

TRANSACTION COST THEORY AND MANAGEMENT CONSULTING

Why Do Management Consultants Exist?

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by

Staffan Canbäck

**Henley Management College
Brunel University**

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1. OVERVIEW OF THE MANAGEMENT CONSULTING INDUSTRY

Despite current popularity and astounding growth rates, management consulting remains one of the least researched and written about industries (Gagnon 1984). We take for granted that the industry should exist and function in the way it does. Yet the tremendous growth of the management consulting industry over the last twenty years cannot be explained easily. As “Bernie Ramsbottom” of the Financial Times (April 11, 1981) put it:

Of all the businesses, by far
 Consultancy's the most bizarre.
 For to the penetrating eye,
 There's no apparent reason why,
 With no more assets than a pen,
 This group of personable men
 Can sell to clients more than twice
 The same ridiculous advice,
 Or find, in such a rich profusion,
 Problems to fit their own solution.

Solely for purposes of analysis in this paper, management consultants are defined as those who provide general management advice within a strategic, organisational, or operational context, and who are institutionally organised in firms. It excludes other types of consulting, and it excludes management consultants who are not institutionally

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organised. My estimate is that the chosen segment of the consulting market accounts for around 30 to 40 per cent of total consulting revenues, and 80 per cent of management consulting revenues.

What is management consulting? According to Greiner and Metzger (1983): "management consulting is an advisory service contracted for and provided to organizations by specially trained and qualified persons who assist, in an objective and independent manner, the client organization to identify management problems, analyze such problems, recommend solutions to these problems, and help, when requested, in the implementation of solutions."

There are a few key words in this definition. "Advisory service" indicates that consultants are responsible for the quality of their advice, but they do not substitute for managers and have no formal authority. "Objective and independent" indicates financial, administrative, political, and emotional independence from the client (Kubr 1996). "Trained and qualified" shows that a consultant is more than the individual and his or her personal experience. As will be seen, these elements in the makeup of management consulting sometimes contribute to the demand for external consulting services, and sometimes detract from it.

1.1 HISTORY OF MANAGEMENT CONSULTING

Within the context of the above definition, management consulting has a long history (see Moore 1982; Kubr 1996; UNCTAD 1993). The first management consultants appeared around the turn of the last century and included individuals such as Frederick Taylor, Henry Gantt, Arthur D. Little and Harrington Emerson, all of whom are still famous for their contributions to the science of management. Little and Emerson also started two of the first consulting firms. These pioneers were mainly concerned with operational efficiency issues such as Taylor's time-and-motion theory.

Between 1910 and 1940, a second generation of consultants expanded the concept of management consulting. Edwin Booz started offering "business research services" in 1914, and James O. McKinsey started McKinsey & Company in 1926. In Europe, Lyndon Urwick and Charles Bedeaux were pioneers who contributed extensively to defining management consulting in the 1920s. These consultants pioneered or implemented techniques such as budgeting processes, the divisionalised organisation, merit-based compensation schemes, and forecasting techniques.

During the early post-war years, and in many cases growing out of wartime experience, consulting experienced a big surge with the

formation of such firms as Cresap, McCormick & Paget, William E. Hill, Bruce Payne & Associates, Hay Associates and Towers Perrin.

Three major developments took place in the 1960s. First, Bruce Henderson moved from the Arthur D. Little firm to start the Boston Consulting Group in 1963, and more or less single-handedly operationalised the concepts of strategy and strategy consulting. Out of this sprang a second generation of strategy specialists such as Bain & Company, Strategic Planning Associates, Braxton Associates, LEK Partnership, and Monitor Company.

Second, the major accounting firms started responding to the growth of management consulting and created management advisory service groups to augment their core accounting practices. Today the consulting practices of Andersen Worldwide, PricewaterhouseCoopers, Deloitte & Touche and Ernst & Young often rival the accounting activities of these firms in size.

And third, also starting in the 1960s with the emergence of Cambridge Research Institute and Management Analysis Center, firms institutionalising the combined consulting practices of leading academics and practitioners began to make their presence known.

Even as late as 1980, despite a growing proliferation of specialties, management consulting was still in its infancy as an industry with

perhaps around 18,000 practicing management consultants worldwide, and only 30 to 40 per cent of these employed in the large, institutionally organised firms of the type mentioned above' (Consultants News 1982-1998; Payne 1986). Even the largest consulting firm in those days, Booz Allen & Hamilton, had revenues of only around \$150 million. The industry as a whole had revenues of \$1.2 billion in the United States, and worldwide perhaps \$2 billion.¹

Over the next seventeen years, the management consulting industry grew to around \$35 billion globally. The annual growth rate was more than 20 per cent. Today there are approximately 140,000 consultants worldwide (a considerable percentage of the more recent growth is accounted for by information technology projects manned less by management consultants than by systems integration specialists).

This growth is impressive, but the true importance of the industry's evolution is the accumulation of institutional knowledge. In 1980 there were less than five consulting firms with more than 1,000 consultants. Today, there are more than thirty. If the experience curve applies in consulting services, then it may be noteworthy that approximately 80 per cent of all consulting experience was generated in the last seventeen years,

¹ The numbers presented in this section are the author's reconciliation of several sources. They are broadly in line with those of most observers.

and only 20 per cent in the period from 1886 (when Arthur D. Little started the first consulting firm) to 1980. As we will see, this has had profound implications for the division of labour and the balance of power between consultants and clients.

1.2 MANAGEMENT CONSULTING'S IMPORTANCE

More than just a growth industry, management consulting in and of it self is one of the most important and enduring management techniques developed over the last fifty years. A secondary effect of this invention has been the rapid dissemination of new frameworks, tools and techniques in large companies.

Surprisingly, however, not much has been written about this phenomenon. In part, it could be because few are interested in the topic – it is still seen as an admission of failure by many managers to use consultants; and who wants to read about failure? In part it could be because the management consulting firms are highly secretive, and thus difficult to analyse and understand.

A few facts and observations do speak for themselves. Management consulting firms today employ around 25 per cent of the graduates from the leading business schools, and those graduates are usually among the

top performers in their class. Some traditional companies have essentially given up recruiting at these schools because consulting firms and investment banks can offer what is perceived as more career opportunity, better pay, and a more stimulating environment than traditional companies in the manufacturing or service sectors.

Another aspect is that today there are approximately 70,000 management consultants in the United States, compared to around 150,000 executives of the type consultants normally interact with at firms governed through "complex" management (Granovetter 1984). That is, for each executive there are 0.5 management consultants who advise, full time. In 1980, this ratio was approximately 0.1. Clearly, and without inferring any judgment on the relative contribution of executives and consultants, the balance of influence is shifting dramatically.

Finally, several industry observers, including Payne (1986), argue that innovation in areas such as strategy is dominated by management consultants, and not by managers or academics. The same is probably true for other management disciplines. Take, for example, reengineering in its various incarnations.

Consequently, management consultants have had a large impact on the state of management due to both the quantity and quality of contributions.

