Some History: From Boston Box to three logics that drive corporate action

Corporate level strategy seeks to answer two questions: How to assemble a portfolio of businesses, and how to manage these businesses for maximum performance. Over the last fifty years, there appear to have been four broad schools of thought. In this chapter we review these four schools, showing how they provide the foundations for the three logics, presented in Chapter 1.

The "professional management" school proposes that it makes sense to have multiple businesses in one company when the leaders of the company have superior professional management skills. These managers know the latest techniques of good business management, like planning, performance management, financial control, financial structuring, and decision making. This makes it possible for these managers to expand into new areas and acquire businesses where the managers are less skilled at these management techniques. Corporate level strategy, according to this school, is about ensuring that the top team has the latest management techniques. Using these techniques, the company can then expand into attractive sectors or acquire businesses that are less well managed.

The "portfolio planning" school proposes that it makes sense to develop portfolios that deliver a combination of growth, profitability and cash flow. To achieve this, a mix of businesses may be required - for example, some large, profitable but mature businesses which can throw off the cash required to fund the expansion of smaller, growing businesses with good long term profit potential. Thus, attractive businesses are not all identical – they can have different blends of different qualities. Corporate strategy is therefore about buying and selling businesses to maintain an optimal, attractive mix. It also involves directing resources towards those businesses which are, or are on their way to being, the most attractive.

The "synergy" school proposes that it makes sense to have multiple businesses in one company when the businesses can be linked together to create extra performance through "synergies". Classically referred to as economies of scale or scope, synergies can come from combining activities where there are economies of scale, or from transferring knowledge across businesses which share some similar scope. Corporate strategy is therefore about identifying businesses where there are opportunities for synergy and developing skills at making the linkages between the businesses work.

The "capital markets" school proposes that it makes sense to buy businesses which are under-priced and sell them when they are over-priced. Capital markets do not always price businesses on the basis of their true underlying value, creating arbitrage opportunities. Corporate strategy is therefore about buying and selling businesses, or stakes in businesses, at the right time.

Each of these schools is described in this chapter, highlighting the insights, tools and frameworks they provide and the issues they present.[i]

The Professional Management School

An important and enduring justification for the multi-business company, dating back to at least the middle of the twentieth century, is the argument that the managers of successful companies possess better management skills. This enables them to deliver better performance and justifies their owning a range of businesses. Kenneth Andrews, a leading management thinker at the time, argued that there had been a steady development of executive talent in America. The establishment of business schools in the early twentieth century created the basis for the education of professional managers, and the advancement of the science of management. These managers had superior management techniques that made it possible for them to improve business performance. These techniques also enabled managers to operate divisionalised structures and so expand into more and more sectors.[ii]

General Management Skills

During the 1950s and 1960s, much scholarly attention focused on identifying basic principles of management, useful to all managers and applicable to all kinds of enterprises. Peter Drucker, the management guru, argued that intuitive management was no longer sufficient. He encouraged managers to study the principles of management and to acquire knowledge and to analyse their performance systematically.[iii]

It was not a great leap to conclude that, if all managers face similar problems, professional managers might be able to use their skills across a range of different businesses. Simple observation, as well as theory, supported this idea. Robert Katz, an expert in management skills, noted that, "We are all familiar with those 'professional managers' who are becoming the prototypes of our modern executive world. These men shift with great ease, and with no apparent loss in effectiveness, from one industry to another. Their human and conceptual skills seem to make up for their unfamiliarity with the new job's technical aspects."[iv]

During the 1960s, the growth of conglomerates, with their numerous acquisitions of unrelated businesses across different industries, provided almost laboratory conditions in which to test out the idea that professional managers could apply their skills to many different businesses. Conglomerates such as Textron, ITT, and Litton not only grew rapidly, but also profitably, and top managers of these companies perceived themselves as breaking new ground. For example, David Judleson of Gulf & Western claimed, "Without the high degree of sophistication, skills, and effectiveness that management has developed only in the last two decades, the conglomerate could not exist. These management techniques provide the necessary unity and compatibility among a diversity of operations and acquisitions."[v]

Harold Geneen used a system of detailed budgets, tight financial controls and face-to-face meetings among his general managers to build ITT.[vi] In 1967, Royal Little, who masterminded Textron's broad diversification, explained that the company succeeded because, "we are adding that intangible called business judgement."[vii] Textron had common financial controls, budgetary systems, and capital allocation procedures across its many businesses. It provided few central services and had only a very small corporate office. The group vice presidents, who were each responsible for a number of divisions, were appointed from outside the company. They acted as overseers and consultants to the divisions, helping them improve their "business judgment".

For more than twenty years, a belief that some managers had better general management skills than others seemed to justify a kind of virtuous circle of corporate growth and diversification. Andrews summarized that basic premise, arguing that, "successful diversification – because it always means successful surmounting of formidable administrative problems – develops know-how which further diversification will capitalize and extend."[viii]

The high stock prices of conglomerates in the 1960s reflected the growing belief that this new way of managing – professional managers acquiring and improving a diverse range of businesses in a divisionalised structure – was the future. But economic worries at the end of the 1960s brought the dream to an end. The stock market in 1969 fell by 10% and the prices of conglomerates by as much as 50%.[ix]

The financial crisis of the mid 1970s followed, causing many conglomerates to run out of cash. Some, like Ling-Temco-Vaught in the US and Slater Walker in the UK failed completely. Others, ITT and Textron, just survived. All of them had to slim down their portfolios to raise cash. Belief that professional managers could make any business perform had been lost, and faith in conglomerates as the way forward never recovered.

The Concept of Strategy

The 1970s financial crisis and the struggles of conglomerates coincided with the rise of a new management technique – strategic planning. Senior managers, this new technique proposed, should focus their attention on the "strategies" of their companies. Strategy was more than long-range planning or objective setting; it was a way of deciding the basic direction of the company and preparing it to meet future challenges.[x]

C. Roland Christensen, one of the creators of the business policy course at Harvard Business School during the 1960s, argued that the concept of strategy made it possible to simplify the complex tasks of managers.[xi] A focus on strategy prevented senior executives from doing harm by meddling in operating details and day-to-day issues that they did not understand. These should be left to more junior managers with knowledge of the local circumstances. It allowed corporate executives to concentrate on the most important issues facing their companies – and it simplified management by providing a framework for decisions.

CEOs readily accepted that strategy should be their main responsibility. During the late 1960s and 1970s many companies established formal planning systems, and the appropriate structure and uses of such systems received much attention from academics.[xii] In the early 1970s, Louis Gerstner, who later ran IBM, remarked on how quickly strategic planning had been adopted by companies, noting that, "Writer after writer has hailed this new discipline as the fountainhead of all corporate progress."[xiii]

Problems with Resource Allocation

The 1970s cash crisis made the challenge of allocating resources across a portfolio of businesses a critical activity in most diversified companies. It became synonymous with corporate-level strategy: and a preoccupation of CEOs and CFOs. But it was a difficult job, and the growing field of strategy did not have an easy answer. Corporate CEOs needed to understand the relative merits of investment proposals coming from a range of businesses in different sectors, with different time horizons, competitive positions, and risk profiles, not to mention management teams with differing levels of credibility. A company such as ITT had to allocate resources among businesses that included telecommunications, insurance, rental cars, bakeries, and construction. With many divisions competing for funds, how could a company be sure it was investing in the best projects for future growth?

