
Marc van Wegberg and Arjen van Witteloostuijn

11.1 INTRODUCTION

A discussion about multi-market competition should distinguish between statics and dynamics. Static multi-market studies are concerned with the effects of multi-market scope on performance. Because of economies of scope, multi-market penetration improves efficiency and raises profits (Baumol, Panzar and Willig, 1982; Teece, 1980). If the scope of firms overlaps, the firms are said to meet in multiple markets. Strong multi-market contact may enhance collusion between them and raise their performance (Edwards, 1955; Feinberg, 1984; Bernheim and Whinston, 1990).

Firms may learn from these results that they should increase their presence in multiple markets, so as to realize economies of scope or to raise multi-market contact with salient rivals. A change of scope, however, brings us into the realm of dynamic multi-market competition. In the 1990s, some reversed multi-market mergers (such as Matsushita-MCA, Novell-WordPerfect and AT&T-NCR) suggest that failure may occur. What kinds of mistakes and failures can occur when firms change their scope? We are especially interested in failures that go beyond normal business risk. A static approach to strategy may overlook or downplay some disadvantages of a wide scope.

The aim of this chapter is to identify why decisions to change the firm’s presence in multiple markets may lead to failure, even when applying an otherwise sound strategy of changing the firm’s scope. We begin with discussing the content of a rational strategy with respect to multi-market scope. Next, we identify mistakes that firms can make in changing their scope. We illustrate the argument with a case from the field of information technology: the market for web browsers.
11.2 ALIGNING MULTI-MARKET SCOPE WITH THE RESOURCE BASE

Before identifying the kinds of mistakes that firms can make when they change their scope, we need to know what would be a rational, ex ante profit-maximizing course of action. Multi-market competition theory argues that the goals of market power and efficiency benefits drive the optimal choice of a firm's multi-market scope. We will focus in this chapter on efficiency benefits, although market power could play an important role here (Edwards, 1955; Feinberg, 1984; Bernheim and Whinston, 1990). The efficiency benefits are based on economies of scope. Economies of scope arise if it is cheaper to supply two or more products in one process, than to operate separate processes for each product (Baumol, Panzar and Willig, 1982). The reason for this is that the supply of one product makes some resource(s) freely available to another product if both products are jointly supplied.

There are several ways by which a firm can realize economies of scope. It can repackage or combine existing technologies in a new product. It can also use a shared resource simultaneously in multiple products. The strategy of umbrella branding is an example, whereby a firm sells a large variety of products, all using the same brand name. Different products may also share some common value activities, such as the development or production of components. As these cases illustrate, a key idea in multi-market competition theory is that the optimal choice of a firm's product scope depends on the resources it uses. Two propositions to be tested in empirical studies link the firm's resource base to its strategic moves.

First, a firm's shared resources lead to efficiency benefits in a new market, if its resources are intensely used in that market. An R&D-intensive firm will likely enter R&D-intensive markets; an advertising-intensive firm will enter an advertising-intensive market. Research in this area (for example, Ramanujam and Varadarajan, 1989, p. 526) suggests: Proposition 1: Probability of entering new markets: Established-firm entrants tend to come from markets that are related in terms of their resource intensities (capital intensity, R&D intensity, or advertising intensity).

Montgomery and Hariharan (1991) confirm this proposition. They studied entry decisions by 366 major US manufacturing corporations in 258 industries in the period 1973-1977. They found that: 'A firm's selling intensity and research and development intensity are very important indicators of which firms will enter new markets. Further, the breadth of a firm's resource base is a very strong predictor of diversified expansion' (p. 85). Measuring resource requirements in terms of capital, selling, and R&D intensity, 'firms enter industries whose resource requirements are similar to their own resource profiles. This result holds for a firm's relative levels of...
selling intensity, research and development intensity, and capital intensity, as well as our more specific measure of relatedness’ (p. 85). Entry may occur by means of an acquisition. Related resource intensities may not only indicate in which markets a firm will enter, but also which (kinds of) firms it will want to acquire.