Yet, this does not explain why management consultants “exist.” It is not clear why managers would want to give away so much of their companies’ intellectual agenda to outsiders. It is not obvious why it is more cost effective to hire experts from the outside than to do the same work internally in companies. And even if it were, why is this happening on a massive scale now, and not sixty years ago? Why is it happening in the United States, for example, but only to a limited extent in Japan?

Before addressing these issues in Chapters 4 and 5, Chapter 2 delineates the roles and tasks of management consultants by reviewing the relevant literature, and Chapter 3 introduces transaction cost theory to provide the theoretical underpinning for explaining why management consultants exist.

2. MANAGEMENT CONSULTANTS' ROLES AND TASKS

This chapter summarises various perspectives on what management consultants actually do, that is, their roles and tasks. First, the writings of several academics are reviewed. Then, the same is done for a few management consulting practitioners.

2.1 ACADEMICS' VIEWS

Schein (1988) categorised management consultants with respect to the role they play in their interaction with clients. He distinguished between three models of consultation: purchase of expertise, doctor-patient and process consultation.

The purchase-of-expertise model is used by clients who require the consultant to bring their own independent perspective on the industry and the issues at hand. In its purest form, the consultant is not expected to interact extensively with the client but rather to provide his or her expertise in a hands-off relationship.

In the doctor-patient model, the consultant emphasises his or her diagnostic capability by carefully analysing the client organisation's problems. Using their often unique experience base and diagnostic skill,

consultants quickly assess strategic and organisational blockages. This model leads to an intimate and often trust-based relationship between the consultant and the client.

The process consultation model builds on the notion that the consultant is the facilitator, while the client contributes the expertise. Thus, there is a clear division of roles and tasks. The client ultimately chooses what to do about a problem. The consultant, on the other hand, provides a methodology for defining the problem and finding the best possible solutions. The similarity to psychological analysis methods is not coincidental. Schein's classification reflects a range of roles, from the consultant as a content provider to the consultant as a process provider.

A similar segmentation is suggested by Nees and Greiner (1985), who divide strategy consultants into five categories:

- The “mental adventurer” analyses truly intransigent problems, such as long-term scenarios for country development, by applying rigorous economic methods and leveraging his or her experience base.
- The “strategic navigator” bases his or her contribution on a rich quantitative understanding of the market and competitive dynamics,

and then recommends courses of action without too much regard of the client's own perspective.

- The “management physician” derives his or her recommendations from a deep understanding of the internal dynamics of the client organisation, often willingly sacrificing some objectivity to gain a realistic perspective on what is achievable.
- The “system architect” impacts his or her clients by helping redesign processes, routines, and systems – always in close cooperation with the client.
- The “friendly co-pilot” counsels senior managers as a facilitator rather than as an expert, and has no ambition to provide new knowledge to the client.

The mental adventurer broadly corresponds to Schein’s expert model; the strategic navigator, management physician, and system architect correspond to his doctor–patient model; and the friendly co-pilot is similar to the process consultation model.

Nees and Greiner further showed that institutionally organised strategy consultants are found primarily in the strategic navigator and

management physician segments. The Boston Consulting Group, Bain & Company, and Monitor Company are examples of the former, and McKinsey & Company of the latter. Clearly, the role of the consultant in both segments requires a relationship between client and consultant that goes beyond a contractually specified arms-length relationship.

Turner (1982) used a hierarchy of tasks to demonstrate the extent of a consultant's involvement with a client. He argued that until the late 1970s, the consultant often worked as a supplier to the client, but that the relationship increasingly is built on a partnership of mutual respect aimed at fundamentally improving the client's effectiveness. Turner used eight task categories to delineate management consulting approaches. The first five correspond to the traditional arms-length supplier status; the last three are newer, evolving tasks:

1. Providing information to a client
2. Solving a client's problem
3. Making a diagnosis, which may necessitate redefinition of the problem
4. Making recommendations based on the diagnosis

5. Assisting with implementation of recommended actions
6. Building a consensus and commitment around corrective action
7. Facilitating client learning
8. Permanently improving organisational effectiveness.

Most management consulting firms today aspire to work on the higher value-added activities at the lower end of the list. Thus, it is once again clear that management consultants' relationships with their clients are becoming increasingly complex, and that these relationships rely more and more on sophisticated contractual arrangements of a primarily informal nature, such as trust. However, research has also shown (Leontiades and Ahmet 1989) that management consultants still have a long way to go before they exert major influence on the core issues of their clients. A chief executive is more likely to be influenced first by his or her own instincts and thinking on a particular subject, followed by the planning staff, the board of directors, and investment bankers, than by consultants. Thus, it is unclear how far down the task hierarchy management consultants have really moved.

2.2 PRACTITIONERS' VIEWS

Marvin Bower (1982), the driving force behind McKinsey & Company over almost half a century, suggested six reasons why hiring external consultants makes sense in many situations: (1) they provide competence not available internally, (2) they have varied experience outside the client, (3) they have time to study the problems, (4) they are professionals, (5) they are independent, and (6) they have the ability to create action based on their recommendations. However, he does not make clear why most of these statements should be true.

In large companies, the core market for management consultants, most of the skills provided by consultants should ostensibly be available internally because large companies have encountered most classes of problems.

Arguably, creating the time to study a problem should simply be a matter of priority setting. That the degree of professionalism is automatically higher within a consulting firm is not obvious. Furthermore, there are arguments both for and against the proposition that consultants are more independent than internal managers and experts. Finally, the superior ability to create action, attributed to consultants by Bower, appears to be a matter of training and methods and not intrinsic to the consulting capability. Thus, only the second statement—that consultants have varied experience outside the client—appears to be correct, *prima facie*.

Implicit in Bower's argument, however, is the belief that consultants work primarily with Schein's first two models, the expert and doctor-patient models, since the consultant is expected to provide an independent perspective on the substantive issues at hand. In Turner's hierarchy, this corresponds to the lower levels. Bower appears to see the consultant as a partner to the client in solving unstructured, difficult problems, rather than as a supplier of packaged methods and approaches.

Bruce Henderson, the force behind the Boston Consulting Group for many years, had a similar perspective (Hagedorn 1982). He argued that consultants add significant value to society (through their clients) by reducing the problem-solving cycle time. Exactly why management consultants have more of this capability than others is, however, unclear. But as with Bower, Henderson's implicit argument is that management consultants work together with their clients in a complicated relationship to jointly solve the problems at hand. Henderson also argued that the consultant needs to work in a specialised institutional environment that takes into account that the key resource is the body of consultants, a highly mobile resource, and that a consulting environment is characterised by instability.

Kelley (1979) made a contrary argument to Bower and Henderson based on interviews with more than 200 internal consultants at various

companies. Among other things, he argued that external consultants are more expensive than internal consultants, they are not available at the right time, and they lack an understanding of the client's environment. This reduces the external consultant's effectiveness. Kelley also predicted that the bulk of consulting work will be carried out by internal resources in the future and that external consultants will be used only for special problems and when there is a need to augment the internal resources. As was quantified earlier in this paper, Kelley has been proven wrong by events, and the management consulting industry is today many times larger than when he wrote his article. In fact, we will see later that external management consultants are cost effective, available, and adept at understanding their client's problems and circumstances.