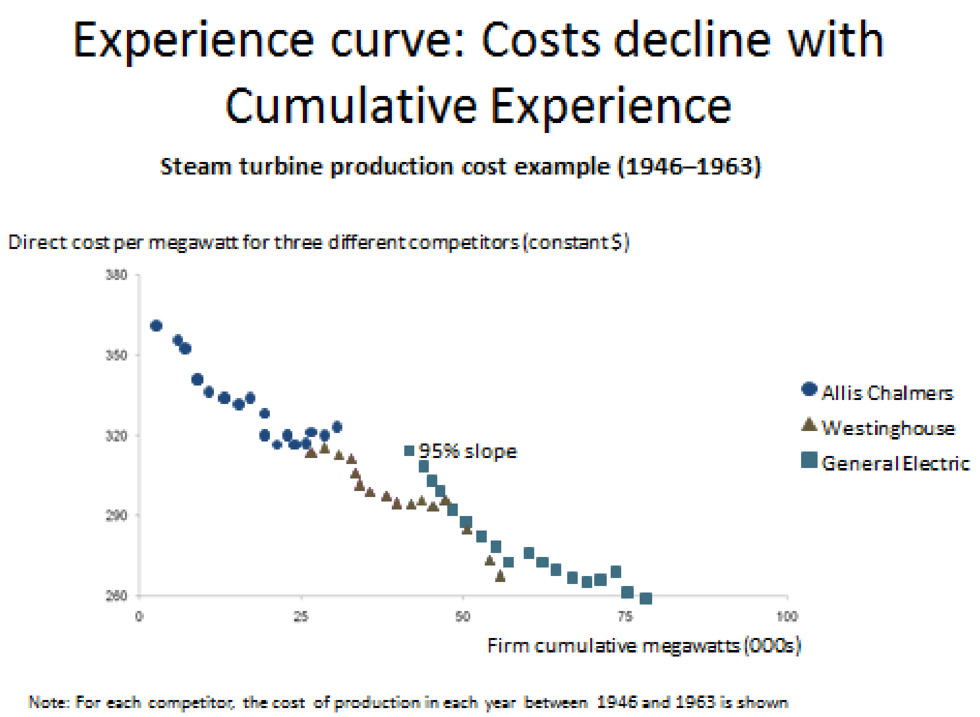
Joseph Bower explored in detail how a large, diversified firm allocated resources. His research highlighted the gulf between financial theory, which saw the manager's task as choosing projects with the highest returns, and corporate reality, where all proposed projects showed at least the return required by the corporate hurdle rate for investment. In practice, divisional managers only proposed projects with acceptable forecast returns, and corporate-level managers could not use financial analysis to choose among projects.[xiv] What they needed was a management technique to help them.

The Portfolio Planning School

To help companies with this resource allocation challenge, academics and consulting companies developed portfolio planning tools. These tools were based on insights about which businesses offered the most attractive opportunities for investment. They solved the resource allocation problem by allowing corporate managers to direct resources towards such businesses. They also gave insights into which businesses were unattractive businesses. These businesses could then be restructured, sold or closed down.

The pre-cursor of these portfolio planning tools was developed by the Boston Consulting Group (BCG). As a result of work that the company had done helping its clients with business level strategy issues, BCG consultants discovered the Experience Curve, which was written up and developed by the company's founder, Bruce Henderson.

Exhibit 2.1 Experience Curve: Costs decline with Cumulative Experience



The experience curve proposed that costs come down in a predictable way as a company gains experience in producing a particular product. Attractive businesses were those with more experience than competitors, and thus lower costs and higher margins. These businesses also offered higher returns on incremental investment – so they were better candidates for further investment and growth. This growth led them to have even lower costs, higher margins and more attractive returns on incremental investment – a virtuous circle.

The classic example of this was in steam turbines. There were three main competitors in the US. The data on costs was made public due to an anti-trust suit. In the chart, the cost level of each company in the years from 1946 to 1963 is shown plotted against the cumulative production of that company. Each company is travelling down a similar experience curve but, because GE has the highest market share, GE is well ahead of the number two player (Westinghouse), which in turn is well ahead of the number three competitor (Allis Chalmers). GE has an attractive business whereas Allis Chalmers has an unattractive business.[xv]

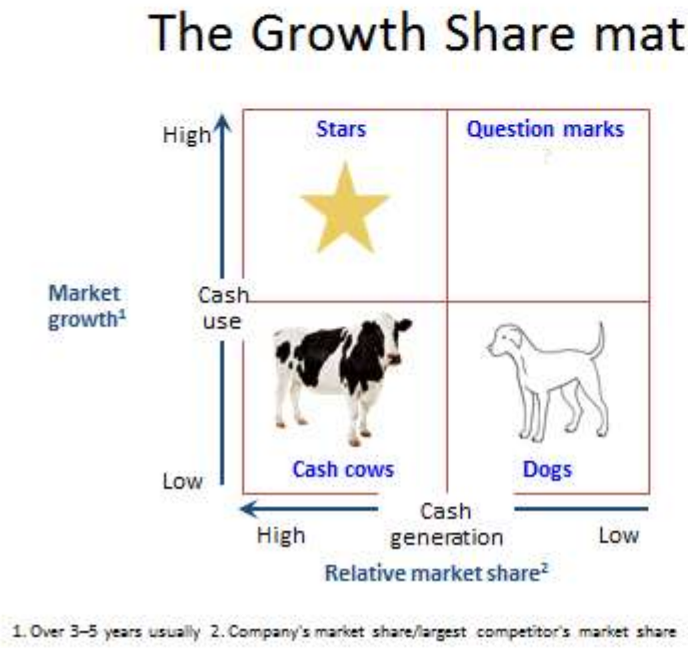
The experience curve suggests that the primary driver of advantage and attractiveness (to Henderson they were virtually synonymous) is relative cumulative experience. If you have twice the experience of a competitor this is likely to give you a significant cost advantage. BCG consultants were busy taking this insight to their clients. The implication was that businesses needed to aim for market leadership, which would give them greater volumes and greater cumulative experience. The measure they used was relative market share (the market share of the business divided by either the market share of the leading company or, if the business was the market leader, by the market share of the second largest player).

Meanwhile, Bruce Henderson was using the same experience curve insight to help conglomerates with their resource allocation problem. He argued that they should allocate resources so as to create businesses with high relative market share. In the event that it was not possible to become one of the leading players, the business should be sold or closed down. This had a big impact on management thinking. For example, in the 1980's Jack Welch of GE took the idea and turned it into his No 1 or No 2 strategy. Businesses in GE were required to develop plans that would take them to the first or second position in their global markets, otherwise Jack Welch would change the managers or sell the business.

The Growth Share Matrix

BCG then developed the famous Boston Consulting Group matrix. Individual businesses in a corporate portfolio could be positioned on two dimensions. The bottom axis was relative market share, a proxy for competitive advantage, profitability and cash flow generation. The vertical axis was growth, which reflected the investment needs of the business:

Exhibit 2.2. The Growth Share matrix



This matrix provided additional insight about which businesses were attractive and how to allocate resources. Businesses that had, or could develop, high market share were attractive. Size and growth were also attractive characteristics of a business, because bigger, faster growing businesses could generate more value than smaller, stagnant ones. Growth was indicated by the position of the business on the vertical axis. Size was indicated by drawing circles proportional to the revenue or assets of the business. This meant that the three contributors to attractiveness – size, growth and competitive advantage - could be seen on one chart.[xvi]

The BCG matrix built on the insights provided by the experience curve. It provided a richer guide to attractiveness and how resources should be invested. Corporates should take the cash generated by the Cash Cows and invest it in maintaining the leadership position of the Stars. Question Marks should get cash only if it was possible to turn them into Stars, through acquisition or market share gains. Otherwise they should be divested. Dogs should be divested (unless it was possible to consolidate the business with other competitors to create a Cash Cow). As the Stars matured, they would become the next Cash Cows, creating the cash to fund the next phase of investment into new Stars and Question Marks.

For example, GE's steam turbine business, with its high relative market share, would have been a Star during the phase when industry growth was high. During this period it would have needed enough investment to allow it to maintain or grow market share. It would have become a Cash Cow as industry growth slowed – at which time it would be expected to throw off cash for other businesses.

Over the same period, Allis Chalmers would have slipped from being a Question Mark to being a Dog. While it was a Question Mark it needed cash to grow not just with the market, but to build market share so as to approach the competitive position of GE. However, by the time growth flattened out, Allis Chalmers had failed to do this. Without radical restructuring, for example a merger with Westinghouse, there would be little future for this business because it would be unlikely to generate sufficient margins or cash to warrant continued investment.