Proposition 2: Merger to exploit economies of scope: Mergers inspired by the motive to exploit economies of scope are most likely between firms in markets that are similarly advertising- or R&D-intensive.

Stewart, Harris and Carleton (1984) explored this proposition. They used data of 83 US manufacturing firms acquired during the period 1970-1977, including divisions of other companies before acquisition. Horizontal mergers were omitted. This and other screening conditions reduced the sample to 35 acquired firms. They found that the advertising intensity and R&D intensity of acquiring firms are strongly positively related to those of the acquired firms. Also, if a target firm had a high advertising intensity, this increased the probability of being acquired by a firm in a high advertising industry and lowered the probability of being acquired by a firm in a low advertising industry.

These empirical findings suggest that a firm’s shared resources are of prime importance in selecting markets to enter and targeting firms with a view to acquire them. Firms may extend their multi-market scope in order to capture value from their shared resources. A key question then arises if a firm engages in moves consistent with the propositions above: can it still fail?

11.3 FAILURES WHEN CHANGING MULTI-MARKET SCOPE

The business press abounds with cases where a new market entry aimed to gain economies of scope, in fact led to a fall in performance. Mistakes may occur for a variety of reasons: flawed assessments of the resources that drive synergy effects, organizational issues, scope-related feedback effects on the firm’s resource base and the effects of changes in scope on product market competition. These various effects are discussed below.

11.3.1 Over-abstraction

We focus on resources that drive the firm’s expansion into new markets. Some of these resources consist of relationships. Customer goodwill presupposes a relationship between the firm and its customers. Goodwill represents the accumulation of customers’ knowledge of a firm’s reliability
and product quality. Outside the purview of these customers, no goodwill may exist. The same holds for reputation. Most resources are combinations of inputs. These inputs need to be combined and managed. Their performance depends on this management and on incentives for the individuals involved. Information is at the heart of these resources.

The knowledge embedded in these resources is often tacit. This is usually seen as an advantage, as tacit knowledge is more difficult for rivals to copy or to buy. The tacit nature of knowledge also has a less often noticed disadvantage, however, it makes it more difficult for the firm's own management to assess its knowledge base. Management may suffer from over-abstraction, leading to a failure in profitably expanding its multi-market scope. Management may interpret the firm's resources in abstract terms as 'our brand name', 'our technical expertise', and so on. In reality, the resources may represent a highly specific mixture of relationships among individuals, complex combinations of inputs (some bought in open markets, others developed in-house), ways of storing and communicating information and incentives. This highly specific, unique mixture may or may not succeed when put to work in a new environment.

The danger of over-abstraction is to apply resources in a non-appropriate setting. Each market functions within a unique context (of environmental characteristics), such as institutions, routines and relationships. Every market requires a specific kind of expertise. A market, as does a firm, has ways (institutions, routines) to transmit information and to provide incentives. The firm's resources are also associated with a set of institutions, routines and relationships. They may or may not fit in the context of the new market. In the abstract terms of Proposition 1, it would be appropriate for an R&D-intensive firm to enter an R&D-intensive industry. At a concrete level, however, the firm's expertise and the new market's need for expertise may not match at all.

AT&T has a substantial expertise in electronics and such an expertise is surely required in the computer industry, but does this mean it should have acquired NCR? IBM made the same mistake of over-abstraction when it entered into telecommunications by acquiring Rolm. In discussing these two moves, von Tunzelman and Soete (1987) note that firms usually possess a highly specialized knowledge base. The failure to recognize this point, that is over-abstraction, then leads to misguided attempts to invade new territories.

Firms can try to solve this problem by engaging in a more realistic assessment of their resource base. They can use information technology to aggregate their information-based resources. Groupware software, such as Lotus Notes and Internet-based software, allows firms to create databases that contain the accumulated knowledge of the firm's employees. This software makes the firm's knowledge more visible and allows the firm to
assess weaknesses, as well as to identify new opportunities hidden in the data.