The preceding summary of the literature points to a number of propositions:

- Management consultants increasingly address critical, long-term issues of their clients and are a significant part of the intellectual agenda of executives (corresponding to Turner's three lower levels).
- Consultants add value by addressing both content and process issues based on expertise, methodology, and general problem-solving skills (corresponding to Schein's expert and doctor-patient models).

- Management consultants work together with their clients in a complicated and fluid relationship characterised by a high degree of mutual trust.
- Management consultants are best organised in independent, specialised firms with unique characteristics and success factors (as argued by Bower and Henderson).

3. TRANSACTION COST THEORY

The above perspectives do not shed much light on why management consultants exist. Transaction cost theory, however, may do so. The theory deals with the real costs of allocating resources in an imperfect world of misunderstandings, misaligned goals, and uncertainty. Since management consultants deal with this very issue, it may be that the theory can help explain the existence of the profession.

Transaction cost theory was initially developed in the 1930s by Ronald H. Coase to help explain why certain activities, products, or services are carried out internally in firms – while others are bought and sold in the marketplace. Coase's ideas were neglected for many years, but around 1970 several scholars started expanding on them. Most notable of these is Oliver E. Williamson, who over the last twenty-five years has dedicated his research to transaction-cost-theoretical issues.

Unfortunately, this massive effort has not yielded a good definition of what transaction costs are, and there has been considerable criticism of the lack of clarity and testability of the theory. The following is yet another imperfect attempt at defining transaction costs.

First, a company's costs can be classified in two categories: production costs and transaction costs. Production costs are those we are most

familiar with. They are all the costs that are associated directly with productive activities (Masten 1982) such as manufacturing, logistics, and product development. Transaction costs, on the other hand, are those costs associated with organising economic activity. They thus vary with organisational form (Masten 1982). Or as Kenneth Arrow (1983) puts it, “The distinction between transaction costs and production costs is that the former can be varied by a change in the mode of resource allocation, while the latter only depend on the technology and tastes, and would be the same in all economic systems.” It has been estimated that at least 45 per cent of the gross national product in a developed society is generated by transaction costs (Wallis and North 1986; Ghertman 1998).

Coase defined the term transaction costs in his pioneering work “The Nature of the Firm” (1937) by asking two fundamental questions: “Why is there any organisation?” and “Why isn’t all production carried out by one big firm?” His answer was that there are transaction costs that determine what is done in the market, with price as the regulating mechanism, and what is done inside the firm, with bureaucracy as the regulator. Coase pointed out that “the distinguishing mark of the firm is the supersession of the price mechanism.” Within this framework, all transactions carry a cost, either as an external market transaction cost or an internal bureaucratic transaction cost. “The limit to the size of the firm...[is reached] when the

costs of organizing additional transactions within the firm [exceed] the costs of carrying out the same transactions through the market" (Coase 1993). As we will see later, this is exactly the issue for management consulting. Why do companies buy this service through a market transaction rather than doing it themselves?

According to Coase (1937), the most important market transaction costs are the cost of determining the price of a product or service, the cost of negotiating and creating the contract, and the cost of information failure. The most important internal transaction costs are associated with the administrative cost of determining what, when, and how to produce, the cost of resource misallocation (since planning will never be perfect), and the cost of demotivation (since motivation is lower in large organisations). In any given industry the relative magnitude of market and internal transaction costs will determine what is done where.

Williamson (1975, 1985) extended the argument by noting that two behavioural assumptions are critical. First, individuals in an organisation are boundedly rational. This, in the words of Herbert Simon ([1947] 1976), means that "human behavior is *intendedly* rational, but only *limited* so." This limitation makes it impossible to structure perfect contracts, and any contract will be incomplete even if all information is available. Second, individuals behave opportunistically. This means that they will act in self-

interest with guile. While some object to this strong assumption, a number of studies have shown that it is valid in organisations (Williamson 1993), and it is a well-established tenet of Darwinian zoology (Dawkins 1989).

The implication is that promises of responsible behaviour are only credible when they are supported by enforceable commitments, since individuals otherwise would break an agreement if it is in their self-interest to do so.

With the two assumptions of bounded rationality and opportunism, Williamson (1975) demonstrated that three factors play a fundamental role in determining if market or bureaucratic transactions are optimal. The factors are asset specificity, uncertainty, and frequency of transactions.

By asset specificity is meant physical assets, human assets, site, or dedicated assets that have a specific usage and cannot easily be transferred to another use. Under this condition, opportunistic behaviour can be expected if the asset is part of a market transaction.

An example is if a supplier invests in specific tooling equipment dedicated to one customer (or for that matter, if a consulting firm invests in a client relationship). Over time, the customer will be able to put pressure on the vendor since the vendor has no alternative use for its investment and will be willing to accept a price down to the variable cost of production to cover some fixed cost. This leads to a difficult negotiation in which each

party may try to “cheat” and in which complicated safeguards have to be incorporated in the contract. On the other hand, if the customer owns the equipment, then the incentive to cheat disappears, and the cost of creating safeguard contracts is eliminated because the asset is owned by the same company.

High uncertainty such as business cycle volatility or technological uncertainty will lead to more bureaucratic transactions because it will be difficult, and prohibitively expensive, to create contracts that cover all possible outcomes. Thus, with higher uncertainty firms tend to internalise activities.

Finally, if the transactions are frequent there is once again a tendency to manage the transaction through bureaucracy since the repetitive contracting cost will be higher than the bureaucratic cost.

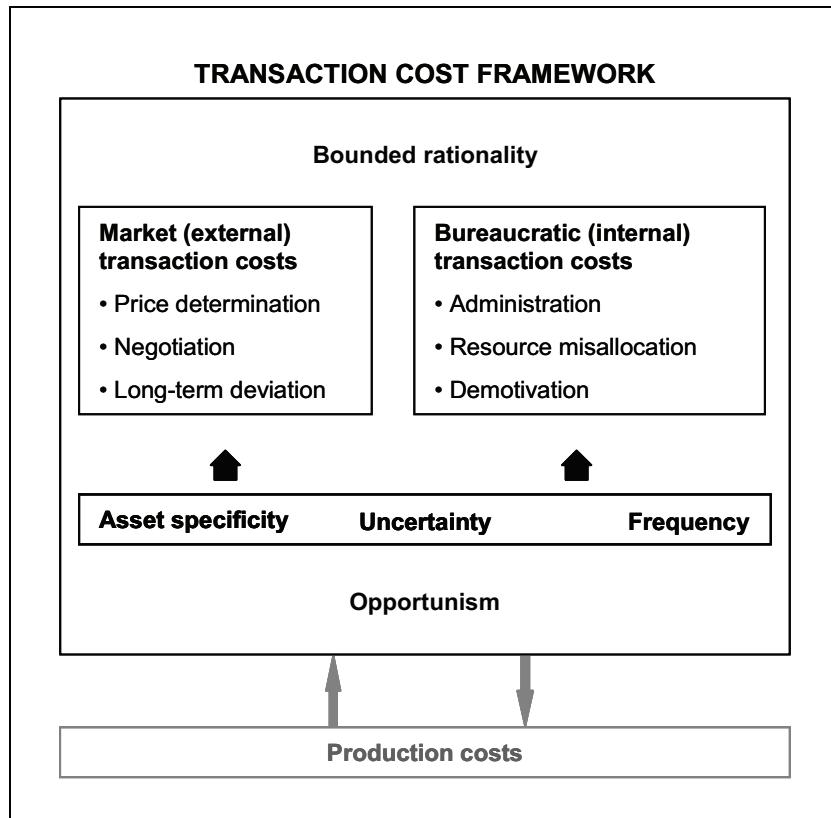
Empirical research has shown that the three factors above indeed do have an impact on the choice of transaction mechanism. For example, Masten (1984) demonstrated this within the aerospace industry, Teece (1981) and Klier (1993) within the automotive industry.

