlantic Richfield Co	100	USA	Exploration and production, gas and power, refining and marketing, pipelines and chemicals
BP America*			
BP Amoco Company			
BP Amoco Corporation			
Standard Oil Co.	100	USA	Exploration and production
Vastar Resources Inc.	100	USA	
Associated undertakings	%	Country of incorporation	Principal activities
<i>Abu Dhabi</i>			
Abu Dhabi Marine Areas	33	England	Crude oil production
Abu Dhabi Petroleum Co.	24	England	Crude oil production
<i>Germany</i>			
Erdölchemie	50	Germany	Chemicals
Ruhrgas AG	25	Germany	Gas distribution
<i>Russia</i>			
Rusia	25	Russia	Exploration and production
Sidanco ^a	10	Russia	Integrated oil operations
<i>Taiwan</i>			
China American Petrochemical Co.	50	Taiwan	Chemicals
^a 20% voting interest.			
Joint ventures	%	Principal place of business	Principal activities
CaTo Finance Partnership	50	UK	Finance
Empresa Petrolera Chaco	30	Bolivia	Exploration and production

Joint ventures	%	Principal place of business	Principal activities
Lukarco	46	Kazakhstan	Exploration and production, pipelines
Malaysia – Thailand Joint Development Area	25	Thailand	Exploration and production
Pan American Energy	60	Argentina	Exploration and production
Unimar Company Texas (Partnership)	50	Indonesia	Exploration and production

Source: BP Amoco Annual Report.

3.2.2 The Classical Economic Approach: Economies and Diseconomies of Scale

In early economic theory a firm was conceived of as being a fairly simple organization, run by an owner-manager (entrepreneur) effectively as an extension of the owner-manager's personal property. There were thus no serious problems of managerial control, or of conflicts of interest among various stakeholders. Similarly, the assumption of widespread perfect competition ruled out the need for any serious marketing decisions. There was an analysis of the optimal size of a firm, based on the concepts of economies and diseconomies of scale and leading to the U-shaped average cost curve (Fig. 3.1). Economies of scale are those factors which tend to reduce the unit cost of a product in the long run as the scale of planned production is increased (not to be confused with the obvious short-run improvements in unit cost which occur in a cyclical upswing when underutilized existing facilities can be operated closer to their planned ratings). Such economies of scale arise in various ways: in the potential for greater specialization in labour and machinery; in purely technical relationships such as the geometry of buildings, containers, and pipes; in the greater energy efficiency of larger machines; in the greater statistical regularity of large numbers; in the buying power of large purchases. The beneficial effect of these phenomena can be observed in various degrees in production, distribution, development, administration, and finance.

On the other hand, it was argued that there might also be diseconomies of scale: factors which tended, at least eventually, to increase the unit cost of a product as its scale of planned production increased. The combination of these two influences would produce an average cost curve, which first fell under the influence of the beneficial economies of scale but would ultimately be pulled up again by the diseconomies as the firm tried to grow too big. The optimal size was obviously the lowest point of this average cost curve where the marginal effect of the remaining economies of scale was just offsetting the marginal impact of the incipient

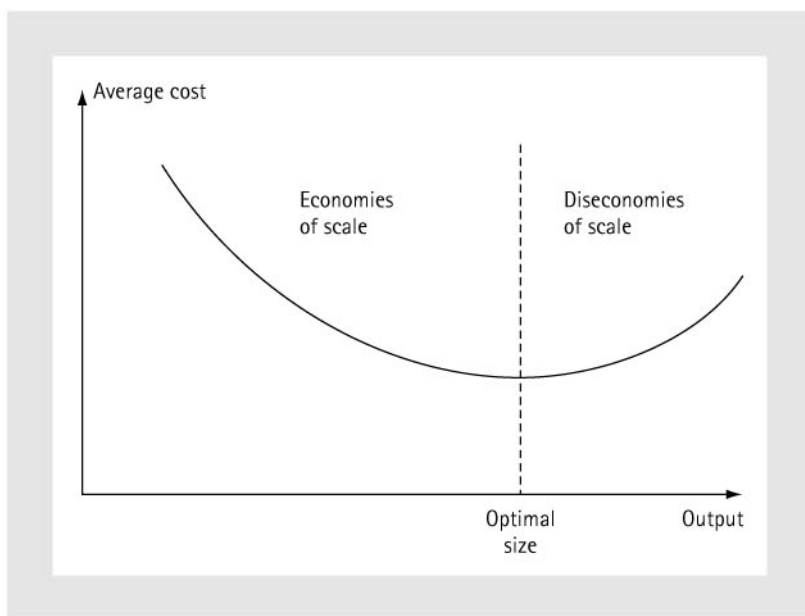


Fig. 3.1 Average cost curve

diseconomies. Furthermore, it was implicitly assumed that this optimal size would still be quite small in comparison to the total market, thereby depriving firms of any chance of market power and justifying the analysis of markets in terms of perfect competition.

A more recent development introduced the idea of economies and diseconomies of scope. As a firm expands its product range, its unit costs might at first fall for a variety of reasons: better utilization of assets both physical and intangible, such as capital-intensive plant, technological expertise, design teams, marketing networks, and brand names. Thus, a major motor manufacturer will almost certainly find it advantageous to produce not a single model but a range of models. However over-diversification might lead costs to rise again. Each model carries certain fixed costs, and too wide a product range will lose the advantages of scale in each individual model. Therefore, there should be an optimum, cost-minimizing product range for a firm.