Another strategy is to make the firm's resources less abstract. Some resources are more situation- and relation-specific than others. Experience in management and problem solving is more abstract than expertise in LCDs. If employees' skills are highly specialized, the firm has a greater chance of failure in a new environment than if employees developed some general skills.

11.3.2 Organizational Side-effects of Changing Scope

A change in scope has important organizational consequences. These in turn may lead to (unexpected) costs. An important characteristic of a successful multi-market firm is connectedness. A firm's shared resource should be matched to the scope and selection of its product markets, to the other resources, to its employees and their incentives and skills and to its internal organization. The firm achieves an equilibrium when all these components (resources, product markets, human assets, organization) fit together. We label this condition connectedness, which is similar to Porter's (1996, p. 70) use of the concept of fit.

Connectedness is a necessary condition to achieve synergy. The existence of scope economies in the production process is, therefore, only one ingredient among many needed to produce synergy. To put it differently, when firms fail to realize synergy, the problem may be their inability to achieve connectedness, rather than a faulty expectation of possible economies of scope.

To create connectedness, a firm should adjust the parts that make up the firm: it may need to invest in or divest in resources, adapt its product portfolio (by entry and exit), its human assets (by promoting learning, through selection and promotion) and the organization (both the organizational structure and the company's culture). Making these adjustments indicates that connectedness is costly. Investing in resources is a case in point.

Designing or adjusting resources so that maximum connectedness is achieved tends to make them unique to the firm, and may reduce their value to other companies. As a result, they become firm-specific. *Firm-specificity is an investment in connectedness.* A firm's investments are firm-specific the more they are tailored to be connected to the (complementary) resources, the workforce and the firm's internal and external organization. The firm increases its effectiveness by designing machinery, training employees, developing products and organizing itself so as to maximize this connectedness. Such moves increase the firm's uniqueness. Some of its
characteristics, or a combination thereof, are likely to be unique. By bringing the other resources in line with these features, the firm becomes even more unique. Connectedness, though costly, may thus contribute to competitive advantage.

*Figure 11.1 Elements of connectedness*

![Diagram of connectedness](attachment:image.png)

Firm-specificity, however, also represents a form of inertia, which points to another possible cost of connectedness. Durable resources that are difficult to trade are the firm's *inertia factors or commitments* (Ghemawat, 1991). A firm's reputation and goodwill will cause inertia, as do long-term relationships with employees, suppliers and customers. The inertia may be intended, as in the case of reputation, or arise as a side-effect of irreversible investments in immobile production factors.

Connectedness calls for co-ordination, which is costly in several ways (Porter, 1985, p. 259). Multi-market scope leads to synergies only if the multi-market activities are effectively co-ordinated. Co-ordination raises compromise costs, when a compromise between interdependent business units of a firm calls for one unit to take decisions that may run against its own best interest. Co-ordination costs also increase when, due to connectedness, a change in shared resources is accompanied by changes in the other components of Figure 11.1. Finally, if a firm coordinates its decisions across several markets, it becomes difficult to adjust to new information. Each adjustment must be coordinated as well, which is likely to be time consuming. Long communication lines also imply that it may take a while before new information reaches the decision makers. Connectedness thus makes adjustments more costly, which is another way of saying that it reduces flexibility. Porter's analysis therefore points out a trade-off between multi-market spillovers (economies of scope) and flexibility.

Connectedness calls for setting priorities. A firm may have several shared resources which impose inconsistent demands on its connectedness, in terms
of the incentives given to employees, the budget to be allocated and the selection of markets that should be served. Once such an inconsistency emerges, top management needs to set priorities and decide upon its core competencies. The opportunities foregone because of such a choice are opportunity costs of the core competence. Philips' shared resources, for example, are its brand name and know how. Its brand name stands for reliable family products, while its know how stands for innovative products. This has led to mismatches, namely when the company failed to attract the customer base it needed. Its compact disk interactive (CD-i) is an example. It should initially have been targeted at the population of 'gadget lovers', but Philips' marketing did not target these people.