The final important aspect of transaction cost theory pertinent to this paper restates an argument from the beginning of this section. Transaction

costs alone do not explain whether transactions are carried out in the market or internally in the firm. Douglass North, the 1994 Nobel Prize winner in economics, has forcefully pointed out that firms try to minimise total cost, not only transaction costs (North 1987, 1990; North and Wallis 1994). In addition to transaction costs, a firm has production costs. Sometimes, and we will see this in the example of management consulting, transaction costs are not always minimised because the resulting improvement in production costs can outweigh the increase in transaction costs.

We can now summarise transaction cost theory in the framework shown in Figure 1.

Figure 1: Transaction Cost Framework



Finally, two specific applications of transaction cost theory will be used in the following two chapters.

Aoki (1990) has identified some of the basic differences between Japanese and American style management, and then used elements of transaction cost theory to explain these differences. One of his observations is that spontaneous and voluntary coordination is much more prevalent than in Western firms. Thus the need for explicit performance contracts is reduced. This is achieved by having a long period of socialising among employees – the system of lifetime employment combined with a

promotion system built on seniority. A consequence is that it is critically important to have stable hierarchies with clearly defined roles, and it is difficult to inject outside expertise of a temporary nature. Thus, while Japanese firms are adept at using suppliers for standard products and services, they find it much more difficult to use high value-added services from the outside.

England (1984) applied the theory to the short-lived practice of inside contracting that was prevalent in the early days of the manufacturing era, especially in New England. Under this system, owners contracted with suppliers to perform all operations within a factory, while providing the productive assets such as machinery. In essence, the inside contractor agreed on a transfer price with the owner, and then had the freedom to hire workers, develop work methods, and take whatever action necessary to generate a profit.

The practice broke down for fundamental transaction-cost-theoretical reasons. The high asset specificity between owner and contractor (including physical, human, and site specificity) made it impossible to design contracts between owners and contractors that gave a fair share of profits to both parties. The contractor, having superior knowledge of operations, found ways to improve productivity beyond the expectation of the owner. Thus, supernormal rents accrued to the contractor. At the same

time, the internal contractor did not have many proprietary skills and it was therefore relatively easy for the owner to replace the inside contractor with his own supervisor and work force. By the end of the nineteenth century the inside contracting system had given way to the vertically integrated industrial firm where all resources—human and physical—were under the control of management. One may wonder if management consulting, which has much in common with the inside contractor, will disappear in a similar way.

4. WHY DO MANAGEMENT CONSULTANTS EXIST?

Drucker (1979) expressed that “the management consultant is an extraordinary and indeed truly unique phenomenon.” He argued that there are two reasons for why it exists. First, management is neither a science nor an art; it is a practice learned through exposure to and experience with a wide variety of companies in a wide variety of industries. A typical executive, however, lacks that exposure. As Drucker notes: “he works with the same organization – or at the most, with very few. He lacks exposure and cannot gain it. Nor can he simulate it.” Consultants, on the other hand, transcend organisations and thus gain exposure.

Second, Drucker observed that executives yearn for objective insights into their management problems. Empirical research by Gattiker and Larwood (1985) confirmed that clients first and foremost look for stimulation, expertise and objectivity when they turn to outside consultants.

Both these explanations for why management consultants exist are compelling, but they suffer from not being anchored in an underlying theory. Transaction cost theory provides a rigorous and consistent explanation for the existence of management consulting. To understand

the growth of management consulting within a transaction-cost-theoretical context, two fundamental questions need to be answered:

- Why is there increasing demand for the types of services management consultants provide?
- Why is this demand best filled by external consultants who are not direct employees of the firm – but rather by contracted outsiders?

4.1 DEMAND FOR MANAGEMENT CONSULTING SERVICES

In the first chapter, Greiner and Metzger (1983) defined what management consultants do: they help solve management problems by giving objective and independent advice. Why is there such extraordinary demand for these types of services today compared to fifty years ago? An answer is provided by Wallis and North (1986) who studied changes in the US economy between 1870 and 1970 by dividing the gross national product into production cost and transaction cost components. They further divided transaction costs into market transaction costs (such as the costs of buying and selling in the marketplace) and bureaucratic transaction costs (such as the costs of coordinating activities within firms) along the lines suggested in the transaction cost framework shown in Figure 1 (see p. 26, above).

While national accounts and census data do not easily conform to this breakdown, Wallis and North nevertheless managed to show that transaction costs have become an increasingly important part of the US economy. They estimated that transaction costs increased from 8 to 45 per cent of the economy between 1870 and 1970, with the highest growth occurring in bureaucratic (internal) transaction costs. Applying the same methodology to subsequent years, a continued increase in transaction costs was found by Ghertman (1998).

To understand this trend, consider how the following underlying mechanism might operate. As companies strive to reduce production costs by exploiting scale and scope economies, they must specialise – which in turn leads to a need for internal coordination. If transaction costs did not exist, then the largest company in each market would also be the most profitable company, since coordination between functions could be achieved without effort. But because of transaction costs, this does not happen. Instead, large companies must deploy considerable coordination resources in order to realise production scale and scope economies. On balance, this pays off, and total productivity increases year after year. Reductions in production costs are larger than the additional bureaucratic transaction costs incurred, and therefore value added grows.

Thus, traditional blue-collar jobs are disappearing as production costs are reduced, while the number of white-collar jobs aimed at coordination is increasing. Moreover, more effort is spent on creating the appropriate contractual mechanisms inside and between firms. Witness, for example, the increased use of non-traditional forms of cooperation between firms through different forms of alliances and partnerships.