Product range can be interpreted broadly. The motor manufacturer may diversify not only into more cars but also into trucks and buses, motorbikes, bicycles, indeed into any other product. However, for each group of products one needs to balance the advantages arising from genuinely overlapping characteristics against the disadvantages arising from inevitable dissimilarities. Thus, although trucks and buses certainly use much the same technology as cars, the scope for common components is limited because their engineering is necessarily more heavy-duty than cars, and their marketing channels are entirely different. There are therefore pros and cons to

such a diversification, and in practice different motor companies have taken different views.

However, the traditional analysis had several weaknesses. Empirically, although many studies of firms and industries were able to demonstrate quite clearly the existence of economies of scale—sometimes quite substantial—diseconomies of scale were more elusive. In one sense this difficulty could be rationalized away: sensible firms would not want to operate in the region of diseconomies of scale, so it should be no surprise that there were few observations. However, this did not entirely meet the point, since even the very largest firms in the world still seemed to be operating in the region of economies of scale; thus even if diseconomies of scale did exist in principle, their practical impact on most firms was negligible.

Also the theoretical arguments for diseconomies had a fatal flaw. Even if it were possible to argue that labour and machinery could become overspecialized, that the favourable geometric relationships and energy efficiencies would disappear as monstrous structures would require extra strengthening to avoid collapsing under their own weight, etc., etc., a sensible firm would simply avoid these problems by expanding its facilities just up to the point at which the malign effects were beginning to become important (i.e. the lowest point of the average cost curve), and then conducting any further expansion by a complete replication of those facilities, operated independently. If the first set of facilities could produce an output at the lowest average cost, then so presumably should the second, and the firm as a whole could therefore double its output at no cost penalty. Thus, aside from a minor indivisibility problem (say the firm wanting to produce one-and-a-half times the optimal output), the average cost curve need never turn up and there would be no limit to the size of a firm from cost considerations.

3.3 THE IMPORTANCE OF MANAGEMENT

The only theoretical argument left for diseconomies of scale therefore had to be based on the notion that there was some factor within the firm that could not be replicated in this way. In some specific cases one can clearly see that there might be: a mining firm for instance might be able to replicate all the labour and machinery of one site on another, but it may be impossible to replicate the favourable geological structure of the first site. However, such considerations are not normally so important in manufacturing for instance.

A more generally held view was that 'management' was such a factor which could not be replicated. Thus, in the plant duplication example above, although doubtless junior and middle plant managers could well be replicated, there would still only be

one top-level management for the firm as a whole (unless the plants were indeed operated totally separately, in which case were they still really a single firm?), with now presumably double the workload. In the language of pyramidal managerial hierarchies which was popular at the time, the person at the very top (on whose desk rests the plaque ‘the buck stops here’) cannot be replicated and will eventually be overwhelmed by the increasing workload.

Thus, for some time, ‘managerial diseconomies of scale’ remained the main argument for a limit to the size of firms. Yet it was still not very satisfactory. Although it was certainly possible to observe many firms which did seem to be experiencing managerial difficulties arising from growing too big, this did not seem inevitable. Again the example of the very biggest firms in the world, often used as role models of managerial efficiency, did not support the hypothesis. Theoretically, the hypothesis rested too firmly on the rigid pyramid hierarchy, which in practice was increasingly open to question.

3.3.1 Chandler

Chandler’s detailed historical studies of the development of major US corporations in the early twentieth century exposed these weaknesses further. In Chandler’s studies, a typical corporation would begin as the creation of one man who operated as the paradigm owner-manager. As the corporation grew, outside finance and subordinate managers were introduced, but the founder was still firmly in control of all aspects of the business at the top of a simple hierarchical pyramid. Up to a point this system continued to work tolerably well, but as the corporation grew further, and in particular as it diversified into a multifarious range of activities, the ability of the founder to comprehend and act on all the necessary information did indeed become overloaded as the simple model predicted. At this point a crisis ensued and either the firm collapsed, or the senior management conducted a form of palace revolution, pensioned off the founder to a rather more nominal role, and reorganized the management structure along less autocratic lines. Multi-divisional structures with considerable operating autonomy, but reporting to a head office on overall financial and strategic variables, became the standard form of American corporation and subsequently (although the details have been subject to continual change) the standard form of all corporations.

These looser, flatter forms of management structure appeared to enable firms to push back the limits imposed by managerial diseconomies of scale. The lesson might be that as with production, different technologies were appropriate for different scales of output: the simple hierarchy was very good for small and medium-sized firms, but large-scale organizations required a different technology—and firms that persisted with the inappropriate technology were bound to encounter problems.

Just so long as a firm continued to adapt its management technology appropriately to its size, perhaps it could grow without any bounds at all.

But the really important point made by Chandler was that it was not simply size that mattered; it was really the overall complexity of the operation. The problems of a large but basically single-product firm might well still be comprehended by a single mind; in Chandler's view it was the diversification of corporations as much as their size that created the serious difficulties. Founder control tends to last longer in more narrowly focused companies, where success depends critically on the performance of a few crucial products or on a single brand image or theme, than in companies with broader diversification strategies. Thus, the import of the title of Chandler's first major work was that the managerial structure of the firm must be an appropriate one for its overall business strategy, and not simply for its size.