Insiders in the company usually understand that new entry will force the firm to change the terms of its connectedness. They may then engage in political activities (Milgrom and Roberts, 1992, p. 192) in order to select entry markets which will have beneficial side-effects for them. The firm's subsequent connectedness may benefit them. More specifically, individuals in a firm may push for entry into the 'wrong' kind of markets in order to protect their existing expertise, relations or career chances.

Firms increasingly understand the need to create connectedness without losing too much flexibility. They are increasingly using alliances and outsourcing as remedies. Alliances can be used to contribute complementary resources to some of the firm's activities, without burdening the firm with the need to create intra-organizational connectedness. If a firm needs specific expertise for one particular new venture, it can turn to an ad hoc alliance, rather than buying or developing that expertise itself.

Whether a firm is flexible or inert also depends on how it organizes its resource base. Some multinational firms keep their core competencies centralized in the country of origin. Most multinational firms are less international in their R&D than in their manufacturing and sourcing activities. This helps to create and ensure connectedness. This strategy can be called centralized or imperialistic, as it imposes resources from one country upon many. US software producers can thereby impose technical standards worldwide (which may very well be efficient). A disadvantage of this approach is that it reduces the firm's adaptability to new markets. An alternative is the 'market of ideas' approach, often adopted by multinational enterprises from small open economies. For example, Dutch companies like Reed Elsevier, Philips and Ahold systematically adopt successful ideas developed in one country in many other nations. The source of the new ideas or products can be located outside the Netherlands. A decentralized resource development approach is flexible, but its disadvantage is the lack of coordination and the duplication of efforts.
11.3.3 Market-resource Feedback Effects of Increased Scope

Entry into a new market may have feedback effects on the firm’s resource base. Neglecting these may lead to an over-estimation of entry revenues. For example, if the new activity is a failure, it may backfire on the firm’s goodwill or reputation: the black-eye effect (Jensen, 1992). The new activity may also strengthen the firm’s reputation: the halo effect. In addition to Jensen’s unintended feedback effects, there are also intended ones. To make entry a success may call for a change in the firm’s connectedness. This in turn may call for further changes in scope, such as exiting from some current markets. A broader scope will usually require a wider pool of resources also to be present and which need to be connected to the rest of the company. With more to co-ordinate, the firm tends to become less flexible.

Feedback effects can be positive or negative. They are positive if they create synergy or if they strengthen the firm’s intended inertia factors (its core competencies and its commitment to its home markets). Positive feedback improves the firm’s overall competitiveness. Negative feedback occurs if the new activity increases unintended inertia, or if it crowds out existing activities, for example, by creating pollution or negative reputation effects. Feedback effects should be considered part of the entry costs of the new activity (Van Wegberg and Van Witteloostuijn, 1993). They are the most difficult part to assess and the part where management is most likely to err.

It may take a farsighted management to anticipate these feedback effects. A management with a short-term, case-by-case decision-making focus may fail. Compared with a new firm, an established firm that enters a new market faces a complicated situation. On the one hand, the established firm can utilize its existing resources when entering the new market. Its entry costs will thus be lower than for a new firm, which needs to start up production from scratch. On the other hand, the market entered may lead to feedback effects on the established firm’s existing markets. The firm’s management needs to correctly anticipate such feedback effects.

Table 11.1 The new market entry decision

<table>
<thead>
<tr>
<th>A new market opportunity</th>
<th>Entry revenue net of direct entry costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>Nil or small</td>
</tr>
<tr>
<td>Positive</td>
<td>Positive and high</td>
</tr>
</tbody>
</table>

Feedback effects:

<table>
<thead>
<tr>
<th>Feedback effects</th>
<th>New entry decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>Forego</td>
</tr>
<tr>
<td>Positive</td>
<td>Forego?</td>
</tr>
</tbody>
</table>

Exploit and adjust existing market/ Forego
Exploit and raise the stakes
The table shows that management faces two dilemmas. First, the entry opportunity may be attractive per se, but have negative feedback effects on the firm’s current products and markets. A solution may be to shield the existing market from the new market by separating them. For example, firms increasingly tend to impose financial targets on each division separately. Treating each division as an independent unit reduces synergies, but also reduces the danger of negative spillovers.