As a consequence, senior executives today deal primarily with abstract issues relating to transaction costs, while fifty or a hundred years ago they concentrated on more concrete tasks aimed at reducing production costs. Therefore, the role of top management in a large company has changed beyond recognition. In one of the most famous books by a chief executive, Alfred P. Sloan, Jr.'s ([1963] 1990) description of General Motors under his stewardship, illustrates the point. The book deals almost exclusively with production-cost issues in sales, manufacturing, development, and finance, and has an insignificant amount of abstraction. Most of the excerpts from executive committee meeting minutes deal with practical issues such as forecasting and inventory build-up, production schedules, project-development issues, and cash management. Other illustrations can be found in old corporate annual reports. The opening statement in Asea's² 1948 annual report concerns factory utilisation. It goes on to discuss

² Today part of Asea Brown Boveri (ABB), the Swedish-Swiss electrical-engineering conglomerate.

manufacturing and product-development issues, and ignores what today we call strategic and organisational issues.

In contrast, while today's executives still must manage production costs, an even larger challenge lies in optimising transaction costs. As Herbert Simon ([1947] 1976) anticipated: "In the postindustrial society, the central problem is not how to organize production efficiently (although this will always remain an important consideration), but how to organize to make decisions, that is, to process information." The level of abstraction has increased commensurately. Today we talk about vision, strategic intent, learning organisations and virtual corporations. We find that most companies' value can not be calculated by studying the income statement and balance sheet alone, since much of the market value is embedded in abstractions such as brand image and intellectual capital.

In this world, it is necessary to be good at symbol manipulation (Reich 1991): "Symbolic analysts solve, identify, and broker problems by manipulating symbols. They simplify reality into abstract images that can be rearranged, juggled, experimented with, communicated to other specialists, and then, eventually, transformed back into reality." The symbols are often qualitative rather than quantitative. Examples are the five forces framework and the value chain developed by Michael E. Porter, and the 7-S framework designed by McKinsey & Company. Reich

estimated that in 1990 close to 20 per cent of American jobs were held by "symbolic analysts", while at mid-century no more than 8 per cent of workers could be so classified. Thus, as the transaction cost part of the economy has grown, so has the demand for symbol manipulation.

4.2 NATURE OF DEMAND

The transaction cost framework can also be used to more specifically deduce the nature of this demand.

First, bureaucratic (internal) transaction costs principally stem from the cost of administration, the costs of resource misallocation, and the negative impact of demotivation in large organisations. Management techniques aimed at minimising these can, for example, be found within the fields of organisational design, strategic planning, and governance. Organisational design influences the cost of administration and the level of motivation significantly. An example is the superior performance of multidivisional organisations over functional organisations (Armour and Teece 1978). Strategic planning reduces resource misallocation by channelling scarce resources into areas where the company has a competitive advantage. The appropriate choice of governance models helps improve motivation through incentives, and reduces organisational

slack such as excessive bureaucracy. These are exactly the kinds of problems management consultants solve.

Second, market transaction costs derive from price determination, contract negotiation, and the risk that there will be long-term deviations from the contract due to unanticipated events. To reduce these costs, executives primarily need information. The demand for market and competitive information—and the intelligent synthesis of this information—has increased dramatically over the last thirty years. Services such as these are offered by management consultants.

In sum, the increase in demand for management consulting services is explained by fundamental shifts in the economy. Today's complex business environment requires high transaction costs to function. This in turn increases demand for symbolic analysts, the kinds of professionals found in modern management consulting firms. Stryker (1954) identified this trend years ago when he observed that consultants used to work on "specialized problems—in plant layout, for example, or in wage-incentive programs", but "a relatively new kind of consultant—the man or firm that in effect offers to set a company's basic objectives, policies, structure, and strategies" was emerging.

4.3 REASONS FOR USING EXTERNAL MANAGEMENT CONSULTANTS

Why then is the demand for symbol manipulation satisfied largely by external management consultants? After all, corporate executives could do the symbol manipulation themselves, or they could use internal consultants. Instead they often turn to outside help, causing a 20 per cent annual growth in the industry since 1980. It has not always been this way. Once upon a time, executives did the work themselves. Chandler (1962) described how executives at the du Pont Company struggled between 1917 and 1921 with how to organise the company. They created working parties and *ad hoc* committees, and at the same time worked individually on position papers and proposals. No consultants were involved. Similarly, when General Motors faced a major crisis in 1920, it turned to one of its senior executives, Alfred P. Sloan, Jr., to diagnose and solve the problem. Sloan's write-up, the Organization Study (1919), soon catapulted him into the chairmanship of General Motors, without the help of consultants.

Over time, however, the do-it-yourself approach has declined due to its inefficiency. Typically, a senior executive is not familiar with the particular problem he or she is facing and does not know which problem-solving technique to apply. This is increasingly true as management becomes

more complex. Executives remain boundedly rational (Simon [1947] 1976); and, of course, they do not have the capacity to learn everything.

Thus, the choice for the executive often is whether to turn to internal or external experts for advice. According to transaction cost theory, this choice hinges on the degree of asset specificity, demand volatility, technological uncertainty, and the frequency of transactions involved (see Chapter 3). If these factors are insignificant, then buying the services in the external market will be the better solution (Rubin 1990): "When a competitive market exists, this usually offers the most powerful method of controlling costs. If a product is made internally, then the firm must spend substantial managerial resources monitoring costs and efficiencies...The first presumption should always be for purchasing inputs on the market."

What, then, can be said about the degree of asset specificity, uncertainty, and frequency of transactions in management consulting services? The two latter factors have worked in favour of using outsiders, although their influence probably is weak. Uncertainty has decreased over the last fifty years, as evidenced by the decline in volatility of the S&P 500 index and of GDP growth. The frequency of transactions is usually low, with most problems to be solved being unique and singular.

Asset specificity stands alone as the most important factor. It can be broken down into four components: physical asset specificity, human asset specificity, site specificity, and dedicated assets. Giving consulting advice does not usually require an investment in physical assets that are specific to the client, and when it does (such as the purchase of client-specific software), the cost is usually billed directly to the client. Site specificity is low since the consultant rarely moves permanently to the client's location. Dedicated assets that cannot be redeployed are uncommon. The only aspect of asset specificity that truly affects the decision to use internal or external experts is human asset specificity. That is, the extent to which the consultant's knowledge is specific to the client.

4.3.1 Human Asset Specificity

High human asset specificity exists if the consultants need to invest significant time and effort to understand the client's business, or conversely, if the client needs to invest in understanding how the consultants work. In Turner's (1982) eight task categories described in Chapter 2 (see pp. 14–15, above), there is an increasing degree of human asset specificity the further down the list the consultant works. Task 1: "Providing information to a client", usually does not require a client-specific investment, while Task 8: "Permanently improving organisational

effectiveness”, demands that the consultants have a thorough understanding of the idiosyncrasies of the client organisation – an understanding that often takes at least a year to build.

If human asset specificity is high, then there is significant risk that the client or the outside consultant will try to take advantage of the other party, a so-called hold-up situation. For example, the client may try to reduce the price or ask for free additional work since it knows that the consulting firm cannot easily reassign people who have invested in building an understanding of the client organisation. Similarly, consultants know that it will take time for the client to find, evaluate, and build the knowledge of a new consultant. In the end, it may be easier for the client to avoid the hold-up situation by using internal resources rather than to go through a painful negotiation with outsiders.