3.3.2 Penrose

Edith Penrose, to some extent building on Chandler's work, cautioned against the over-optimistic view that firms could easily be any size they chose. She argued that management structures could only be expanded slowly. Management was not a factor which could simply be bought in the marketplace and set to work at peak efficiency immediately. Managements were teams which had to learn to work with another, to learn the implicit cultures and informal networks of the organization, and the idiosyncratic features of this particular firm's markets. Too rapid expansion would not leave enough time for the effective team-building, and would lead to mistakes and poor decision-making. On the other hand, it was the very nature of management to solve (sooner or later) their immediate problems, or routinize them so that fewer resources were needed in the future to control them, and this meant that management teams would naturally develop spare capacity over time, spare capacity which should be employed on new problems generated by an expansion of the firm's activities. Thus, a firm should have an ideal rate of growth: too slow and the managerial resources would not be efficiently employed; too fast and the over-rapid expansion of insufficiently assimilated new managers would lead to control loss of the traditional kind. The traditional managerial diseconomies argument was thereby moved from a static equilibrium story to a dynamic, rate-of-growth, story. Firms could not immediately, although they might ultimately, achieve any size they desired.

If in Penrose's view the constraint on growth arose from the inability to transform individually hired managers immediately into effective teams, one avenue of escape might appear to lie in acquisition: the purchase of an existing team already in operation. However, in practice, this merely produced a different variant of the same problem: the firm would now have two teams rather than one, each with their

own culture which might well be inimical to the other's. It was a moot point whether that problem was preferable to the original one. In some cases the costs of attempting to fuse two powerful cultures together have clearly exceeded the costs of more organic expansion. However, a subtler exponent of the Chandler hypothesis might see some advantage in a strategy of acquisition without trying too hard to fuse the two teams into one: by adopting an overall management strategy which would maintain considerable autonomy for the two teams and keep the necessary harmonization to a minimum, the organization might maximize its rate of growth.

Box 3.2 'Big Bang': The reform of UK financial markets

Traditionally UK financial institutions had operated in a highly regulated environment, with competitive forces largely suppressed by the Bank of England. In particular the Bank of England and other interests controlled entry to the various sectors of the financial markets: organizations tended to be specialized to one particular task and not allowed to trespass on the preserves of other organizations.

In the early 1980s the Conservative government significantly reduced the scope of regulation and introduced a more open, competitive environment—the so-called 'Big Bang'. With organizations free to operate in any sectors they chose, a significant redrawing of the boundaries of firms was expected. The initial consensus was that the specialized structure would rapidly be replaced by large multifunctional enterprises offering a comprehensive range of financial services. The driving force for this would be economies of scope, which would exist in marketing (current-account customers could also be interested in savings, insurance, pension, and stock-market products) and in information (a bank's long-term experience of a customer's current account would give it an informational advantage in assessing credit risk for mortgage-lending and other credit). Large-scale amalgamations did indeed occur—retail banks merged with investment banks, with stockbrokers, with building societies, so that the average UK financial institution is currently a more comprehensive and diversified organization than before.

However, dire predictions of the complete demise of more specialized players have not been borne out, and some of the large amalgamations have been notable failures. As well as economies, there were some diseconomies of scope which were perhaps underestimated.

Several retail banks (e.g. Barclays, Natwest) made notable failures with their forays into investment banking. Here the hoped-for synergies were rather less obvious; the businesses and their operational styles were not in fact as similar as they might have superficially appeared. A big retail bank could provide a large capital base for an investment banking operation, but this could also be provided via more arm's length, market-oriented transactions, so the advantage of full integration was not high. The capital would have been better employed strengthening the retail business. On the other hand, specialization had advantages of managerial focus, speed of response in a market where speed is an important factor, and the ability to concentrate a larger volume of investment business, giving economies of scale.

Another area of relative failure was estate agency. The economy-of-scope argument was that if a financial organization was in the business of lending money to customers

for house purchase, there would be obvious synergies in offering a complete house-buying package: mortgage, insurance, legal work, and the marketing of the houses themselves. Hence, there was an initial spate of financial institutions buying up estate-agency chains. Most of these were shown to be disastrous failures when the property market turned down in the late 1980s.

Probably the main cause of failure was an incompatibility of management styles. Large financial organizations are necessarily bureaucratic: they operate within a structure of self-imposed controls and standardizations to protect against fraud and mismanagement. On the other hand, a successful estate agent is more a small entrepreneur with good local information and flexible bargaining/dealing skills. Such people tended to find the managerial style of their new owners oppressive and either retired on their gains or left to refound their own independent businesses as soon as they were contractually free to do so. As there are few assets in such a business except the people, the purchasers found they had made a bad deal.

3.4 THE BOUNDARY BETWEEN FIRMS AND MARKETS

3.4.1 Coase

In a seminal article in 1937, Ronald Coase approached the problem from a different direction. He noted that economics had a well-worked-out theory of market relationships. Indeed this theory claimed that, at least under some admittedly rather strict ideal assumptions, market forces left to themselves would produce an allocation of resources which could not be bettered—the so-called Pareto-efficient allocation in which there was no possibility of any economic agent doing better for himself/herself without another agent doing worse. But if this were true, why on earth should firms exist at all? Coase saw firms as islands of authority allocation in a sea of market relationships. In the sea, resources and products flowed towards particular uses voluntarily, in response to market signals—prices. Within the firms however, resources were allocated by the command of the management. Why should such commands do any better than the market?

Coase's explanation is that there are costs of using the market and there are costs of using authority. The former include searching for trading partners, comparing prices, negotiating transactions, monitoring fulfilment of contracts, paying and collecting moneys owed, etc. The latter include managerial and supervisory costs, planning and trouble-shooting, hiring, firing, and training costs, etc. Coase

assumes that the latter costs tend to increase with the size and complexity of the firm (this is similar to the idea of managerial diseconomies of scale but the concept is a broader one, as we shall see). When considering any particular transaction or activity, the firm will prefer to take it in-house if the costs of so doing are less than the costs of having it performed by the market. A firm will therefore expand its size and its range of operations until the marginal costs of using internal authority relationships are equal to the marginal costs of using the market.