Second, another dilemma occurs if the entry opportunity is not very attractive in itself, but has a positive feedback effect on current activities. If the firm’s management is confident about the economic potential of its current activities, it may well enter the new opportunity for the sake of safeguarding these current activities. For instance, consumer electronics companies such as Sony and Matsushita entered the music and movie industries in the 1980s, expecting positive feedback effects on their hardware activities in TV sets, videorecorders and new technologies, such as videogame players and DVD players (the DVD is the successor of the CD-ROM). This strategy aims to maximize the feedback from the new market to the firm’s core markets. Integrating and co-ordinating these activities then become of prime importance.

The entry opportunity is non-controversial if it combines positive net revenues with a positive feedback effect. This requires an organizational structure and human resources that allow the new opportunity to strengthen the firm’s competitiveness in its current markets. The firm in fact strengthens the specificity of its connectedness in a way that increases the profitability of its current product market scope.

In selecting new opportunities for growth, firms prefer positive/positive opportunities, in terms of the table above: opportunities with positive revenue and positive feedback effects. In this decision process, management is likely to follow a two-stage approach. The first one is to assess the (intended) inertia factors that underly its connectedness. The second stage is to use these to identify new opportunities, their net entry revenues and their feedback effects. The higher the expected value from the firm’s current markets, and the more commitment is vital to continued competitiveness in these markets, the more it will be inclined to exclude opportunities with negative feedback effects (even if the entry revenue itself is positive). The feedback effect of an entry opportunity will induce the firm to rethink its current scope. Hence (major) entry decisions need to be assessed in terms of the overall picture: at the level of the corporation, rather than that of a business unit.
11.4 COMPETITOR-DRIVEN FEEDBACK EFFECTS FROM A CHANGE IN SCOPE

The success of a change in scope depends not only on the firm's internal characteristics, but also on the context of competition. A change in scope may change competition both in the market entered and in the entrant's current market. Its current market rivals may react to its move, as do the incumbents in the market entered. If a firm extends its scope, it should anticipate competitor-driven feedback effects on its home market.

If a firm enters a market, it reduces the revenues and perhaps the sales of the incumbents in these markets. These firms may then search themselves for new markets. For example, they may decide to enter the entrant's current market(s). This reciprocal entry may occur for a variety of reasons. The same economic rationale that drives a supplier of product A to supply product B, may drive a supplier of B to enter the market of A. Entry costs from market A to B and from B to A may be low (Brander, 1981). Excess capacity in A may be profitably used for product B, and vice versa (Cairns and Mahabir, 1988; Van Wegberg and Van Witteloostuijn, 1993). An economy of scale or scope may make it efficient to supply both A and B (Baumol, Panzar and Willig, 1982). Strategic reasons may also account for reciprocal entry. A firm may retaliate to incursion into its domain by reciprocal entry (Edwards, 1955). It may try to hurt the entrant in its current market in order to reduce its entry threat. As Watson (1982, p. 40) puts it, 'pursuit of a foreign competitor's domestic markets can help protect the threatened company's own home market share'.

Whatever the reasons for reciprocal entry, it imposes a feedback effect from entry on the entrant's current market. Prospective entrants should take this competitive feedback into account before making their entry move. Entry is not a one-shot activity. The entry changes the market place, the rivals' strategies and the entrant's resource base. These changes are new and often unexpected events that the entrant has to react to. As a consequence, the entry process may evolve in an unpredictable way.