Thus, all other things being equal, external consultants can be expected to work on issues that have low human asset specificity, while internal experts deal with issues close to the heart of the organisation. Indeed, this is the way symbol manipulation was done until the 1970s, with fast-growing internal consulting staffs (such as those at General Electric and Xerox (Kelley 1979)) addressing core issues, and external consultants working primarily on projects with low human asset specificity.

4.3.2 Rationale for External Consultants

But all other things are not equal. External consultants have been able to use three other transaction cost-related factors to their advantage, while trying to minimise the negative impact of high human asset specificity.

First, opportunistic behaviour can be expected within and between firms. As specialisation to realise scale and scope economies increases, this opportunism becomes stronger, given that specialisation leads to goal conflicts between organisational units and individuals. A manager in marketing will not necessarily have the same goal as a manager in manufacturing, even though the goal of the company is to maximise shareholder returns. Thus, the risk of efficiency losses due to misaligned goals increases with the growth of transaction costs. To offset this, executives more than ever need objective, detached advice.

Who then can best provide the objectivity? External management consultants have the benefit of not being members of the organisation. They usually do not have vested interests or oblique loyalties. (The counterargument is that the consultant has one unique sponsor to whom he or she will yield if necessary. Research (Gattiker and Larwood 1985), however, suggests that this does not happen often enough to warrant concern.)

In addition to giving impartial advice on key issues, consultants can also perform managerial audits. Traditionally, this has been within the domain of accountants, but as the complexity of organisations has increased, the ability of accountants to detect shirking has decreased (Rubin 1990).

External management consultants have to a large extent filled this void. In transaction-cost terms, the external management consultant is more likely than an internal counterpart to lessen the bureaucratic insularity of top management and to reduce internal transaction costs due to misallocation of resources within and between functions.

Second, for those activities that do not carry high human asset specificity vis-à-vis the client, external consultants can build experience more effectively than can inside consultants. Having seen similar problems before, the cost to external consultants for leveraging this knowledge base will be low. In contrast, internal consultants are experts in how their own company works, but seldom are they in a position to create an experience base by problem type.

Also, the external consultant often has the opportunity to engage in joint problem solving with colleagues (Paroush 1985). Such collaboration is encouraged by the incentive structure of consulting firms. Replicating this type of system within a client organisation is difficult because most client

organisations are joint stock companies with very different reward systems.

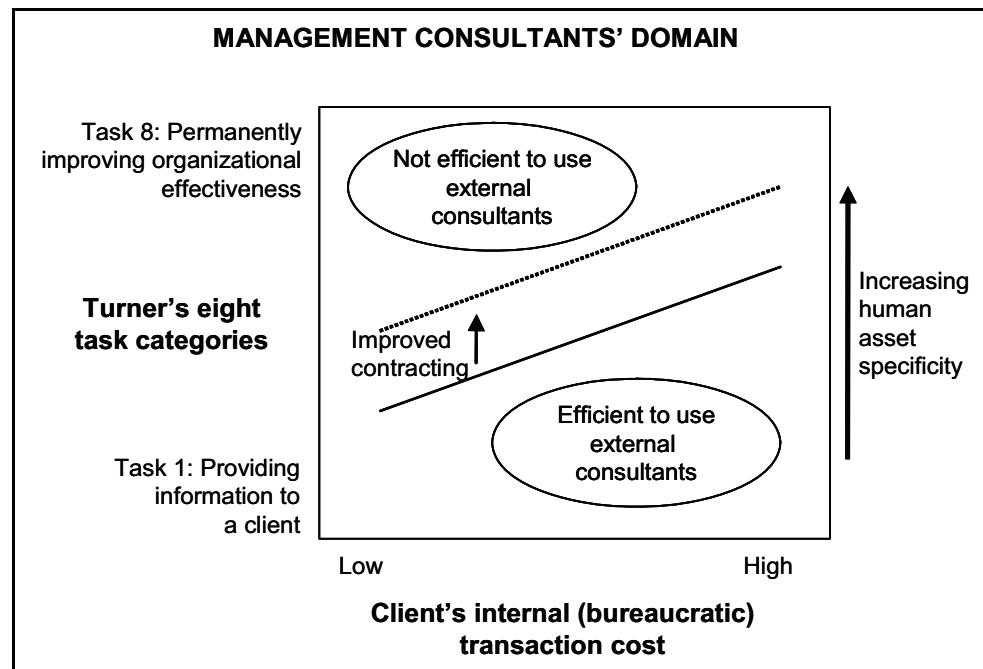
Third, external consulting firms are likely to out-produce their internal counterparts. Incentives are more easily tailored to the needs and performance of individuals in smaller organisations, while employees in larger organisations suffer from bureaucratically induced demotivation (and most consulting firms are smaller than their clients). A parallel is found in R&D, where smaller companies have three to ten times higher productivity than larger companies (Cooper 1964; Zenger 1994).

The three factors just described are advantages held by external consultants relative to internal consultants. Consulting firms also often manage to offset the negative impact of high human asset specificity through contractual mechanisms. In accordance with the transaction cost framework, it is in external consultants' interest to minimise the cost of price determination, negotiation, and the impact of long-term deviations from the agreed-upon contract. Price determination can be simplified by charging a fixed monthly fee, with the cost to the client proportional to the length of the project. Negotiations are possibly burdensome, but can be alleviated by using short and standardised proposals. The risk of deviations from the intended task is usually small because most efforts are relatively brief and there is constant feedback between client and

consultant. Projects seldom take more than one year, and the norm is three to nine months. Consultants further reduce this risk by providing easy exits for the client, such as agreements that the work can be terminated without advance notice and without a stated reason. What is sometimes viewed as a less-than-rigorous contracting policy is in fact a mechanism for consultants to offer their services more efficiently.

The above logic can now be summarised in Figure 2, which captures all elements of the discussion in this section.

Figure 2. Management Consultants' Domain



Earlier, the question why we have seen an explosion in the demand for management consulting in the United States, but not in Japan, was posed

(see p. 10, above). The answer is complicated, but lies embedded in the figure above. Part of the answer lies in Japanese and Americans being at different stages in the management-skill development cycle. More important, Japanese management tradition places so much reliance on the long-term predictability of careers and protecting organisational knowledge that it is difficult for outsiders to be accepted by large corporations. External consultants' disruptive effects on clients' management processes, so far, have outweighed the benefits of their expertise, stimulation, and objectivity. That is, the human asset specificity is high, leading to internal problem solving within companies.

5. HOW WILL MANAGEMENT CONSULTING EVOLVE?

Management consulting firms exist for a good reason: the nature of management has changed. Unlike in earlier times, abstract issues embodied in the transaction-cost part of the economy demand management's attention. Consequently, there is a market for symbol manipulation – a market that barely existed fifty to a hundred years ago. External management consultants are well suited to meet this demand. They bring objectivity, experience, and high productivity. Working with outside experts often, though not always, can cost the client less than using internal resources, when both direct and indirect costs are factored in. As we will see in this chapter, this is likely to hold true in the future as well.