Whereas the traditional economic view of the firm was a very one-dimensional one, and the resulting idea of a firm's optimal size was confined to the optimal output of a single product, Coase's idea is much broader. The firm's cost-minimizing calculations will also determine whether the firm should be a single-product or a multi-product firm, how many and what kind of products to produce, how far forward and backward the firm should vertically integrate, what functions to outsource and what to retain in-house.

The overall outcome is therefore a natural and optimal division of labour between firms and markets, depending on the relative costs of each method of resource allocation. If, as a result of technical change or other reason, the relative costs change, the location of the optimal margin will also change. Therefore improvements in management technology reduce the costs of authority relationships and encourage firms to expand their range of operations. On the other hand, tougher labour laws which increase the costs of hiring and firing will encourage outsourcing and subcontracting. Similarly, the increasing efficiency of markets in most Western economies in recent decades has assisted the move of firms towards greater specialization and focus, downsizing, and outsourcing. At the other end of the spectrum, in regions like the former Soviet Union where market relationships can hardly be relied upon, it is well-known that enterprises engage in degrees of vertical integration and ranges of in-house activity that would be unthinkable in the West.

Box 3.3 Toyota and General Motors

General Motors makes about 11 million cars annually and has about 750,000 employees. Toyota makes about 8 million cars but has only about 70,000 employees. How can this be explained? Their technology and scale advantages are hardly very different from one another.

US labour markets are very flexible; neither union power nor government regulation impose great costs on a firm's ability to hire and fire. However the lifetime employment system prevalent in large Japanese companies makes labour adjustment prohibitively expensive. Thus, the transactions costs of internal relationships are higher for Japanese firms than for US firms. On the other hand, the highly developed subcontracting market in Japanese industry makes the transactions costs of extra-firm relationships lower than in the United States.

Box 3.4 The National Health Service

The UK National Health Service was set up as a vertically integrated health-care organization. It provides both health-care insurance and the health-care services themselves. In the 1980s the Conservative government instituted a reform programme aimed at vertical disintegration: the ‘purchaser–provider’ split.

‘Providers’ (basically hospitals but also to some extent general practitioners and other services such as ambulances) previously under the control of local health authorities were given a measure of autonomy (‘Trusts’) and command of their own budgets. The local health authorities continued to receive revenue from the government (effectively the insurance premia of the local population) and were to use that revenue to buy health-care services from providers who would quote prices for them in a competitive ‘quasi-market’.

The aim was to improve efficiency by introducing a greater element of market discipline into what was perceived as an overly bureaucratic allocation system. However, the negative aspect was that the market system had its own costs, as outlined by Coase. Additional managers and administrators had to be recruited to develop the price lists and the cost information behind them, to negotiate and monitor the contracts, etc.

Assessment of the system’s overall success has been difficult. However it was politically unpopular, and the highly visible introduction of financial criteria into an ethically sensitive area produced continual public relations difficulties. The subsequent Labour government abolished the quasi-market, although it retained the purchaser–provider distinction. Thus, the precise nature of the relationship between purchaser and provider has become less clear-cut—perhaps it can be seen as the inevitable development of a Williamson idiosyncratic bargaining relationship.

3.4.2 Richardson

George Richardson added some more important detail to the Coase framework. In his view the simple dichotomy between the islands of conscious authority and the sea of impersonal market relationships was too misleading. It ignored the important network of non-market relationships between firms. In a foreshadowing of the currently fashionable ‘core competencies’ philosophy, he drew a distinction between activities that were ‘similar’—in that they required similar skills, abilities, and competencies to perform—and activities that were ‘complementary’—in that for production or marketing purposes the activities needed some coordination. Thus, the production of tyres and the production of rubber sports-shoes soles are similar but not complementary, while the production of tyres and the assembly of motor-cars are complementary but not similar. Firms would tend to specialize in the production of similar commodities, and where they required inputs of non-similar commodities they would depend ultimately on other firms; where the need for complementary coordination was slight, arm’s length market transactions would

suffice, but if the degree of coordination required was very complex inter-firm, but non-market, relationships would be observed, such as long-term contracts, sub-contracting, technical cooperation, and joint ventures.

Like Coase, Richardson argued that conventional economic theory had little to offer in the analysis of these significant areas of economic behaviour. Worse, the natural tendency of mainstream economics would be to regard many of these practices as anti-competitive and undesirable, in that they appeared to be some form of gratuitous suppression of market competition. Such a tendency was entirely due to the absence of an adequate framework for identifying any potential benefit which might accrue from them. Orthodox theory assumed costless markets and given firms, so by definition could not envisage any usefulness for such practices, whereas in fact the management of the interface between firms and markets required a considerable input of resources, with the usual possibilities of their being used efficiently or inefficiently.

3.5 TRANSACTIONS COSTS ECONOMICS

Coase's approach is conceptually insightful, but not easy to translate into operational terms. It is difficult to specify and measure the precise costs of market versus internal transactions. However, Coase did at least provide a framework in which an economic analysis of corporate *institutions* could proceed, where the prevailing mainstream economics had treated the 'firm' as a purely logical construct with no clear connection to the flesh-and-blood firms observed in reality.