11.4.1 Legitimizing of the Choice of Multi-market Scope

Firms may expand their scope anticipating synergies that may take a long time to emerge. It is a normal business risk that these synergies may not materialize. The real concern is how firms legitimize their belief in these synergies. Social phenomena such as follow-the-leader behavior, imitation and adopting what appears 'fashionable' may be important here. A similar problem occurs if a firm, which wants to expand its scope, must choose from a wide variety of new options. Making the wrong choice can be rationalized
ex post as the outcome of taking normal business risks. The terms by which
decision-makers in a firm legitimate their decisions will affect the decisions
themselves. This may lead to a mistaken change of scope. One way to
legitimize a new venture is to point to leading rivals who did the same. It
may have been sound business practice that in the 1980s and early 1990s,
Matsushita, Sony and Philips all acquired film companies. It may also be,
however, that some element of ‘fashion’ and imitation crept in. If the new
activity fails, at least management did not fail alone. If this motive tends to
occur, a firm that enters a market should anticipate that others may follow its
move, thus crowding the market entered.

11.4.2 Anticipating Reciprocal Entry

The established firm faces the problem that the market entered differs from
its familiar, current market. It may have different players, traditions and
institutions. In an international business context, the local firms may interpret
foreign entry in a highly personal or cultural way. For instance, they may
interpret entry by an American firm in political terms (imperialism), in social
terms (a threat to local employment), or in moral terms (a sign of confidence
in the locals, an opportunity to learn). As a consequence, they may react to
the entry in quite (un)predictable ways. Reciprocal entry can be such a
response. If the entrant’s management solely focuses on how to efficiently
exploit its own resources, it may fail to appreciate the uniqueness of each
market entered. The management of a large, multi-market firm may also be
‘egocentric’. It may be smart enough to understand what its optimal moves
should be, given its rivals’ current positions. It may, however, fail to realize
that rivals may be sophisticated, too, and may come up with unexpected
answers to the challenge. It should be able to put itself in the shoes of its
rivals to understand their reasoning process.

11.4.3 Raising the Stakes

Dangerous feedback effects may occur when firms compete by raising the
stakes. If an entry opportunity promises positive entry profits as well as
positive feedback effects, it may induce the firm to expand its resources and
their connectedness. Firms which base their large (international) scope on a
few core competencies, are likely to invest heavily in them. There are quite a
few markets where competitors raise the stakes. Each new generation of
memory chips calls for massive investments in R&D and production
capacity. The same holds for new cars and civil aircraft. In the software
application industry, competition has shifted from separate applications (in
word-processing, databases, and so on) to integrated suites comprising all
major applications. This move has destroyed all but the most cash rich
software suppliers and has reduced the market to three key players
(Microsoft, Lotus and Corel). Novell's move into software suites (when it
acquired WordPerfect) has been very costly: it was unable to keep up with
Microsoft in the suite market and it lost its control over the market of
network operating systems.

A firm which raises the stakes, should anticipate two possible problems:
loss of flexibility and resource constraints. Investments will become
increasingly firm-specific and connectedness will increase. The associated
inertia poses dangers if unanticipated events occur. For example, inertia
makes dominant suppliers vulnerable to new competitors. Upstarts may have
a more narrow scope, but greater flexibility. Then, connectedness of
established firms, given the inertia associated with it, creates windows of
opportunities for upstarts. Cases abound where upstarts defeated once
seemingly invincible rivals such as IBM and General Motors. Their
strategies, if successful, force the established multi-market rivals to react, and
may ultimately drive them out of the affected markets.

Widening the scope of the firm may weaken the firm's commitment to its
current market. Most firms are resource-constrained and entering a new
market will force it to forego other developments. A market leader is less at
risk when extending its scope than a firm which faces intense competition in
its current markets. Under John Sculley, for instance, Apple moved into
portable digital assistants with its Newton pen-based hand-held computer.
While developing this new operating system, it neglected to update its
Macintosh operating system for PCs, thus putting it at a disadvantage relative
to the competing Windows operating system.

