Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company’s public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Global sourcing strategy and sustainable competitive advantage

Masaaki Kotabe\textsuperscript{a,}\*, Janet Y. Murray\textsuperscript{b,1}

\textsuperscript{a}The Washburn Chair of International Business and Marketing, The Fox School of Business and Management, The Institute of Global Management Studies, Temple University, 349G Speakman Hall (006-00), Philadelphia, PA 19122, USA
\textsuperscript{b}Boeing Institute of International Business, John Cook School of Business, St. Louis University, 353 Davis-Shaughnessy Hall, 3674 Lindell Boulevard, St. Louis, MO 63108, USA

Abstract

Global sourcing strategy has been one of the most hotly debated management trends in the last 20 years. In its early years, global sourcing was examined mostly from “in-house” development and procurement perspectives; and in the last several years, research focus has shifted to “outsourcing” activities. Along with this shift from internal to external focus on global sourcing, many researchers and business practitioners have applied a core competency argument to justify increased levels of outsourcing activities on a global basis. Although the beneficial aspects of outsourcing are assumed in most cases, no consensus exists in reality as to the effect of outsourcing. Furthermore, the increased instability of the exchange rate environment in the last several years has also led to increased difficulties in managing globally scattered operations that were once fashionable in the 1980s-90s under the rubric of global strategy. In this article, the authors explore potential limitations and negative consequences of outsourcing strategy on a global scale.

© 2003 Elsevier Inc. All rights reserved.

Keywords: Global sourcing; Procurement; Outsourcing; Performance; Exchange rate instability

1. Introduction

Global competition suggests a drastically shortened life cycle for most products and no longer permits companies a polycentric, country-by-country approach to international business. If companies that have developed a new product do follow a country-by-country approach to foreign market entry over time, a globally oriented competitor will likely overcome their initial competitive advantages by blanketing the world markets with similar products in a shorter period of time. Indeed, it is imperative for companies to continuously create and acquire capabilities that would help generate a sustainable competitive advantage over their rivals. Increasingly, how to source globally has become a critical strategic decision that is influenced by the capabilities needed to compete.

Barney (1991, p. 102) has stressed that a firm possesses sustained competitive advantage when it adopts a strategy that is “not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy.” Unfortunately, product innovation alone cannot guarantee that a firm would enjoy sustainable competitive advantage. Instead, it is of utmost importance for a firm to complement its product innovation with strong manufacturing and marketing capabilities. This is primarily because, in today’s highly competitive market, legal means of protecting proprietary technology have become ineffective as new product innovations are easily reverse engineered, improved upon, and invented around by competitors without violating patents and other proprietary protections (Baumol, Nelson, & Wolff, 1994; Levin, Klevorick, Nelson, & Winter, 1987). Production sharing facilitates technology diffusion through official and unofficial channels among competitors. Obviously, the value of owning technology has lessened drastically in recent years as the inventing company’s temporary monopoly over its technology has become transitory.

History has shown repeatedly that in a highly competitive environment many manufacturers begin to either produce in lower-cost locations or outsource components and finished products from lower-cost producers on a contractual original equipment manufacture (OEM) basis. Howev-
er, companies increasingly outsource to gain access to suppliers’ capabilities (Barney, 1999). Global sourcing strategy generally refers to management of (1) logistics identifying which production units will serve which particular markets and how components will be supplied for production and (2) the interfaces among R&D, manufacturing, and marketing on a global basis. The ultimate objective of global sourcing strategy is for the company to exploit both its own and its suppliers’ competitive advantages and the comparative locational advantages of various countries in global competition.

First, we explain the nature of global sourcing strategy as practiced by multinational companies in the last 20 years and explore its long-term strategic implications. The world economy in the last two decades of the 20th century was generally characterized by relatively consistent economic growth and predictable currency fluctuations. While the nature of global competition remains the same, the global market environment has drastically changed in the last several years starting with the Asian financial crisis that took place in 1997. Therefore, second, we explore some sourcing strategy implications under current turbulent times.

2. Global sourcing as a business practice

Without established sourcing plans, distribution, and service networks, it is extremely difficult to exploit both emerging technology and potential markets around the world simultaneously. As a result, the increased pace of new product introduction and reduction in innovational lead time calls for more proactive management of locational and corporate resources on a global basis. We emphasize logistical management of the interfaces of R&D, manufacturing, and marketing activities on a global basis—which we call global sourcing strategy—and also the importance of retaining the company’s capability and gaining access to suppliers’ capabilities to design and develop major components and finished products. These capabilities allow the company to better understand the cost and quality implications of its sourcing relationship with its suppliers.