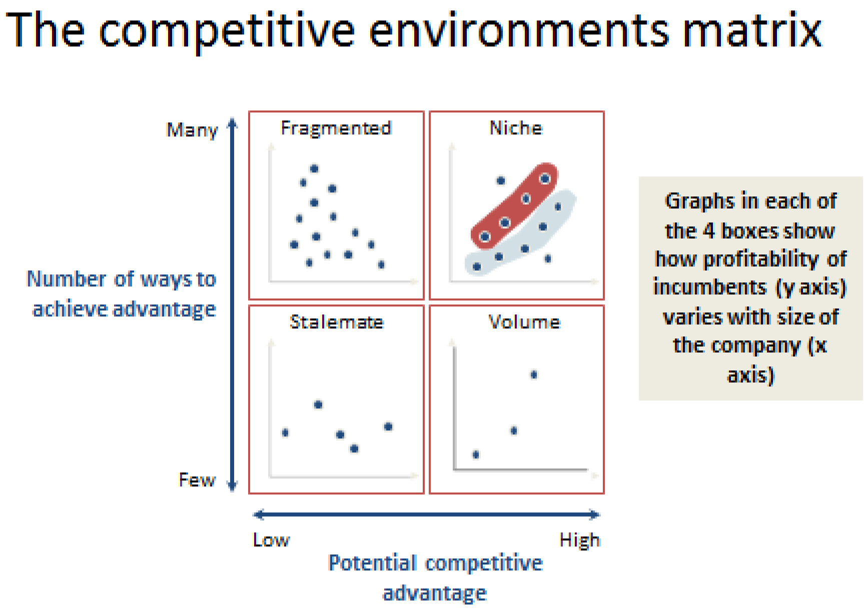
The matrix provided the strategic framework managers needed to allocate resources amongst their businesses. It also helped them decide which businesses to sell and which to keep. The matrix even had implications for the overall portfolio shape. Henderson assumed that cash needed to be recycled around the corporation, because raising equity was a risky business in volatile capital markets (and the 1970s was an especially volatile time). Therefore, attractive portfolios were those which were balanced, so that the amount of cash used by some businesses was balanced by the cash generated by the others.

Concepts of balance extended beyond cash balancing. Balanced portfolios should have high growth businesses to balance low growth businesses, and high profit businesses to balance businesses where an aggressive strategy might mean periods of low profits. Using these ideas, many companies restructured their portfolios, divesting low growth, low margin, low potential businesses and investing in higher margin or higher growth businesses. Monsanto, for example, used portfolio planning to restructure its portfolio, divesting low-growth commodity chemicals businesses and acquiring businesses in higher growth industries such as biotechnology.[xvii]

The BCG matrix assumed that cumulative experience drove competitive advantage and thus business attractiveness. Hence market share was the key to success. However, this razor-like focus on market share was challenged by others, including within BCG itself. Other factors were found to be drivers of advantage, such as patents, brand strength, the scale of individual plants, or focus on a limited number of product lines.[xviii] One study suggested that the experience curve was responsible for about 30% of differences in competitive success.[xix]

A further refinement to portfolio thinking at BCG came from the insight that the ability to build competitive advantage is not equally prevalent in all industries. The BCG Environments matrix (1981) proposed that there are four different types of industry, based on the potential size of the competitive advantage available to leaders, and how many ways there are to create advantage.

Exhibit 2.3. The Competitive Environments matrix



"Volume businesses" are particularly attractive because there are high economies of scale, allowing the leaders to earn particularly high returns. For example, in disposable diapers there are scale economies in the purchasing, manufacturing, distribution, sales, administration and branding functions – thus making it particularly profitable for the market leaders.

"Niche businesses" are attractive because they offer high returns to those who have market share in one or more niches within a broader industry – in effect the industry consists of a number of different volume businesses each competing in a particular niche. [xx]

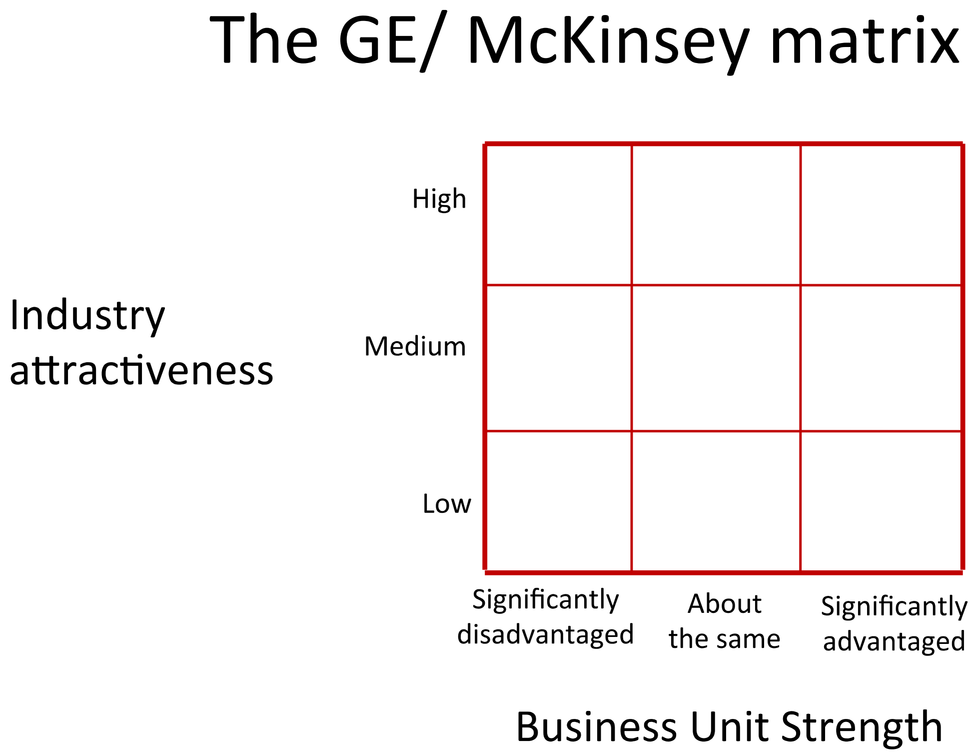
Other industries do not offer significant sources of advantage. No one player can earn superior profits over the long term. Such businesses are called "stalemate" or "fragmented" businesses and are associated with generally lower rates of profitability. The implication for corporate strategy is that attractiveness, and thus portfolio and resource allocation decisions, should not be based solely on growth rate and market share, but also on the characteristics of the industry and the potential for any competitor to make a healthy return.

At one level these developments in strategy, and the associated tools and frameworks, enabled corporate managers to be smarter about identifying attractive businesses, allocating resources and designing appropriate strategies for businesses. However, they also suggested that the sources of business attractiveness were more varied and business-specific than suggested by the original BCG matrix Corporate managers needed a framework for categorising attractiveness that would help them understand the strategic requirements of the business and guide resource allocation. It was BCG's consulting rival McKinsey who proposed an alternative tool that captured the greater complexity that managers needed.

The GE or McKinsey Matrix

Fred Gluck, a McKinsey director (eventually to become McKinsey's Managing Director), was determined to come up with a strategy framework that could challenge BCG and its eponymous matrix.[xxi] Working with General Electric in the 1970s, Gluck came up with a rival matrix (see below), which factored in some of the developments in thinking during the 1970s:

Exhibit 2.4. The GE or McKinsey matrix



Rather than plot the precise figure of Relative Market Share (RMS) on the horizontal axis, Gluck plotted the strength, competitive position or competitive advantage of the business unit. This was less precise than RMS, but provided a catchall for the wide range of sources of competitive advantage that were now acknowledged.

The vertical axis plotted market or industry attractiveness. This was less precise than the market growth rate used in the BCG matrix, but it included other dimensions that might make the market attractive for investment – for example, its size or its profitability. Being in a large market was good because it offered more potential for investment. This was of particular importance for large corporations such as General Electric who preferred focusing on a few large businesses rather than spreading themselves across many niche businesses.

Profitable markets (a concept that was not included in the BCG matrix), were self-evidently more attractive to invest in than less profitable markets. For example, the average return on capital employed in a market, such as pharmaceuticals, is nearly 30%.[xxii] The average return in a market, such as airlines, is nearer to 5%. In 1996 Southwest Airlines, one of the world's most successful airlines, earned a return on capital employed of 12%. In the same year, one of the most successful pharmaceutical companies, Glaxo Wellcome, earned 55%.