Subsequently some economists, most noticeably O. E. Williamson, have attempted to build on Coase's foundations and those of earlier 'institutional' economists such as J. R. Commons, a comprehensive theory of transactions costs. Essentially this involves dividing the costs faced by firms into two types: production costs and transactions costs. Production costs are those necessarily implied by the available production technology, but transactions costs are determined by the institutional structures within which resources are gathered and directed and the products marketed. Decisions about institutional structures are therefore to be seen as attempting to minimize the total burden of transactions costs faced by the firm.

3.5.1 Williamson

Williamson rests his transactions cost theory on two fundamental behavioural assumptions: 'bounded rationality' and 'opportunism'. The first means that

economic agents are intendedly rational, but they do not have perfect information, or more importantly the cognitive capacity to make use of perfect information, even if they had it. They cannot guarantee to work out all the possible outcomes of any situation and calculate the absolutely optimal course of action. Consequently, they can easily make mistakes and be surprised by eventualities they had not even anticipated. However, they are aware of their limitations and their actions will be influenced by that awareness: for instance, knowing that nasty surprises cannot be ruled out they might be expected to try to make themselves less vulnerable to such surprises.

Opportunism is defined by Williamson as 'self-interest with guile'. By this Williamson intends to emphasize that a certain amount of deviousness as well as straightforward honest self-interest should be expected from trading partners: a partner will renege on a contract if it turns out to be in his interest to do so; a partner may supply false information if there are no penalties for doing so, and even if he supplies the truth it may not be the whole truth.

Williamson makes great play of the fundamental difference between his assumption of opportunism and the more usual economic assumption of self-interest. However, it might be argued that the difference lies not so much in the description of the behavioural assumption as in the description of the problems within which the behavioural assumption is deployed. The problems with which Williamson and we are concerned here naturally provide an avenue for the self-interested person to indulge in deception, whereas in many more traditional economic problems such as basic consumer theory such opportunities simply do not arise. The problem really is which rules (laws, social norms, or private agreements) one can rely on a partner to adhere to against his or her own interest, and which rules one cannot so rely on. Clearly in some circumstances there might be very little to rely on, whereas in others there might be very little to fear.

Against this background, Williamson points to three important dimensions of transactions.

3.5.1.1 *The Degree of Asset Specificity*

If a transaction requires investment in assets that are specific, i.e. they are long-lived and have little ability to be redeployed to other uses if the transactional relationship comes to a premature end, there will be an important question of which party should make them? Or more crucially which should finance them? Because once made, the maker is vulnerable to opportunism from the other partner who will try to renegotiate the terms. Complex contractual safeguards might be required before one partner might be willing to make such investments, but because of bounded rationality even these might not be considered a sufficient guarantee. Such transactions might therefore be better taken entirely inside the firm as vertical integration, or might require the creation of a joint venture with equity-sharing to reassure both partners.

3.5.1.2 *The Degree of Uncertainty*

When the nature of a transaction can be clearly defined, in terms of exactly what is to be expected from each party in all possible circumstances, a simple contract should suffice. But where the ultimate requirements are not clear in advance, and where even the list of possible circumstances may be impossible to complete, it may be impossible to write a contract to give enough reassurance to both parties. For instance an American car manufacturer wishing to sell a car to an Indian customer has a relatively simple contractual problem: clearly there are administrative and bureaucratic difficulties to be overcome (and there is a risk that they might not be overcome) but the contractual relationship is simple: if the car is delivered, the company gets the money; if not, it doesn't. However, if the American company wants to break into the Indian market in a big way by engaging an Indian company as distributor, the contractual difficulties are much greater: what precisely will be required from the Indian company and what from the American? There are bound to be large specific investments required. Overall success will depend on the quantity and quality of a wide range of inputs from both Indian and American companies, and on factors outside either of their control such as Indian government policy and the policies of other motor companies.

This is not to say that such contracts are impossible: clearly contracts in just such circumstances do exist. But they are likely to be a legal minefield, and where they do exist they usually do not attempt to specify everything in great detail, but instead lay down procedures for resolving problems as they arise and financial structures which are designed to give reassurance against opportunism. Again many firms would prefer to internalize such arrangements to avoid the transactions costs.

3.5.1.3 *Frequency and Duration of Transactions*

Where a transaction is a one-off event there is, *ceteris paribus*, little incentive to create specific control institutions, and a general arm's length contract is likely to be used. However, if partners perform the same kind of transaction repeatedly with each other they will have an incentive to evolve some idiosyncratic rules and procedures to resolve problems and disputes more economically. Thus, motor insurance companies prefer to average out claims between each other on a knock-for-knock basis rather than to insist on individual investigation and resolution of each claim on its own merits.

Repetition of transactions has a further favourable effect: the knowledge of continued business relations with a partner reduces the advantages of a single act of opportunism. Any gains made thereby may be quickly lost again by acts of retaliation or simply by a less cooperative attitude in future.

3.5.1.4 Williamson's 'Fundamental Transformation'

Williamson argues that his analysis of idiosyncratic transactions has more importance than might immediately appear and in fact should really be the basic building-block of economics, because even when transactions can be performed apparently at arm's length in a thick market with many buyers and sellers, as soon as a deal is struck the circumstances change. If there is any degree of asset specificity and any time-span for the performance of transaction there will be scope for *ex post* opportunism whatever the *ex ante* terms of the deal. Thus, if I want to buy a washing machine, I originally have a wide choice from a large number of stores each stocking a variety of products. At this point it looks to be a classic arm's length transaction in a competitive market, with the outcome predictable in terms of competitive market theory—I will buy from the seller who offers the best package of price and services. However, as soon as I decide to buy a particular washing machine from a particular store and hand over my credit card to finalize the transaction, the seller suddenly becomes less certain about his promise to deliver next day, which had been an important element in my original decision. However, at this point it is too much hassle to demand cancellation of the credit card transaction and go to my second-choice store (where probably the same thing will happen anyway!), so buyer and seller are locked into a bilateral (idiosyncratic) renegotiation of the terms. Williamson's point is that we should realize in advance that this is going to happen and factor it into our initial decisions. Notice that in this particular example it is unlikely, by convention, that the seller will renege directly on the price quoted—this being a very clearly specifiable quantity, an alteration here would likely be accepted immediately by both parties as voiding the contract. Reneging is much more likely in more vaguely specified dimensions.