11.5 A CASE: THE BROWSER MARKET

The dynamic browser market illustrates some of the failures analyzed above.
In 1990, an English physicist at CERN, Switzerland, Tim Berners Lee,
invented the World Wide Web. He developed standards such as the hypertext
protocol, HTTP, and the hypertext language, HTML. He programmed a
browser to view and download files stored on distant computers. Berners Lee
used a little known computer system for his browser (the Next). A university
then wrote the first browser for PCs: Mosaic. The businessman Jim
Barksdale enticed the main author of that program, Marc Andreessen, to join
him in a new company, namely Netscape. Netscape developed the first
'commercial' browser, the Netscape Navigator. In true Internet fashion, the
Navigator was distributed free of charge. From a commercial perspective,
however, this approach was an intelligent marketing strategy rather than an
Internet tradition. By distributing Navigator free of charge, the company built marketing power. Most actual revenues came from the server software.

The browser appeared to be a useful tool and numerous companies entered the market with their own browser. The online network companies Compuserve and AOL, for example, decided to enter this market. Quarterdeck, a software company, also entered. As Microsoft realized the market potential of the Internet, it licensed a browser from the Spry company. Synergies were expected between the browser, other applications, online access, and utilities. Competition among these companies led to a ‘feature’ war. Suppliers introduced new browser varieties at a very rapid pace. The market changed into a ‘raising the stakes’ contest and by 1996 most suppliers had exited. At present, Microsoft and Netscape basically share a duopoly. Still existing rivals moved into niches. WebTV developed a browser for TV-based Internet. When recognizing that this niche may grow substantially, Microsoft acquired WebTV early in 1997.

The escalation was not simply a matter of Microsoft and Netscape investing increasing quantities of money in their products. Their investments intended to uncover new sources of value. The first source of value is that the browser defines the standards that govern how information should be formatted. Text can be entered in the HTML language; there are also standards for pictures, video, animations and sound. Due to the growing importance of the Internet, these standards will govern all information processing in the future. The distinction between Internet data and the data stored on PCs and mainframes will disappear. Increasingly, users will store their information in formats that are accessible over the Internet. The organizations who control the Internet (standards), will also control the desktop. The competition between browsers seemed to be relatively unimportant. However, the impact of browsers on standards changed this into a much broader battle.

A second reason for the escalation is that the status of the browser product changed over time. At first, it was perceived as a new tool to view and download files. Then it became an application of similar status as word processors and spreadsheets. Finally, Netscape realized that the browser could become an operating system. That is, the user would interact with the PC and all date exclusively via the browser. The underlying operating system, such as Windows, Macintosh, Unix, or OS/2, would become irrelevant. Hence, Netscape developed browsers for all major operating systems. Microsoft realized that it would become irrelevant if Netscape were to win the browser war. In what will surely go down as one of the most controversial maneuvers in business history, Microsoft decided to integrate the browser into its operating system. The analysis above represents a case of an entrant moving from a browser application into the market for operating
systems and then facing reciprocal entry by the dominant supplier from the latter market. Netscape surely did not anticipate Microsoft's brilliant move.

Competing by raising the stakes is, therefore, an adventure where each party uses increasing quantities of resources to find new applications and to provide new sources of value to customers. The direction in which the technology develops, determines the ultimate winner. To anticipate how this process will evolve is very difficult. Microsoft's strength is that it can invest its massive software development resources into any new development. Its weakness is that any new product has to be compatible with its previous software releases. Compatibility dominates over other concerns, such as performance and timing. Recently, some security problems in Microsoft's browsers have been attributed to the speed with which Microsoft has to work and the difficulty of combining Internet software with its traditional desktop operating systems and application software. Netscape has no previous commitments to be concerned about. It has pieced together a team of software people totally committed to the one task of Internet software. Its connectedness is completely compatible with the Internet culture. Its weakness is that of any upstart. Microsoft may be able to outperform it merely on the basis of strength of its resources.