There was also less emphasis on the need for a "balanced" portfolio. Implicit in the application of the BCG matrix was the concept of balance. However, this idea was not fundamental to the GE/ McKinsey matrix.

While the BCG matrix advised managers to “sell Dogs, grow or divest Question Marks, grow Stars and create a balanced portfolio”, the GE/McKinsey matrix advised managers to “restructure bottom left, and invest in top right”. Businesses on the middle axis could be invested in if cash was available. But there were no explicit prescriptions for “balance”.[xxiii] The implicit idea here was that an attractive portfolio was one that provided “sustainable growth”, with a mix of established and developing businesses.

The concept of cash flow balance was still important, however. The available cash limited what could be invested in. But it was a constraint on strategy, rather than a core part of the underlying logic. To the extent that stock markets were liquid, this constraint could be relaxed, allowing for a more aggressive investment strategy.

BCG’s matrix was more powerful because its axes could readily be quantified. However, in the long run, the vagueness of the axes of the GE/ McKinsey matrix was also its strength. They could accommodate an ever expanding view of what made industries attractive – for example, the various factors suggested by Porter’s five forces (a framework that was not available when the matrix was first created).[xxiv] According to a BCG study, the two dimensions of the GE/ McKinsey matrix are the most popular criteria used by corporate managers to evaluate their business portfolios.[xxv]

The helicopter view provided by portfolio planning techniques was widely perceived as useful. For example, one CEO explained:

Portfolio planning became relevant to me as soon as I became CEO. I was finding it very difficult to manage and understand so many different products and markets. I just grabbed at portfolio planning, because it provided me with a way to organize my thinking about our businesses, and the resource allocation issues facing the total company. I became and still am very enthusiastic. I guess you could say that I went for it hook, line, and sinker.[xxvi]

During the 1970s, more and more corporations adopted portfolio planning, with the largest diversified companies being among the earliest adherents. One survey showed that by 1979, forty-five per cent of the *Fortune 500* companies were using some form of portfolio planning.[xxvii]

Portfolio planning reinforced the virtuous circle of corporate growth and diversification. It helped corporate-level managers correct past diversification mistakes, leading to divestitures of unattractive businesses, and it encouraged a mix of businesses, with different strategic (and cash) characteristics to ensure current performance and future growth.

Problems with Portfolio Management

Even as an increasing number of corporations turned to portfolio planning, practical problems emerged.[xxviii] Companies discovered that while certain businesses appeared attractive, they were not necessarily easy to manage. It turned out to be extremely difficult, for example, for corporate managers with long experience of managing mature businesses in a particular industry sector to manage new growth businesses in new, dynamic, and unfamiliar sectors.

Research on how companies actually used portfolio planning confirmed the difficulties of managing businesses with different strategic characteristics, missions, or mandates. Philippe Haspeslagh investigated whether companies adjusted their systems of financial planning, capital investment appraisal, incentive compensation, or strategic planning to fit the requirements of their different businesses. The focus of his study was on the role played by corporate-level managers, rather than on specific business-level strategies. He found that companies made few formal changes in their corporate-level systems. But, he also noted that in successful companies managers did make informal attempts to adapt these systems to their different businesses.[xxix] In another study on the effectiveness of portfolio planning techniques, the authors discovered that Cash Cows performed better in an organizational context of autonomy while fast-growing businesses benefitted from more control. The authors concluded that the administrative context was an important variable in explaining business performance, and that many companies were taking the wrong approach to some of their businesses.[xxx]

The recognition that different types of businesses needed to be managed in different ways undermined the arguments of both the Professional Management and Portfolio Planning schools. Many companies discovered that common systems and approaches, when applied to different kinds of businesses, helped improve some businesses but caused others to underperform. A focus on attractive businesses did not put tight enough boundaries on what types of businesses a particular management team should and should not own, and did not shed enough light on how these businesses should be directed and managed.

1980s: Back to Basics

During the 1980s, there was widespread scepticism about the ability of companies to manage and add value to diverse, conglomerate portfolios. Stock market analysts and observers highlighted the existence of a “conglomerate discount” – the degree to which the value of a particular conglomerate was less than the sum of its parts – the opposite of what proponents of the professional management and portfolio planning schools would expect. Raiders such as Carl Icahn and T. Boone Pickens demonstrated that they could acquire even the largest companies, break them up, and realize huge profits. This prompted a re-thinking of both the role of corporate management in large companies, and the kinds of portfolio strategies which were appropriate.

What seemed most obvious about the corporate level in many companies was not its contribution, but its cost. Thus, attention shifted to cutting headquarters costs. Some companies turned central services into profit centres, charged with selling their services to the business units, while other companies disbanded central functions altogether. The pruning of corporate staffs often meant devolving more authority to business divisions.[xxxi]

Companies also trimmed their portfolios. For example, in the 1960s only 1% of US firms refocused, while 25% diversified their portfolios. In contrast, in the 1980s 20% refocused while only 8% diversified[xxxii]. Refocusing was driven by a number of factors. Capital markets, which had rewarded diversifiers in the 1960’s, became sceptical. They also became more sophisticated, punishing underperformance and making takeovers more feasible. Managers who had been over-optimistic about their ability to manage diversified portfolios found that they were takeover targets. Rather than have their companies broken up, they discovered the benefits of focusing back onto their core businesses.

Value-Based Planning

Faced with the threat from corporate raiders and the criticism of academics, chief executives of diversified companies focused on shareholder value. They wanted to do whatever would drive up the value of their shares and reduce the risk of a hostile takeover. Again, consultants came to the rescue and value-based planning techniques were born. These techniques viewed the business as a shareholder might. Managers were encouraged to invest only in businesses where doing so increased their value.[xxxiii] The idea of attractive businesses was retained – but taken back to its fundamentals. Any business was attractive, so long as it generated value for shareholders.

Value-based planning, like portfolio planning, offered corporate-level managers a means of evaluating many different businesses using a common framework. Attractive businesses were those that could deliver "economic value" (a surrogate for share price gains). This provided corporate-level managers with a tool for portfolio planning and capital allocation.

Value-based planning was not just a way of selecting portfolios, it also came with a set of tools for managing businesses. Targets could be set on the basis of what would maximise shareholder return. The specific targets varied according to the particular models used. Some emphasised returns on capital employed above a cost of capital. Others emphasised cash generation. But all provided ways of setting targets, monitoring performance, designing incentive plans and educating managers in techniques that could be applied to a wide range of businesses. So, although value management originated as a way of measuring the attractiveness of a business, it rapidly developed into a more generalizable approach to managing large organisations. As such, value management contributed to both the Portfolio Planning and the Professional Management schools.

Value management techniques gained many adherents, especially among American corporations. In 1987 an article in *Fortune* described how "managements have caught the religion. At first reluctant, they pound at the door of consultants who can teach them the way to a higher stock price – a price so high it would thwart even the most determined raider."[xxxiv]

But value management also had limitations as a guide to corporate strategy. Like all financial tools, once the hurdle becomes clear, managers learn to manipulate the numbers so that future projects meet the hurdle. Also, it measures the outcome rather than the input. A higher stock price is a reward for creating value. But the key question remained. What sort of portfolios, managed in what sort of ways, would enable corporate-level managers to deliver superior performance?

With hindsight both portfolio matrices and shareholder value techniques were powerful tools for helping managers get out of the mess they had got themselves into. But they did not shine a light on where the real gold might lie.

The Synergy School

The Synergy School offered an approach a very different from that of the previous two schools. It suggested that corporate strategy should be built round linkages between businesses. If one or more businesses in the portfolio has a common activity or skill, and the cost of the activity or skill is driven by scale, utilisation or learning effects, then there may be benefits to sharing these activities or skills across businesses.[xxxv] Creating these benefits involves designing "linkages". The benefits themselves are "synergies".

The amount of value that can be created depends on the degree to which there are synergies from sharing activities or skills. This differs from the professional management school, which implies that the amount of value that can be created depends on the degree to which the management skills of corporate-level managers are greater than those of business-level managers.