Similarly, a decision to buy components in a competitive market at one time from one supplier may affect the future competition for such component supply, if the currently favoured supplier thereby gains information or other advantages which make it more desirable to stick with it in future than to allot future contracts to rivals.

Thus, even despite an appearance of large-number competition, Williamson argues that all transactions inevitably become idiosyncratic and that the normal economic competitive results cannot be relied upon.

Box 3.5 Cable television franchising

Williamson demonstrates the inevitability of idiosyncratic relations with an example from early US cable television franchising. In 1970 the City of Oakland, California, asked for competing bids to run its local cable TV network. At the franchise allocation stage there were five competing bidders. The franchise was awarded to the (considerably) lowest bidder. However, some short way into the franchise period, it became clear that

Box 3.5 (Continued)

the franchisee had been over-optimistic and could not deliver the specified services at the contracted prices. The franchisee therefore sought to renegotiate the terms in its favour. At this point the City found that its bargaining power had diminished dangerously. Insistence on the original terms might simply drive the contractor into bankruptcy and consequent politically unacceptable loss of service; because of the specificity of investment there would be some appreciable cost of reallocating the franchise; and the original alternative bidders might be difficult to reactivate at short notice. There was no alternative but to accept the renegotiation.

3.5.2 Empirical Studies on Transactions Costs

The transactions costs framework has given rise to many empirical studies, particularly of vertical integration. Three of particular note can be mentioned here. Klein, Crawford, and Alchian examined the developing relationship between General Motors and its supplier of car bodies, Fisher Body, in the early twentieth century. Before 1919 wooden bodies were supplied apparently on a normal arm's length market basis. However, with the development of the all-metal body considerable specific investment in assets was required and a ten-year contract was agreed whereby GM would buy all its bodies from Fisher with the price determined by an agreed formula and disagreements to be settled by compulsory arbitration. However, GM did not remain satisfied with the contract for long. Its demand for bodies grew faster than had been anticipated; it became unhappy that the price formula did not reflect the potential cost-savings from such scale and it wanted Fisher to build new plants next to GM assembly plants to realize the economies of scale and transportation. Such a further increase in specificity did not appeal to the Fisher management, so GM was obliged to buy out the company and move to full vertical integration in 1926. Similar stories can be told of the British motor industry.

Monteverde and Teece examined the similarities and differences in vertical integration between General Motors and Ford across a large number of component groups. They concluded that the most important variables favouring vertical integration were the level of engineering skill required in designing a component and whether the component was specific to the manufacturer. They interpreted these as transactions cost variables.

Joskow has studied relationships between coal-mines and coal-burning electric power stations in the United States. The greater the proximity between mine and power station the longer was the average term of supply contracts. In the extreme examples of so-called 'mine-mouth' power stations, full vertical integration was the dominant structure.

3.6 PROPERTY RIGHTS THEORIES

3.6.1 Alchian and Demsetz

Alchian and Demsetz saw the basic rationale for the existence of firms as deriving from the inability to measure individual performances in situations of team production. The production of a complex output may require contributions from several input-owners, but if their contributions are separable in the sense that their value can be individually measured independent of the contributions of others, there is no reason in principle why the production should not be organized in a wholly disintegrated manner, with each input-owner performing his individual task and contracting to sell on the resulting intermediate product to the next input-owner, and so on. Some industries (e.g. the traditional Swiss watch-making industry) have indeed operated in just this fashion, demonstrating that the advantages of even quite elaborate specialization in themselves do not provide a necessary argument for firm organization.

However, where such separability does not exist, it might be difficult to define the product of each input-owner and thus transfer prices for the intermediate products may be impossible to establish. In a tug-of-war team, who can tell who is pulling hardest? Where only the overall output is measurable, there will be a tendency for input-owners to free-ride or 'shirk', to the detriment of all. However, although the precise productive contribution to output may be impossible to measure, observable behaviour of input-owners may provide some correlation with productive contribution. But this behaviour in itself cannot be sold as a marketable commodity.

The members of the team, realizing the mutually destructive incentives of their situation, voluntarily agree to give up their freedom to a director or monitor, who is able to observe and set standards for input behaviour. Each agent therefore has a contract solely with this monitor and not directly with the other team members. The monitor has the right to terminate any team member's contract. This acceptance of the direction of the monitor reduces members' ability to shirk—but the monitoring is costly in time and effort to the monitor, so who is to monitor the monitor? Putting in another level of monitoring would only defer the ultimate problem, so Alchian and Demsetz's solution is to give the residual profits of the enterprise to the monitor. By implication the remuneration of other members of the team is a fixed sum. Any savings accruing to the firm through more energetic monitoring, and losses through lax monitoring, are immediately felt in the monitor's pocket, so that the monitor has the correct incentive to put in the ideal effort. By contrast, the other team members, no longer having the freedom to determine their own efforts, do not require incentivization.