Global sourcing strategy requires a close coordination among R&D, manufacturing, and marketing activities across national boundaries (Kotabe & Helsen, 2004, Chap. 10). There always exist conflicts in the tug-of-war of differing objectives among R&D, manufacturing, and marketing. Excessive product modification and proliferation for the sake of satisfying the ever-changing customer needs will forsake manufacturing efficiency and have negative cost consequences, barring a perfectly flexible computer-aided design (CAD) and computer-aided manufacturing (CAM) facility. CAD/CAM technology has improved tremendously in recent years, but the full benefit of flexible manufacturing is still many years away. Contrarily, excessive product standardization for the sake of lowering manufacturing costs will also be likely to result in unsatisfied or undersatisfied customers. Similarly, innovative product designs and features as desired by customers may indeed be a technological feat but might not be conducive to manufacturing. Therefore, topics such as product design for manufacturability and components/product standardization have become increasingly important strategic issues. It has become imperative for many companies to develop a sound sourcing strategy in order to exploit most efficiently R&D, manufacturing, and marketing on a global basis.

Executives should understand and appreciate the important roles that product designers, engineers, and production managers, and purchasing managers, among others, play in corporate strategy development. Let us take a look at Toyota’s global sourcing strategy as an example.

Toyota is equipping its operations in the United States, Europe, and Southeast Asia with integrated capabilities for creating and marketing automobiles. The company gives the managers at those operations ample authority to accommodate local circumstances and values without diluting the benefit of integrated global operations. Thus, in the United States, Calty Design Research, a Toyota subsidiary in California, designs the bodies and interiors of new Toyota models, including Lexus and Solara. Toyota has technical centers in the United States and in Brussels to adapt engine and vehicle specifications to local needs. Toyota operations that make automobiles in Southeast Asia supply each other with key components to foster increased economies of scale and standardization in those components—gasoline engines in Indonesia, steering components in Malaysia, transmissions in the Philippines, and diesel engines in Thailand. Toyota also started developing vehicles in Australia and Thailand in 2003. These new bases develop passenger cars and trucks for production and sale only in the Asia-Pacific region. The Australian base is engaged mainly in designing cars, while the Thailand facility is responsible for testing them (Nikkei Net Interactive, 2002).

In addition to capitalizing on the comparative advantages of different sourcing locations and its own unique capabilities by designing and manufacturing certain components in-house, Toyota also reaps the advantages of outsourcing. To outsource components and parts, Toyota adopts both the arm’s-length and partner models in managing their external suppliers. It would purchase necessary, but nonstrategic inputs from independent suppliers on an arm’s-length basis to obtain a lower cost for these inputs. Examples would be belts, tires, and batteries that are not customized and do not differentiate its products from its competitors. Strategic inputs that are of high value and provide differentiation (e.g., transmission, engine parts) are sourced from suppliers based on strategic partnerships to gain access to suppliers’ capabilities (Dyer, Cho, & Chu, 1998). As a result, Toyota is able to combine its own and its suppliers’ unique capabilities to obtain a sustainable competitive advantage over its rivals.
3. Trends in global sourcing strategy

Over the last 20 years or so, gradual yet significant changes have taken place in global sourcing strategy. The cost-saving justification for international procurement in the 1970s and 1980s was gradually supplanted by quality and reliability concerns in the 1990s. However, most of the changes have been in the way business executives think of the scope of global sourcing for their companies and exploit various opportunities available from it as a source of competitive advantage. Peter Drucker, a famed management guru and business historian, once said that sourcing and logistics would remain the darkest continent of business—the least exploited area of business for competitive advantage. Naturally, many companies, regardless of their nationality, that have a limited scope of global sourcing are at a disadvantage over those that exploit it to the fullest extent in a globally competitive marketplace.

Manufacturers were under pressure to compete on the basis of improved cost and quality as just-in-time (JIT) production was adopted by a growing number of companies. JIT production requires close working relationships with component suppliers and places an enormous amount of responsibility on purchasing managers. Furthermore, sourcing directly from foreign suppliers requires greater purchasing know-how and is riskier than other alternatives that use locally based wholesalers and representatives. Locally based representatives are subject to local laws and assume some of the currency risk associated with importing. However, now that purchasing managers are increasingly making long-term commitments to foreign suppliers, direct dealings with suppliers are justified.

As a global company adds another international plant to its network of existing plants, it creates the need for sourcing of components and other semiprocessed goods to and from the new plant to existing plants. Global manufacturing adds enormously to global sourcing activities either within the same company across national boundaries or between independent suppliers and new plants. Mature companies are increasingly assigning independent design and other R&D responsibilities to satellite foreign units so as to design a regional or world product. As a result, foreign affiliates have also developed more independent R&D activities to manufacture products for the U.S. markets in addition to expanding local sales (Kotabe & Swan, 1994).

4. Logistics of sourcing strategy

Sourcing strategy includes several basic choices companies make in deciding how to serve foreign markets. One choice relates to the use of imports, assembly, or production within the country to serve a foreign market. Another decision involves the use of internal or external supplies of components or finished goods. Therefore, the term “sourcing” is used to describe management by multinational companies of the flow of components and finished products in serving foreign and domestic markets.