Although the concept of synergy came to the fore in the 1990s, it has an older pedigree, dating back to Edith Penrose's "The Theory of the Growth of the Firm"[xxxvi]. Penrose, a Cambridge academic, saw two types of synergy: the sharing of indivisible resources (such as a large manufacturing facility), and the transfer of excess resources that are hard to trade (like excess management time). Igor Ansoff, often referred to as the father of strategic management, was the first author to work the synergy idea into a theory of corporate-level strategy. In his 1965 book, "Corporate Strategy", he identifies four types of synergy. The first three (Sales, Operating, and Investment) relate to sharing parts of the value chain (sales, distribution, purchasing, production processes, plant and equipment and inventory).[xxxvii]

The fourth, Managerial synergy suggests that knowledge gained in one business by a management team can be applied to another business – assuming that the problems faced by the new business are similar to the ones faced in the core business.

The concept of synergy provides clear insights into what businesses should be in the portfolio - only those where there are synergies with other businesses. It also suggests how to manage the businesses – identify where the synergies are and design linkages to release them.

Stick to the Knitting

The synergy school was given a boost in 1982 by Peters' and Waterman's *In Search of Excellence*. It arose as the result of a study conducted at McKinsey as a counterbalance to the types of ideas being promoted by the Professional Management and Portfolio Planning schools. Successful corporations, these two McKinsey consultants observed, did not diversify widely. They tended to "stick to the knitting" - specializing in particular industries and focusing intently on improving their knowledge and skills in the areas they knew best. Managers should move away from their core business only if there are large synergies to be had from connecting with another business.[xxxviii]

Stick-to-the-knitting advice was in part a reaction against the analytical techniques and impersonal approaches of professional managers and the growing fields of strategic and portfolio planning. Bob Hayes and Bill Abernathy, two Harvard economists also voiced this concern in their article "Managing Our Way to Economic Decline." In their view, too many American corporations were being run by "pseudo-professional" managers, skilled in finance and law, but lacking in technological expertise or in-depth experience in any particular industry. They warned that portfolios diversified across different industries and businesses were appropriate for fund managers, but not for corporations.[xxxix]

The need for experience and deep knowledge of a business was also emphasized by Henry Mintzberg, a Canadian academic, who criticized the "thin and lifeless" strategies that result from treating businesses as mere positions on a portfolio matrix. He argued that, instead of broad diversity, we need "focused organizations that understand their missions, 'know' the people they serve, and excite the ones they employ; we should be encouraging 'thick' management, deep knowledge, healthy competition and authentic social responsibility."[xl]

The widespread conviction that companies should stick to the knitting increased scepticism about the ability of corporations to manage and add value to diverse portfolios. It reinforced the practical pressures created by the corporate raiders and contributed to a wave of retrenching, refocusing and de-cluttering.

The case for synergy was powerfully made by Dick Rumelt, who showed that multi-business firms whose businesses were somewhat related, as defined by SIC codes, performed better than more diversified firms[xli]. He argued that related diversification offered more opportunities for the corporate parent to add value to the businesses. In this way, managers stick to what they know well, and are most likely to be able to exploit synergies. However, some argued that SIC codes were not always a good way to define "relatedness".

Chris Zook, a Bain & Co consultant, attempted to broaden the definition. He coined the term "adjacency" and argued that there are a large number of factors that can make a business adjacent: customers, products, channels, technologies, geographies, etc. [xlii]. However, companies should step into adjacent areas carefully. Ideally companies should only take on one dimension of difference (customer or product or channel or technology or …) each time they try a new business. If 90% of the new business is similar to existing businesses, the chances of synergy are much higher and the chances of misunderstandings and mistakes much lower.

Costas Markides and Peter Williamson also explored what defined "relatedness". They argued that the critical measure should be the degree to which businesses can share strategic assets such as brands, suppliers or market knowledge. Drawing on resource theory they argued that these strategic assets have to be valued by customers, rare, imperfectly tradable and costly to imitate[xliii]. Others have suggested that relatedness should be defined in cognitive terms.[xliv]

In other words, there have been a number of different attempts to clarify the synergy concept and make it practically useful to managers.

Problems with Synergy

One challenge came from academics trying to copy Rumelt's research. Empirical evidence on the performance of companies pursuing more and less related strategies was ambiguous and contradictory. Many studies compared the performance of single-product firms, companies that diversify into related products, markets, or technologies, and unrelated conglomerates, but no clear relationship between different diversification strategies and performance was confirmed.

Another challenge came from companies that appeared to stick to a related industry but still encountered significant problems. For example, during the 1980s, companies such as Prudential and Merrill Lynch sought to combine different types of financial services businesses. They discovered that businesses such as insurance, stockbroking, and banking, though all in the financial services industry, nonetheless required very different approaches, resources, and skills.

A third challenge came from the difficulty many companies had in realising synergies. As one observer commented, synergy benefits "… show an almost unshakeable resolve not to appear when it becomes time for their release."[xlv]

A fourth challenge came from a study of performance improvements following acquisitions. The researchers concluded that most improvements arise from asset disposals and restructuring rather than from synergies.[xlvi]

A fifth challenge came from Marcus Alexander's 'blockages' theory. Alexander, a consultant turned academic, proposed that most synergies happen quite naturally in the free market. The sorts of synergies that justify bringing two businesses under the same ownership are quite rare. These are synergies that can only be released as a result of common ownership: synergies that are 'blocked' from occurring between independent companies. 'Blocks' include things like laws, such as those against cartels or those that make it hard to share tax benefits, relationship difficulties or strategic differences between managers, skill deficiencies and institutional voids, such as a lack of an efficient capital market. As a result, many related businesses may be able to release synergies without common ownership.[xlvii]

The Return of Synergy

Despite these problems, by the 1990s synergy became virtually synonymous with corporate-level strategy. Partly this was in response to the failure of diversified companies. Partly it was the result of the prescriptions of prominent academics. Michael Porter, the Harvard strategy guru, viewed the management of interrelationships between businesses as the essence of corporate-level strategy.[xlviii]

Porter argued that diversification would succeed only if it added value to the acquired businesses. The most typical way of doing this was through two types of synergy. The first occurred when business units shared activities that were important sources of competitive advantage: Procter & Gamble's businesses shared a common distribution system and sales force; McKesson had a common warehousing system to serve markets ranging from pharmaceuticals to alcohol. The second type of synergy came from transferring skills between businesses – for example PepsiCo's branding skills and 3M's technologies.[xlix]

Porter was not alone. Rosabeth Kanter, another Harvard guru, argued that synergy is the only justification for a multi-business company.[l] And Friedrich Trautwein, a German academic, found that managers almost always justified diversification moves in terms of the synergies available. He also noted that most of the advice in the management literature on diversification was based on the concept of realizing synergies.[li]

Core Competences

Despite, or possibly because of, the difficulties managers were having building portfolios around synergies, the synergy school gained huge credibility with the publication, in the Harvard Business Review, of an article titled "The core competence of the corporation" by Gary Hamel and C.K. Prahalad, academics from London and Michigan. They argued that the best multi-business companies have a core competence: an organisation skill that is important to the success of every business in the portfolio. This competence is nurtured by corporate-level managers and is present in every business team.

Core competences, they argued, are the glue behind successful multi-business groups. The added value comes from the superiority of the competence, which helps every business succeed. The company should enter businesses that can benefit from or help build the core competence. Corporate level-managers should run the company so as to nurture the core competence.

The corporate portfolio should not be perceived as a group of businesses, but as a collection of such competences. In managing the corporate portfolio, managers ensure that each part draws on and contributes to the core competences the company is seeking to build and exploit. Even a poorly performing business may be contributing to a core competence, and, if managers divest such a business or underinvest in it, they may be undermining some part of their core competences. Businesses that do not benefit from, or contribute to, the core competences should be sold.[lii]

Following publication, managers leapt on the idea of core competences and launched many projects to identify their core competences. But after much effort, most companies found it hard to isolate these core competences or to guide their corporate strategies by this light. For example, Texas Instruments attempted to exploit the core competence it had developed in its semi-conductors business in areas such as calculators, watches and home computers. It failed in these new areas because its top management had no experience in managing such consumer-oriented businesses.[liii] Similarly, Procter & Gamble applied its skills in product innovation and consumer promotion to a soft drinks business, Crush, but eventually divested the business because it ran into unfamiliar problems managing the local bottlers who largely control distribution of soft drinks.[liv]

The Capital Markets School

While academics and consultants were developing different schools of thought about which businesses to buy and how to own them, practitioners were developing their own ideas in parallel. Many managers focused not just on professional management, attractive businesses and generating synergies but also considered whether some businesses could be purchased for a particularly low price, or sold for a particularly high one.