Forty-five years ago, management consulting was considered “one of the hottest – and most influential – growth industries” (Stryker 1954). If anything, this is even more the case today. Many observers expect that consultants will continue to increase market share in problem solving on behalf of corporations and other organisations – and thus there will be continued industry growth. On the other hand, it may be that clients eventually will reclaim the services provided by management consultants – especially those with high human asset specificity. This would parallel the disappearance of the inside contracting system

discussed in Chapter 3. Under this scenario, the consulting industry could stagnate and decline.

5.1 CONTINUED GROWTH SCENARIO

Remember that the key obstacle to using external resources such as management consultants – according to transaction cost theory – is the degree of human asset specificity involved, and that high uncertainty makes it difficult to use outside contractors. For the growth scenario to materialise, the following conditions will have to exist:

The current trend toward management consultants' deeper involvement in solving clients' core problems would have to moderate. If it does not, asset specificity will increase to the point of making external sourcing of consulting services unfeasible. Alternatively, contractual arrangements between client and consultant would need refinement at a sufficient pace in order to mitigate the increasingly negative effects of asset specificity; witness, for example, the increasing use of success fees that tend to align the objectives of clients and consultants.

The internal bureaucracy costs of client organisations would have to remain at current or higher levels. If, however, clients can reduce the costs of administration, resource misallocation, and demotivation, then

transaction cost theory tells us that symbol manipulation done internally is more advantageous. Indeed, highly bureaucratic organisations tend to use more external management consultants than lean ones. (A continued high level of internal bureaucracy costs will stimulate demand for external management consultants.)

Uncertainty (in terms of demand volatility or technological uncertainty) can not increase significantly, given that high uncertainty reduces the benefit of buying products or services from the outside.

If the foregoing growth scenario develops more or less as outlined, then we could see a radically different corporate world within fifteen to thirty years. Initially, we would see continued rapid expansion of the management consulting industry. Soon there would be as many external symbol manipulators as there are executives in large companies. Over time, the balance of power would shift to the management consultants. They would possess the most knowledge about management practice in general, and their clients' problems specifically. They would own the knowledge networks that will be essential in the global economy. The management consulting firms would also attract most of the young, intelligent and well-educated people forming the backbone of the future economy. We thus would see a shift in the balance of influence from the traditional product and services sectors to the symbolic analyst sector –

just as we saw a shift of influence from the agriculture sector to the industrial sector in the 1800s.

Ultimately, management consulting firms would move from being advisors to taking over the management function of their clients. We would see a new corporate configuration in which the consultants work as the symbol manipulators of corporations, and the old corporate structures are dismantled to provide the building blocks for those manipulative activities. Consultants would manage high value-added networks of product design and delivery activities, whereby they would provide strategic and integrative capabilities. The old corporations would provide low value-added products, subassemblies, and services to the specification of the network operators—the management consultants.

5.2 DECLINE SCENARIO

Under the second scenario, management consulting would be doomed, just as inside contracting once flourished and then declined. How would this “doomsday” scenario come to be?

The asset specificity of management consulting advice would need to be so high that clients would find it difficult to handle the interface between

themselves and consultants and thus decide to internalise symbol manipulation.

Large corporations would have to develop their management practices to accommodate the needs of different types of employees, both symbolic analysts and routine workers. In particular, this would require differentiated approaches to performance evaluation and the setting of incentives (a process that has already started as evidenced by the escalating compensation packages lavished on executives).

Uncertainty would have to increase to a significantly higher level than it is today.

The types of problems handled by management consultants would have to become more prevalent within client firms. (Remember, as an activity becomes more frequent there is a tendency to internalise it.)

Should all these things happen we may live to see a second version of the demise of inside contracting. Clients would initially hire away top talent from consulting firms to do the same jobs as before and with the same compensation—but now as employees. The alignment of high asset specificity with internal sourcing would over time prove more cost effective than buying consulting services from the outside. Knowledge

accumulation would then shift toward the clients, and management consulting firms would find it increasingly difficult to provide high value-added advice. However, since management consultants also would be providing an auditing function, and assuming they provided objective advice, they would not disappear entirely. The nature of their work, however, might well shift from Schein's expert and doctor-patient models to the process consultation model — one in which the consultant facilitates and the client provides the expertise.

Under such a decline scenario, external management consultants would work primarily on routine assignments. Yes, they would continue to leverage industry knowledge from client to client, much as McKinsey & Company and others do today. But by its very definition, this knowledge is most unlikely to add unique value to the individual client. Furthermore, opportunities to work on core issues such as strategy and governance would be highly limited. In the end, the consulting process would become substantially streamlined and highly efficient; however, the industry no longer would be able to attract the best people. Management consulting will cease to be "one of the hottest—and most influential—growth industries."

5.3 FUTURE ROLE OF MANAGEMENT CONSULTANTS

In the end, neither of these two scenarios seems very likely to fully evolve. Nevertheless, looking to the next ten or fifteen years, several factors favour the “continued-growth scenario.”

So far, the management consulting industry has been able to largely surmount the hurdle of asset specificity and thereby redefine an appropriate division of labour between clients and consultants. New forms of collaboration have made it easier for clients to outsource problem solving of core issues. An example is the tendency of consulting firms to strive for long-term relationships with clients as opposed to working on one project per client. Another example is that consultants have been backing away from the classical model of “consultants analyse and recommend; clients decide and implement.” Collaboration today is much more sophisticated than it was a mere fifteen years ago, with clients and consultants now working together throughout the entire change process. This trend can be expected to continue.

Of at least equal significance (with or without reengineering and the like): there is no indication that internal (bureaucratic) transaction costs within large corporations will decline. To the contrary, as noted earlier, the transaction-cost part of the economy has grown steadily since the 1870s.

Nor is this trend likely to be disrupted any time in the foreseeable future. For one thing, the increasingly global economy adds to complexity. Within large corporations, the demand for coordination continues unabated. New technologies such as artificial intelligence appear unlikely to change this picture any time soon.

Finally, there is scant evidence that large corporations will be able to realign their management processes sufficiently in order to be able to internalise symbol manipulation. Stinchcombe (1965) found that the way a company manages itself to a large degree is determined by when it was founded. Most large companies, being fairly old, seem unlikely to fundamentally change their *modus operandi*, despite the opportunities presented by the information technology revolution.

If the above arguments hold true, the management consulting industry will continue to prosper. Consultants, together with other external advisors, will play an increasingly important role in the global economy and may ultimately take on the role of network managers. Relationships between clients and consultants will grow stronger and symbiotic. Management consulting will continue to be a preferred career choice for many graduating students at the premier business schools and universities.