Alchian and Demsetz therefore construct the essentials of the modern capitalist firm—workers who do what they are told in return for a fixed wage, an

entrepreneur who does the telling in return for residual profits—out of a purely voluntarist argument reminiscent of social contract ideas in political theory.

3.6.2 The Principal–Agent Approach

The Alchian–Demsetz article is a particular case of a problem in which interest has burgeoned in recent years; the question of how to structure effective incentives within an organization. A unifying framework for this problem is the ‘Principal–Agent’ approach. A Principal is someone who wants something done but does not want to do it himself/herself; therefore he/she appoints an Agent to perform the task. But Agents are neither slaves nor altruistic, and performing the task involves some expenditure of effort on the part of the Agent, so why should the Agent do what the Principal wants? The obvious answer is that in some way the Principal must make it more in the Agent’s interest to perform the task than not. The equally obvious simplest way is to offer a financial incentive greater than the agent’s disutility of effort. ‘Paint my house and I will give you £500; don’t paint my house and I won’t give you anything.’ This simple contract will work well so long as the output of the task is clearly observable—either the house is painted or it is not, and I can clearly see the difference.

The problem gets more interesting when the output of the task is not so clear-cut, and not so clearly observable. A house can be painted carefully and well—all surfaces properly prepared, defects made good, high-quality materials used, several coats of paint applied—or it could be painted less carefully and sloppily—poor preparation, defects painted over, poor quality materials used, minimal coats of paint applied. It might be difficult to tell the difference merely by inspection of the output on completion. A self-interested agent on a flat fee has an incentive to economize on time and cost, thereby producing poor quality. How can the principal prevent this?

One way is obviously by monitoring, as in the Alchian–Demsetz story—inspecting the job at each stage so that any poor-quality inputs are directly detected. However, monitoring can be expensive in time, and one reason for the Principal employing an Agent in the first place is presumably a reluctance to spend time himself on this task. The alternative is to try to structure the financial incentive more efficiently. Instead of a flat fee, remuneration related to output might align the Agent’s incentives automatically with the interests of the Principal. In this case the Principal might offer a fee proportional to the number of years before the house needs repainting.

In the case (to which Principal–Agent theory is often applied) of shareholders’ relationship with their management, profit-related pay has clearly better incentive properties than fixed salaries. In fact it is not difficult to see that in an ideal world managers would have the maximum incentive if the shareholders simply took a

fixed fee out of the business (since they are non-executive they have no need to be incentivized) and the managers have no fixed salary but take the residual profits (not unlike the Alchian–Demsetz conclusion). Obviously, this is almost the opposite of what is normally observed, the reason being that we have so far considered that the performance of the enterprise is entirely dependent on the effort of the Agent, whereas in practice performance is dependent partly on the effort of the agent and partly on random fluctuations beyond the Agent's control; and it is difficult to unscramble the two effects. In this case the problem with highly-gearred incentive structures is that although they correctly reward high effort and penalize low effort, they also transfer all the risk arising from the random fluctuations on to the Agent, and the Agent may not be the best placed to bear these risks. Thus, shareholders are usually wealthier and more diversified than managers, whose limited personal wealth could not stand a big company's losses in a statistically predictable poor year. Similarly, my house painter might be reluctant to agree to my proposal to pay on the basis of length of life of the painting job—the next few years may produce particularly inclement weather; I might be a very poor maintainer of my property in other respects; I might have very unruly children who love kicking paintwork; I may go bankrupt before I finish paying, and so on. Thus, there may be a limit to the desirable level of gearing of incentives; optimal contracts involve a trade-off between incentive to effort and insurance against the random effects.

The structuring of efficient contracts can become much more complex than the above simple explanation. The crucial variable is the amount of information available to the Principal, and incentives can be sharpened if the Principal can find ways of narrowing down the unknown random component of performance. Obvious extensions are the use of relative rather than absolute performance indicators, and the use of options which limit risk to the recipient. Performance may be measured in terms of the organization as a whole or in terms of sub-units of the organization. Sub-unit performance has the advantage of being more closely related to particular individuals' efforts, but may encourage game-playing which is counter-productive to the organization as a whole. The accounting effort in producing measures of sub-unit performance can be considerable.

The implication of this approach is that firms' efficiency is ultimately determined by the efficiency of their incentive structures. The more complex the firm the more difficult it will be to keep the incentive structures sharp, and this might provide limits to the size and scope of a firm.

3.7 THE FIRM AS A NEXUS OF CONTRACTS

The reader has presumably by now noticed that whereas some writers have seen contracts as a quasi-market relationship outside the boundaries of the firm, others see that relations within the firm are themselves equally contractual. Is a contract of employment just the same sort of animal as a contract to supply a good or service, and if so, is this whole attempt to draw a distinction between firms and markets misguided?

One approach is indeed to view the firm simply as an economizing device in contracts. Even without Alchian and Demsetz's complication of non-separability, a team-production organized through bilateral contracts among independent team members would require a large number of such contracts. A team of n members would require $n(n-1)/2$ bilateral contracts (thus 10 members would require 45 contracts, 100 members 4,950). However, if all members contract individually with a specially-set-up third party, only n contracts are needed, a considerable saving. Of course we will confront here again the problem of how the third party can be motivated to perform its function as contractual clearing-house efficiently.