The logic was that capital markets did not always price businesses correctly, creating arbitrage opportunities. For example, James Hanson of Hanson Trust based his corporate strategy partly on buying businesses at a competitive price. One of his most impressive takeovers was that of Imperial Tobacco Group in 1986. Hanson paid £2.5 billion for the group, sold a number of businesses for £2.3 billion, leaving him with the highly profitable tobacco business at a cost of £200 million. Hanson avoided overpaying for acquisitions by identifying "downside risks" that might result in over-estimation of the value. Hanson was also willing to sell any business if another company offered him more than it was worth under Hanson ownership. In summary, Hanson was constantly looking for opportunities to take advantage of vagaries in capital markets - buying cheaply, or selling at a high price.

More recently, private equity companies spend considerable time evaluating the price at which they can sell a business. While they do not necessarily look to buy cheaply, they are careful to ensure that they will be able to sell at an attractive multiple. This involves thinking about who might buy, how many buyers there would be, how they would value the business and what prospects the current acquisition target has of being in adequate shape to sell in a few years.

Unlike the previous three schools, few academics or consultants have considered this way of thinking a valid approach to corporate strategy. Finance academics tended to espouse the efficient markets hypothesis which proposed that stock prices fully reflected the implications of all publicly available information. This still left the opportunity for those with unique information to spot arbitrage opportunities, but this was difficult to research. Finance academics also tended to research capital markets about which there was lots of information – which were typically the capital markets used by large US companies, where the efficient markets hypothesis was most likely to apply. Testing the idea that, for example, small companies sometimes traded at prices below the value of their future cashflows was very difficult to do – and so received limited attention.

Similarly, the high profile strategy consultants such as BCG or McKinsey, who did much to develop thinking about corporate strategy, tended to believe that shareholder value was driven by the strategies they espoused rather than by anomalies in capital markets. Specialists in value management might have been expected to include arbitrage opportunities as one way to generate shareholder value. However, they tended to espouse the efficient market hypothesis – perhaps partly because this validated their argument that it was possible to predict how management action would lead to changes in share prices.

The investment banks, who might have been interested in developing such theories, tended not to publish them if they had them. Arbitraging capital markets remained something many corporate managers thought they did – but there was limited investigation of whether it was a credible strategy.

One person in particular has brought the idea of arbitraging capital markets as part of corporate strategy to the fore. Warren Buffett's investment strategy has been immensely successful and rests partly on acquiring businesses cheaply. His strategy rested on two assumptions. First, that markets are sometimes overheated (and expensive) and sometimes fearful (and cheap). This is captured in one of his famous mantras - that investors "should try to be fearful when others are greedy and greedy only when others are fearful." Another component of his investment strategy is that stock prices may not fully reflect the long term value of certain sources of advantage – such as a strong brand in a mature market.

Towards a Synthesis

Many of the ideas, practitioners, strategies, researchers and writers previously mentioned can be located broadly in one or other of the four schools. This is perhaps a surprise, as the various viewpoints on what corporate strategy should focus on are not necessarily exclusive. It should be possible to improve business unit performance with a mix of professional management skills <u>and</u> synergies. Warren Buffett's success suggests that it is possible to invest in attractive businesses <u>and</u> buy them at low prices.

Some have come close to a more integrated perspective – without fully developing the idea. For example, Ansoff's original definition of synergy included both the linkages between businesses and the application of knowledge gained in one business and applied by headquarters managers to another – but this was not developed to consider how a corporate team might develop superior skills and apply them to a range of businesses.

Michael Porter, who emphasised synergies as the basis for most good corporate strategies, noted that restructuring was an alternative – highlighting Hanson Trust as an example. Hanson focused on improving performance in mature businesses. Indeed, part of Hanson's strategy was to avoid any attempt to manage linkages from the corporate level. However, Porter treated restructuring as a special case and it was the only example he identified that fits the Professional Management school.

Dominant Logic and Management Style

The idea of "dominant logic", proposed by C.K. Prahalad and Richard Bettis offers one way to integrate the various logics. They argue that *"The dominant logic is the lens through which managers see all emerging opportunities (options) for the firm"*[lv]. It is also the lens that guides their management behaviour. For example, managers may believe that success comes from high margins gained by offering customers high service levels. If this "dominant logic" fits the businesses in the portfolio it is likely to add value. The whole is likely to be more than the sum of the parts. But where the dominant logic does not fit the business, the influence from the corporate level can subtract value. Corporate-level managers may push businesses into adding service features that customers do not want, or raising prices to levels that customers are not prepared to pay.

In this view, the dominant logic or management style of the corporate management group is central to the performance of a multi-business firm, and a group of businesses is best managed when the dominant logic of top managers matches the strategic characteristics and requirements of the businesses.

Dominant logic may help explain why some diversification can succeed, and also why many diversification strategies, even those based on synergies, can fail. For example, businesses with opportunities for sharing activities or skills may nonetheless have different dominant logics. Vertical integration is a classic example. Upstream businesses, like farming, typically have different logics (different business models) to midstream businesses, like food manufacturing, which also have different logics to downstream businesses, like food retailing. This can make it difficult for corporate-level managers to realize synergies by vertical integration without risking significant subtracted value.

While the dominant logic concept seemed to explain many experiences, it was hard to apply in a particular company. Managers found it difficult to identify their dominant logic in a way that helped them make decisions. Also managers were uncomfortable with a concept that appeared to limit their capacity to change. As a result, despite its promise, it never evolved into a professional management technique.

Resource theory

Another promising viewpoint, that integrates the Professional Management and Synergy schools, is the Resource-Based View of strategy - developed during the 1980s. This theory proposes that it is the unique "resources" owned by companies that provide the basis for competitive advantage.[lvi] These resources can be physical assets (such as a global network of warehouses), intangible assets (such as a brand) or capabilities (such as a professional management process). Valuable resources are those that are important, superior to competitors, hard to copy or substitute, long lasting, and controlled by the company rather than by other parties such as its employees or suppliers. In many cases resources that meet these tests are the intangible assets or the capabilities, rather than the physical assets which can often be replicated.

David Collis and Cynthia Montgomery, two Harvard professors, brought resource theory to a more managerial audience in the 1990s. Resources, they argued, are the source of competitive advantage for any business unit. They can also be the basis for a corporate-level strategy when the resources can be applied to multiple businesses. Some of these resources are valuable because they create synergies between businesses – for example, a corporate brand, a logistics network, shared research and development, or centralised training and development. But, there are also capabilities that are held by a corporate management team who then apply them to various businesses that are otherwise left to operate autonomously. For example, they describe Cooper Industries, a diversified manufacturer, which created a manufacturing services group to spread best manufacturing practices across the company. This fits the prescriptions of the professional management school. [lvii]

Markides and Williamson, mentioned earlier, also use resource theory to blur the boundaries between the professional management and synergy schools. Their view is that a successful corporate strategy is one that allows the different businesses to share a strategic asset – but the definition of a strategic asset is rather broad. For example, Markides describes Boddington, a regional UK brewer, as being successful because its strategic asset was that it excelled at running pubs – a mix of synergies (for example in purchasing) and professional management skills (corporate managers have superior management skills to individual pub managers)[lviii].

Resource theory thus offers the basis for a synthesis of two schools of corporate strategy. However, it has never really developed to be used by managers and corporate strategists.