REFERENCES

- Aoki, M. 1990. Toward an Economic Model of the Japanese Firm. *Journal of Economic Literature* 28: 1–27.
- Armour, H. O. and D. J. Teece. 1978. Organizational Structure and Economic Performance: A Test of the Multidivisional Hypothesis. *Bell Journal of Economics* 9 (1): 106–122.
- Arrow, K. J. 1983. The Organization of Economic Activity: Issues Pertinent to the Choice of Market Versus Nonmarket Allocation. In *Collected Papers of Kenneth J. Arrow. Volume 2*. Cambridge, Mass.: Belknap.
- Bower, M. 1982. The Forces That Launched Management Consulting Are Still at Work. *Journal of Management Consulting* 1 (1): 4–6.
- Canback, S. 1998. The Logic of Management Consulting, Part 1. *Journal of Management Consulting* 10 (2): 3–11.
- . 1999. The Logic of Management Consulting, Part 2. *Journal of Management Consulting* 10 (3): 3–12.
- Chandler, A. D., Jr. 1962. *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. Cambridge: MIT Press.
- Coase, R. H. 1937. The Nature of the Firm. *Economica* n.s., 4 (16): 386–405.
- . 1993. The Nature of the Firm: Origin, Meaning, and Influence. In *The Nature of the Firm: Origins, Evolution, and Development*, edited by O. E. Williamson and S. G. Winter. New York: Oxford University Press.
- Consultants News. 1982–1998. The World's Largest Management Consulting Firms. *Consultants News*.
- Cooper, A. C. 1964. R&D Is More Efficient in Small Companies. *Harvard Business Review* 42 (May-June): 75–83.
- Dawkins, R. 1989. *The Selfish Gene*. 2d ed. New York: Oxford University Press.
- Drucker, P. F. 1979. Why Management Consultants? In *The Evolving Science of Management*, edited by Z. Melvin and R. G. Greenwood. New York: AMACOM.

- Englander, E. J. 1984. An Inquiry into the Economic Theory of the Firm: Technology, Internal Organization, and Public Policy. PhD thesis, University of Washington.
- Gagnon, R. J. 1984. An Integrated Strategy for Increasing Management Consulting Research. *Academy of Management Proceedings* (August): 148–152.
- Gattiker, U. E. and L. Larwood. 1985. Why Do Clients Employ Management Consultants? *Consultation* 4 (2): 119–129.
- Ghertman, M. 1998. Measuring Macro-Economic Transaction Costs: A Comparative Perspective and Possible Policy Implications. Working paper, Jouy en Josas, France: École des Hautes Études Commerciales.
- Granovetter, M. 1984. Small Is Bountiful: Labor Markets and Establishment Size. *American Sociological Review* 49 (3): 323–334.
- Greiner, L. and R. Metzger. 1983. *Consulting to Management*. Englewood Cliffs, N.J.: Prentice-Hall.
- Hagedorn, H. J. 1982. The Anatomy of Ideas Behind a Successful Consulting Firm. *Journal of Management Consulting* 1 (1): 49–59.
- Kelley, R. E. 1979. Should You Have an Internal Consultant? *Harvard Business Review* 57 (November-December): 110–120.
- Klier, T. H. 1993. Transaction Cost Theory and Just-in-Time Manufacturing: A New Look at Vertical Integration in the United States Automobile Market. PhD thesis, Department of Economics, Michigan State University.
- Kubr, M., ed. 1996. *Management Consulting: A Guide to the Profession*. 3d ed. Geneva: International Labour Office.
- Leontiades, M. and A. Ahmet. 1989. Ceo's Perceptions of Strategy Consultants. *Business Forum* (Winter): 51–53.
- Masten, S. E. 1982. Transaction Costs, Institutional Choice and the Organization of Production. PhD thesis, University of Pennsylvania.
- . 1984. The Organization of Production: Evidence from the Aerospace Industry. *Journal of Law and Economics* 27 (October): 403–417.

- Moore, G. L. 1982. The Politics of Management Consulting. PhD thesis, City University of New York.
- Nees, D. B. and L. E. Greiner. 1985. Seeing Behind the Look-Alike Management Consultants. *Organizational Dynamics* 13 (Winter): 68–79.
- North, D. C. 1987. Institutions, Transaction Costs and Economic Growth. *Economic Inquiry* 25 (3): 419–428.
- . 1990. *Institutions, Institutional Change and Economic Performance*. Edited by J. Alt and D. C. North, *The Political Economy of Institutions and Decisions Series*. Cambridge: Cambridge University Press.
- North, D. C. and J. J. Wallis. 1994. Integrating Institutional Change and Technical Change in Economic History: A Transaction Cost Approach. *Journal of Institutional and Theoretical Economics (Zeitschrift für die gesamte Staatswissenschaft)* 150 (4): 609–624.
- Paroush, J. 1985. Notes on Partnerships in the Service Sector. *Journal of Economic Behavior and Organization* 6 (1): 79–87.
- Payne, A. T. 1986. New Trends in the Strategy Consulting Industry. *Journal of Business Strategy* 7 (1): 43–55.
- Reich, R. B. 1991. *The Work of Nations: Preparing Ourselves for 21st-Century Capitalism*. New York: Alfred A. Knopf.
- Rubin, P. H. 1990. *Managing Business Transactions*. New York: Free Press.
- Schein, E. H. 1988. *Process Consultation: Its Role in Organization Development*. 2d ed. Vol. 1. Reading, Mass.: Addison-Wesley.
- Simon, H. A. [1947] 1976. *Administrative Behavior*. 3d ed. New York: Free Press. Original edition, New York: Macmillan.
- Sloan, A. J., Jr. 1919. General Motors Corporation: Organization Study. Detroit: General Motors.
- Sloan, A. P., Jr. [1963] 1990. *My Years with General Motors*. Edited by J. McDonald and C. Stevens. Reprint, with a new introduction by P. F. Drucker. New York: Currency. Original edition, Garden City, N.Y.: Doubleday.
- Stinchcombe, A. L. 1965. Social Structure and Organizations. In *Handbook of Organizations*, edited by J. G. March. Chicago: Rand McNally.

- Stryker, P. 1954. The Ambitious Consultants. *Fortune*, May, 82–85.
- Teece, D. J. 1981. Internal Organization and Economic Performance: An Empirical Analysis of the Profitability of Principal Firms. *Journal of Industrial Economics* 30 (2): 173–199.
- Turner, A. N. 1982. Consulting Is More Than Giving Advice. *Harvard Business Review* 60 (September-October): 120–129.
- United Nations Conference on Trade and Development. 1993. The Management Consulting Industry: An Overview. In *Management Consulting: A Survey of the Industry and Its Largest Firms*. New York: United Nations.
- Wallis, J. J. and D. C. North. 1986. Measuring the Transaction Sector in the American Economy, 1870–1970. In *Long-Term Factors in American Economic Growth. Studies in Income and Wealth Series*, edited by S. L. Engerman and R. E. Gallman. Chicago: University of Chicago Press.
- Williamson, O. E. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: Free Press.
- . 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
- . 1993. Opportunism and Its Critics. *Managerial and Decision Economics* 14 (2): 97–107.
- Zenger, T. R. 1994. Explaining Organizational Diseconomies of Scale in R&D: Agency Problems and the Allocation of Engineering Talent, Ideas, and Effort by Firm Size. *Management Science* 40 (6): 708–729.