In spite of the economic uncertainty, one outcome is clear. Companies that cannot join in the escalation game, drop out. They exit or are acquired. The same holds for companies that cannot justify to themselves, in the light of their other activities, why they should join the escalation game. This explains why Compuserve and AOL gave up, shortly after sinking tens of millions of dollars into the battle.

Raising the stakes may not only lead to exit but also to entry. Raising the stakes increased the economic potential of the Internet. This increased the interaction between the Internet and various industries active in the use, distribution and supply of information. This in turn brings new players into the field. For example, Lotus pioneered the market for groupware. This is software that uses a company's internal computer network to allow employees to exchange information. The Lotus Notes software stores the communication in databases. This development was initially entirely separate from the Internet. However, one outcome of the Microsoft-Netscape battle was the possibility to use browsers and e-mail for giving access to information stored locally within a company. This has forced Lotus to make Notes web-enabled. It now includes a browser. Lotus's response demonstrates that raising the stakes can change the terms of competition. It changes the linkages between an industry and its environment and may draw in new players, with unforeseen effects on the players caught in a raising-the-stake game.
This case study illustrates the extent to which firms can mistakenly change their scope. The online networks and others failed to secure a foothold in the browser market. It shows the importance of feedback that results from learning processes (browsers have made the operating system more user friendly), of reciprocal entry (between browsers and operating systems) and of strategies that raise the stakes (for example by linking browsers to standards). It also shows how unpredictable the process is. As these activities developed the Internet's potential, they drove out some suppliers of browsers, while attracting suppliers into adjacent markets (such as groupware). Existing players such as Microsoft and Lotus can reap economies of scope, but they are less flexible than an upstart such as Netscape.

11.6 CONCLUSIONS AND IMPLICATIONS FOR THE SMALL OPEN ECONOMY FACED WITH GLOBALIZATION PRESSURES

This chapter has argued that firms can derive a competitive advantage from unique, superior resources only through creating linkages among them. Shared resources can only be successfully applied to a new market by connecting them to complementary resources, giving employees suitable incentives and by organizing the new activity appropriately. This requirement of linkages, that is connectedness, creates inertia and may prevent firms from benefiting from new opportunities in the future. In a dynamic world, this constitutes a major problem for multi-market firms, for which there is no easy solution, not even in theory. This is one reason for many firms' failure to successfully extend their scope.

The framework developed in this chapter also has four immediate implications for firms from small open economies faced with globalization pressures. First, the issue of effectively managing connectedness is likely to be much more critical for firms from small open economies, as international markets may be much more important to their survival, profitability and growth than the domestic market, even at an early stage of international expansion. This is also consistent with the double diamond thinking described in Chapter 3 in this book by Moon, Rugman and Verbeke. Second, correctly anticipating feedback effects is again likely to be much more important for firms from small open economies, faced with much larger foreign players, who can rely on their connectedness with their domestic diamond when reacting to foreign entry. Third, firms from small open economies, precisely because of their intrinsically vulnerable position when faced with problems of connectedness and feedback in foreign markets, may
be better equipped to effectively anticipate and manage unintended dynamic effects of multi-market competition. In fact, they probably should try to build a firm-specific advantage in this area. Fourth, in this era of global mergers and acquisitions, and the more general tendency towards higher concentration in many industries, the analysis presented in this chapter suggests that there may be 'hope' for small niche players even in the most globalized industries. Large firms, especially diversified global MNEs, are very likely to make mistakes regarding the potential of scope economies when penetrating either foreign markets or new activity sectors, for example, as a result of over-abstraction. Hence, smaller firms should recognize the fact that in this case, mere scale and a high diversification level may constitute weaknesses, rather than strengths, in 'guerilla warfare', where the correct anticipation of the enemy’s reactions may be more important than the absolute volume of resources at the firms' disposal.

NOTES


2 Note that it can be controversial whether feedback effects will be positive at all. Moreover, the feedback effect may be positive for some of the firm's current products and negative for others.

REFERENCES