Parenting Advantage and Adding Value

A further contribution was made by Michael Goold and Andrew Campbell in their book, Strategies and Styles. They examined a number of different corporate organisations and suggested that their management approach fell into three groups. “Financial Control” companies, such as Hanson Trust or BTR followed an approach consistent with the Professional School – using a standard set of financial metrics, processes and associated HR systems to manage business units in a common fashion. Financial Control parents typically did not seek to extract synergies from the businesses they owned. “Strategic Planning” companies, on the other hand, worked closely with business unit managers on the long term strategy of each business, including the search for synergies. A third style, “Strategic Control”, fell between these two more extreme models, and could include elements of both the Professional Management and Synergy schools. The implication is that corporate managers could and did utilise the ideas of both schools – sometimes leaning more towards the prescriptions of one school but frequently mixing the two.[lix] This approach provided a way of integrating the insights from both schools, but implied that there were only three primary styles, and in fact two of them were extremes. This did not provide many options for corporate managers to choose between.

These two authors, joined by Marcus Alexander, developed these ideas into the concept of “parenting advantage” – that the goal of any corporate organisation should be to add more value to its businesses than any other owner. Value can be added by a variety of approaches – thus bringing together the ideas of different schools. For example, ABB generated synergies by integrating small companies into a global network, and applied professional management techniques, such as a ruthless approach to cutting overhead costs[lx]. Goold et al. also focused on the issue of subtracted value, mirroring concerns raised by the Prahalad’s concept of dominant logic and Zook’s concept of adjacency, and by researchers who had observed the many ways in which multi-nationals failed to generate the performance levels they expected from their strategies.

The idea of “parenting” to “add value” pulls together the approaches by the Professional Management and Synergy schools. However, it does not integrate the ideas of the other two schools. Adding value implies that managers should not worry about the underlying attractiveness of their businesses. In practice corporate managers spend a lot of time seeking attractive industries or niches where they can invest. Those who are successful in developing attractive businesses can generate significant value for shareholders even if they are not the best parents of the businesses.

A recent survey indicated that while parenting advantage is a widely used concept, it is competing with a number of the concepts developed by the Portfolio Management school – such as competitive advantage, industry profitability and value management.[lxi] It appears that, at least from the point of view of practitioners, parenting advantage is part of the answer, but not all of it.

Goold et al also largely ignored the arbitrage opportunities offered by capital markets inefficiencies.

Practitioners

While there have been some attempts to develop more integrated theories about corporate strategy, practitioners have been combining these different approaches to corporate strategy and putting them into practice.

We have already mentioned Warren Buffett. Berkshire Hathaway's corporate strategy is based partly on buying attractive businesses - for example, companies with strong consumer brands in relatively mature markets. It also creates value by arbitraging capital markets. For example, Buffett waits to buy an attractive business at a point when it is undervalued. He also invests in insurance companies which provides him access to low cost capital and buys low beta stocks, which have historically been undervalued by capital markets.[lxii]

Since the 1990s private equity has provided a highly successful new model for strategists to evaluate. Given the booms and busts within private equity, opinion varies on whether private equity offers significant lessons for the long term. Some argue that private equity has thrived primarily because of temporary advantages, such as a lower tax rates. However, where it has succeeded, private equity is best explained by a mix of the four schools.

Private equity firms buy to sell. They acquire good businesses that can be made more attractive (portfolio planning school) and drive improvements largely through a combination of target setting and incentives (professional management school). Some have argued that the only management skill that private equity brings is financial engineering – replacing equity with mezzanine debt. Even if this is true, it is still a professional management skill that is applicable to any business that does not have a well design financial structure.

Private equity companies are very concerned to buy businesses which can be sold at a high multiple in a few years – for example, because there are a number of potential well-funded acquirers. They also exploited the market for cheap debt especially in the early 2000s (capital markets school).

Private equity firms rarely make any attempt to generate synergies among their portfolio companies. But they do create synergies within a portfolio company through bolt-on acquisitions (synergies school).

International Strategy

In this review of thinking on corporate-level strategy, we have not included work by academics and consultants whose primary focus is international strategy. This is because much of the work on international strategy is focused at the business level rather than at the corporate level.   However, the reverse is also true. It is possible to see international strategy as almost completely overlapping with and hence a special case of corporate-level strategy: the issue is the choice of countries and how to manage them rather than the choice of businesses and how to manage them.

Rather than extend this chapter to cover international strategy ideas, we address them in the Appendix.   There we show how the two sets of ideas have evolved in parallel and where each can contribute something to the other.

Conclusions

Corporate strategy seeks to answer two questions: Which businesses to own, and how to manage them for maximum performance. Thinking in the past has been influenced by four broad schools of thought each of which offers valuable insights into what makes for a successful corporate strategy. The writers and researchers in one school often ignore, or understate the insights of the others – although some have suggested how these four perspectives might be more integrated or used together.

The three logics, we argue, build on and expand the insights of the four "schools". They offer three ways in which corporate strategy can be evaluated and developed.

The proposition that corporate groups need to add value through some combination of professional management skills, specialist skills tailored to a sector or type of business and linkages that create synergies is not disputed. Since Ansoff, managers in corporate-level jobs have been searching for the best ways to add value. This proposition is our "Added Value Logic". It combines the insights from both the Professional Management and the Synergy schools and adds in the observation that corporate headquarters frequently subtracts value.

The proposition that it is preferable to own attractive businesses that have competitive advantage in profitable markets is also not disputed. Owning a portfolio that allows you to make significant investments into growing businesses that offer high returns is clearly better than the alternative. This proposition is our "Business Logic". It derives from the Portfolio Planning school and the excellent work consultants and academics have done to understand what drives high profitability.

The proposition that capital markets offer opportunities for value-creating arbitrage is less broadly supported by research and more debated – but we know that it plays a role in many corporate strategies. While some still argue that capital markets are efficient, the roller coaster ride through the late 1990s and first ten years of the 21st century has laid the capital market's strengths and weaknesses on to the table. It has also led to new theories about the behavioural dimension of capital markets, that explain why the market can overvalue and undervalue companies. These theories are the basis of our "Capital Markets Logic". Companies, we argue, need to take into account the state of the capital markets when they are developing corporate level strategies.

What follows therefore is built on solid ground. It has been hard earned from 50 years of experience, driven by theory and by trial and error.   We now believe we know the core principles that managers should use to drive their corporate-level strategies.

[i] This chapter draws heavily on "Why diversify? Four decades of management thinking", by Michael Goold and Kathleen Luchs, Academy of Management Executive, 1993, Vol 7. No. 3. Many passages are taken verbatim from this article, although they are not indicated by quotation marks.

[ii]Kenneth R. Andrews, "Product Diversification and the Public Interest," *Harvard Business Review*, July 1951, 91-107; "Toward Professionalism in Business Management," *Harvard Business Review*, March-April 1969, 49.60.

[iii] Peter Drucker, The Practice of Management (New York, 1955; re-issued Pan Books, 1968), 21.

[iv] Robert L. Katz, "Skills of an Effective Administrator," *Harvard Business Review,* January-February 1955, 37.

[v] David N. Judelson, "The Conglomerate-Corporate Form of the Future," *Michigan Business Review*, July 1969, 8-12; Reprinted in John W. Bonge, and Bruce P. Coleman, Concepts for Corporate Strategy (New York, NY: Macmillan, 1972), 458.

[vi] Harold Geneen, with Alvin Moscow, *Managing* (New York, NY: Doubleday, 1984).

[vii] Norman Berg, "Textron, Inc.," HBS Case Study, 373-387, 1973, 16.

[viii] Kenneth R. Andrews, "Product Diversification and the Public Interest," *Harvard Business Review*, July 1951, 98.

[ix] Robert S. Attiyeh, "Where Next for Conglomerates?" *Business Horizons*, December 1969, 39-44; Reprinted in John W. Bonge and Bruce P. Coleman, *Concepts for Corporate Strategy* (New York, NY: Macmillan, 1972); Geneen, op. cit., 43.

[x] Peter Drucker, "Long-Range Planning: Challenge to Management Science," *Management Science,* Vol.5, No.3, 1959-238-49; Igor Ansoff, *Corporate Strategy* (New York: McGraw-Hill, 1965); Alfred P. Sloan, *My Years with General Motors* (New York: Doubleday, 1963) (re-issued by Penguin Books, 1986); Alfred D. Chandler, Jr., *Strategy and Structure* (Cambridge: MIT, 1962)(re-issued 1982); Myles L. Mace, "The President and Corporate Planning," *Harvard Business Review,* January-February 1965, 49-62.