Coase himself had originally noted the difficulty that relationships both within and without the firm could equally be described as contractual, and attempted to demonstrate a distinction between the two types. He rejected a distinction based on the form of payment (a fixed wage in an employment contract, a commission for work actually done in a non-employment contract), which had been favoured by some earlier writers, but rested his case on 'the fact of direction'. He quoted a legal authority:

It is this right of control or interference, of being entitled to tell the servant when to work (within the hours of service) and when not to work, and what work to do and how to do it (within the terms of such service) which is the dominant characteristic in this relation and marks off the servant from an independent contractor. . . . In the latter case the contractor . . . is not under the employer's control in doing the work or effecting the service; he has to shape and manage his work so as to give the result he has contracted to effect. . . . That which distinguishes an agent from a servant is not the absence or presence of a fixed wage or the payment only of commission on business done, but rather the freedom with which an agent may carry out his employment. (Batt 1929: 6, 7; quoted in Coase 1937: 404)

It is clear that Coase was right not to rest too much on the form of payment, because as we have seen employees may well be remunerated by various incentive schemes related to output or profits, but the 'fact of direction' is still somewhat vague. Even the quotation above makes clear that an employer's rights of control are not unlimited. Alchian and Demsetz criticize Coase for insisting on the authoritarian power of the employer as against the more limited market persuasion via price which can be exercised by a buyer—after all, if the wage offered to an employee does not seem an adequate return for the demands of the employer, the employee (unlike

a slave) is perfectly free to withdraw in exactly the same way as a grocer will not supply foodstuffs if the price offered is not high enough. And on the other side of the coin it is well known that many principals in subcontracting relationships (Marks and Spencer are an example) are very intrusive in detailing exactly how the goods contracted for should be produced. So exactly where should the line be drawn?

3.7.1 Incomplete Contracts, Residual Rights, and Ownership

In a series of papers, Grossman, Hart, and Moore have developed the theme of incomplete contracts as a way of looking at the implications of ownership, employment, independent agency, and the boundary of the firm. In an ideal world, transactors could specify their contracts complete in every respect: each side's rights and responsibilities under every conceivable eventuality would be written down. But for this to work, all eventualities and actions would have to be perfectly observable, which they are usually not, and anyway such contracts would be far too cumbersome to countenance. Consequently, contracts are almost always incomplete, in that they do not specify explicitly what should happen in some circumstances which are either unenvisaged or for convenience or some other reason not spelt out. An important consideration therefore is which party has the 'residual rights' in the unspecified circumstances. A very simple example might be that I agree to lease my house for a year to a tenant. The agreement will explicitly specify that the tenant has the right to live in the house for the year, and that I have given up my own right to live in the house for the year. It is however unlikely to bother to specify explicitly that the tenant must return the house to me after the year and that I have the right to live in it for the following year and that he does not, because it will be taken for granted that the residual rights (i.e. anything not explicitly specified) are mine by virtue of the ownership of the house.

Ownership of an asset, according to Grossman, Hart, and Moore, is the power to exercise all aspects of control of an asset, other than those which have explicitly been ceded elsewhere. One of the important aspects of control is the ability to grant others access to, or exclude them from, use of the asset. Productive human resources normally need to cooperate with non-human assets in order to produce output. If person A contracts with person B to produce some output which requires the cooperation of a physical asset, the nature of the contractual relationship will be affected by which of A or B owns the asset, because their contract is unlikely to be complete, and the residual rights will therefore favour the asset-owner. In a contractual relationship over time, with a requirement for specific investments (in human or non-human capital) and with the possibility of opportunism, the location of the residual rights may significantly affect the incentives to carry out investment.

Grossman and Hart give the following example: some insurance companies have sales forces who are employees; others may use 'independent but exclusive' agents.

Both types of sales person are remunerated identically by commission. What is the difference? In what sense could one kind of company be said to be more vertically integrated than the other? In Grossman and Hart's view, the key distinction lies in the ownership of one crucial asset: the client list. A salesperson can only be productive in conjunction with a client list, and if the insurance company owns it, then the salespeople, however described, are effectively employees who need to look after the insurance company's interests to retain their ability to work in the future; however if the agents own their own lists, then they have the option of terminating their current agreements with this insurance company and taking their clients to another company in future.

In such a case, would vertical integration (i.e. the insurance company buying the client lists of previously independent agents) be a good idea? Grossman and Hart make the important point that such a transfer of ownership of the asset affects *both* parties' incentives, one favourably but the other unfavourably. In the long term it is desirable for the enterprise as a whole to maintain the quality of the client list (i.e. to have stable, persistent customers who will reliably repeat-purchase) and both company and sales force have actions available to them that will influence that quality. Gaining ownership of the list will increase the natural incentives of the insurance company to take the appropriate actions, but correspondingly, losing ownership of the list will reduce the incentive of the sales force to take their appropriate actions, because they can no longer guarantee not to be excluded from the benefits of their actions in the future.

Transfer of the residual rights has therefore affected incentives in both directions, and the assessment of vertical integration must therefore be a balance. If the effect on salespeople's incentives is quantitatively greater than that on the company's incentives, it is better that the asset should be owned by the sales force.

Box 3.6 The privatization of British Rail

Many privatizations involve the breaking-up of previously monolithic public-sector organizations before transfer to the private sector. A particularly good example is that of British Rail.

Before World War II the British railway system comprised a number of independent private-sector companies. These companies tended to be regionally based (Great Western, London & North-Eastern, etc.) and vertically integrated (each company had its own track, stations, rolling-stock, and other facilities). In the early days of railway development, there were a very large number of such companies, but they had gradually amalgamated into a few large groups.

After World War II the system was nationalized and formed into a single public-sector enterprise. It remained vertically integrated, and it retained a regional divisional structure based on its precedent companies. Over time functionally based business divisions (Inter-City, Freight, etc.) cut across the regional structure.