[xi] C. Roland Christensen, and others, *Business Policy*: Text and Cases (Richard D. Irwin, 1965).

[xii] R.F. Vancil and P. Lorange, "Strategic Planning in Diversified Companies," *Harvard Business Review,* January-February 1975, 81-90; Peter Lorange and Richard F. Vancil, *Strategic Planning Systems* (New Jersey: Prentice-Hall, 1977); K.A. Ringbakk, "Organized Planning in Major U.S. Companies," *Long Range Planning*, Vol.2, No. 2, December 1969, 46-57; Norman A. Berg, "Strategic Planning in Conglomerate Companies," *Harvard Business Review,* May-June 1965, 79-92.

[xiii] Louis V. Gerstner, "Can Strategic Management Pay Off?" *Business Horizons*, Vol. 15, No.6, December 1972, 5.

[xiv] Joseph L. Bower, *Managing the Resource Allocation Process* (Harvard Business School Press, 1970), Harvard Business School Classics Edition, 1986.

[xv] The Boston Consulting Group on Strategy, Edited by C W Stern and MS Deimler, Wiley, New Jersey, 2006, pp12-14, copied from a BCG Perspective, Bruce Henderson, 1973

[xvi] Stern and Deimler, *op.cit.* pp.35-37

[xvii] Richard G. Hamermesh, *Making Strategy Work,* (New York: John Wiley & Sons, 1986)

[xviii] Stern and Deimler, *op.cit.* pp.35-37, BCG Persepctive, Business Environments, Michael Goold, 1979

[xix] The PIMS Principle: Linking Strategy to Performance, Robert Buzzell, Bradley Gale, The Free Press, 1987

[xx] Stern and Deimler, *op.cit.* pp.56-59, BCG Persepctive, Business Environments, Dick Lockeridge, 1981

[xxi] The Lords of Strategy, Walter Kiechel III, Harvard Business Press, Boston, 2010

[xxii] The Five Competitive Forces that Shape Strategy, Michael Porter, Harvard Business Review, January 2008, pp.79-93

[xxiii] https://www.mckinseyquarterly.com/wrapper.aspx?ar=2198&story=true&url=http%3a%2f%2fwww.mckinseyquarterly.com%2fEnduring_ideas_The_GE-McKinsey_nine-box_matrix_2198%3fpagenum%3d1%23interactive_ninebox&pgn=frameworks_ninebox

[xxiv] Michael Porter published his two seminal books, "Competitive Strategy" and "Competitive Advantage" in 1980 and 1985 respectively. They came after both the BCG and McKinsey matrix, but developed the concepts of these two strategy tools to a much greater level of detail and rigor. Competitive Strategy showed how industry structure (the five forces) influenced industry profitability. Competitive Advantage codified and developed much of the thinking about this topic that firms such as BCG had developed in the 1970s, and formalised the idea of the value chain as a way of analysing competitive advantage.

[xxv] Corporate Portfolio Management: Theory and Practice, Journal of Applied Corporate Finance, Morgan Stanley, Vol 23, Number 1, Winter 2011
[xxvi] Richard G Hamermesh, Making Strategy Work, New York, John Wiley & Sons, 1986
[xxvii]Philippe Haspeslagh, "Portfolio Planning: Uses and Limits," *Harvard Business Review,* January-February 1982, 58-73.
[xxviii] Richard A. Bettis and William K. Hall, "The Business Portfolio Approach – Where It Falls Down in Practice," *Long Range Planning,* vol. 16, no.2, April 1983, 95-104.
[xxix] Haspeslagh, op. cit.
[xxx] Richard G. Hamermesh and Roderick E. White, "Manage Beyond Portfolio Analysis," *Harvard Business Review,* January-February 1984, 103-109.
[xxxi] Rosabeth Moss Kanter, *When Giants Learn to Dance* (London: Simon & Schuster, 1989) 94; Thomas More, "Goodbye, Corporate Staff," *Fortune*, December 21, 1987.
[xxxii] Corporate Refocusing, C Markides, Business Strategy Review, Spring 1993, Vol 4, no.1, pp.1-15
[xxxiii] Alfred Rappaport, *Creating Shareholder Value: The New Standard for Business Performance* (New York, NY: Free Press, 1986); Bernard C. Reimann, *Managing for Value* (Oxford: Basil Blackwell, 1987).
[xxxiv] John J. Curran, "Are Stocks Too High?" *Fortune*, September 28, 1987, 24.
[xxxv] Porter, Michael (1985). "Competitive Advantage", New York, The Free Press(p. 328)
[xxxvi] The Theory of the Growth of the Firm, New York, John Wiley and Sons, 1959
[xxxvii] Igor Ansofff, Corporate Strategy (New York, NY: McGraw-Hill, 1965).
[xxxviii] Thomas J. Peters and Robert H. Waterman, *In Search of Excellence* (New York, NY: Free Press, 1982).
[xxxix] Bob Hayes and Bill Abernathy, "Managing Our Way to Economic Decline," *Harvard Business Review*, July-August 1980, 67-77.
[xl] Henry Mintzberg, *Mintzberg on Management* (New York, NY: Free Press, 1989), 373.
[xli] Richard Rumelt, Strategy, Structure and Economic Performance, Division of Research, Graduate School of Business Administration, Harvard University, 1974
[xlii] Profit from the Core, Harvard Business School Press, 2001, Boston, Mass
[xliii] Corporate Diversification and Organisational Structure: A Resource Based View, C Markides and P Williamson, Academy of Management Journal, 1996, Vol. 39, No 2, 340-367
[xliv] Collis D and Montgomery C, 1996, Corporate Strategy: Resources and the scope of the Firm, Burr Ridge, Il: Irwin
[xlv]Richard Reed and George A. Luffman, "Diversification: the Growing Confusion," *Strategic Management Journal*, vol.7, 1986, 34.
[xlvi] S.Chatterjee, "Sources of Value in Takeovers: Synergy or Restructuring," *Strategic Management Journal*, Vol.13, no.4, May 1992, 267-286.
[xlvii] *Corporate-Level Strategy*, M Goold, A Campbell and M Alexander, 1994, Wiley, New York . The blockage ideas were further developed in A Campbell and M Goold, *Synergy,* Persus Books, 1998
[xlviii] Michael E. Porter, *Competitive Advantage* (New York, NY: Free Press, 1985).
[xlix] From Competitive Advantage to Corporate Strategy, Michael E. Porter, *Harvard Business Review*, May 1987
[l] Kanter, op. cit., 90.
[li] Frederich Trautwin, "Merger Motives and Merger Prescriptions," *Strategic Management Journal*, vol.11, 1990, 283-295.
[lii] C.K. Prahalad, and Gary Hamel, "The Core Competence of the Corporation," *Harvard Business Review,* May-June 1989, 63-76.
[liii] C.K. Prahalad and R.A. Bettis, "The Dominant Logic: A New Linkage Between Diversity and Performance, "*Strategic Management Journal*, vol.7, 1986, 495.
[liv] Patricia Winters, "Crush Fails to Fit on P&G Shelf," *Advertising Age*, July 10, 1989.
[lv] Prahalad, C. K. 2004. "The blinders of dominant logic". *Long Range Planning*, 37: 171-179
[lvi] Robert M. Grant, "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation," *California Management Review*, Spring 1991, 114-135.
[lvii] Competing on Resources: Strategy in the 1990, David Collis and Cynthia Montgomery, Harvard Business Review, 1995
[lviii] To Diversify or Not to Diversfy, C Markides, Harvard Business Review, Nov-Dec 1997, pp 93-99
[lix] Strategies and Styles, M Goold and A Campbell, Oxford, Basil Blackwell, 1987
[lx] Goold, Campbell and Alexander, *op.cit*

[lxi] Corporate Portfolio Management: Theory and Practice, Ulrich Pidun, Harald Rubner, Matthias Kruehler, Robert Untiedt, and Michael Nippa, Journal of Applied Corporate Finance, Vol 23, Number 1, Winter 2011 pp.63-76

[lxii] The secrets of Buffett's success, The Economist, Sep 29th 2012