Sourcing decision making is multifaceted and entails both contractual and locational implications. From a contractual point of view, the sourcing of major components and products by multinational companies takes place in two ways: (1) from the parents or their foreign subsidiaries on an “intrafirm” basis and (2) from independent suppliers on a “contractual” basis. The first type of sourcing is known as intrafirm sourcing. The second type of sourcing is commonly referred to as outsourcing. Outsourcing can further be broken down into two types: on an arm’s length or strategic partnership basis. Similarly, from a locational point of view, multinational companies can procure components and products either (1) domestically (i.e., domestic sourcing) or (2) from abroad (i.e., offshore sourcing).

In developing viable sourcing strategies on a global scale, companies must consider not only manufacturing costs, the costs of various resources, and exchange rate fluctuations, but also availability of infrastructure (including transportation, communications, and energy), industrial and cultural environments, the ease of working with foreign host governments, and so on. Furthermore, the complex nature of sourcing strategy on a global scale spawns many barriers to its successful execution. In particular, logistics, inventory management, distance, nationalism, and lack of working knowledge about foreign business practices, among others, are major operational problems identified by multinational companies engaging in international sourcing.

Some studies have shown, however, that despite, or maybe, as a result of, those operational problems, where to source major components seems much less important than how to source them (Kotabe & Swan, 1994; Murray, Kotabe, & Wildt, 1995). Thus, when examining the relationship between sourcing and competitiveness of multinational companies, it is crucial to distinguish between sourcing on an “intrafirm” basis and sourcing on a “contractual” basis, for these two types of sourcing will have a different impact on their long-run competitiveness.

4.1. Intrafirm sourcing

Multinational companies can procure their components in-house within their corporate system around the world. They produce major components at their respective home base and/or at their affiliates overseas to be incorporated in their products marketed in various parts of the world. Thus, trade does take place between a parent company and its subsidiaries abroad, and also between foreign subsidiaries across national boundaries. This is often referred to as intrafirm sourcing. If such in-house component procurement takes place at home, it is essentially domestic in-house sourcing. If it takes place at a company’s foreign subsidiary, it is called offshore subsidiary sourcing. Intrafirm sourcing makes trade statistics more complex to interpret, since part of the international flow of products and components is taking place
between affiliated companies within the same multinational corporate system, which transcends national boundaries. The most recent United Nations official report shows that in 1999, about 34% of world trade is managed by multinational companies on an intrafirm basis (Hamdani, 1999).

4.2. Outsourcing

As discussed earlier, Dyer et al. (1998) have observed that Japanese companies make a distinction of outsourcing as to whether it is based on an arm’s length or a strategic partnership basis. In the 1970s, foreign competitors gradually caught up in a productivity race with U.S. companies. This coincided with U.S. corporate strategic emphasis shifting from manufacturing to finance and marketing. This strategic shift was based chiefly on a cost–benefit analysis that manufacturing functions could, and should, be transferred to independent operators and subcontractors, depending on the cost differential between in-house and contracted-out production. A company’s reliance on domestic suppliers for major components is basically a domestic purchase arrangement. Furthermore, in order to lower production costs under competitive pressure, U.S. companies turned increasingly to outsourcing of components and finished products from abroad, particularly from such countries as China, Singapore, South Korea, Taiwan, Hong Kong, and Mexico. Initially, subsidiaries were set up for production purposes (i.e., offshore subsidiary sourcing), but gradually, independent foreign suppliers took over component production for U.S. companies. This latter phenomenon is usually called offshore outsourcing (or offshore sourcing, for short).

Outsourcing helps reduce fixed investment in in-house manufacturing facilities and thus lower the break-even point, which subsequently helps boost an outsourcing company’s return on equity (ROE). Thus, if corporate executives’ performance is evaluated on the basis of their contribution to the company’s ROE, they tend to have a strong incentive to increase outsourcing.

Unlike their U.S. counterparts who historically managed all suppliers in an arm’s-length fashion, Japanese companies managed their outsourcing activities based on the types of inputs sourced. Although many studies of supplier–assembler relationships in Japan implied that all suppliers are part of the keiretsu, this perception is inaccurate (Dyer et al., 1998). Japanese companies differentiate strategic suppliers (kankei kaisha) that fall into the keiretsu category from independent suppliers (dokuritsu kaisha) that do not. In utilizing both types of outsourcing, Japanese companies are able to achieve economies of scale using arm’s length transactions. At the same time, they also gain access to their suppliers’ capabilities for strategic inputs by using strategic partnerships. In general, “these inputs are not subject to industry standards and may benefit from customization due to multiple interaction effects with other components in the final product” (Dyer et al., 1998, p. 71). It is this unique combination of the firm’s and its suppliers’ capabilities in producing differentiated components in a product that would provide the firm with sustainable competitive advantage.

5. Potential pitfalls in global sourcing

As stated earlier, global sourcing strategy requires close coordination of R&D, manufacturing, and marketing activities, among others, on a global basis. While national boundaries have begun losing their significance both as a psychological and as a physical barrier to international business, the diversity of local environments still plays an important role not as a facilitator, but rather as an inhibitor, of optimal global strategy development. Now the question is how successful multinational companies can circumvent the impact of local environmental diversity.

These counteracting forces have since been revisited in such terms as “standardization versus adaptation” (1960s), “globalization versus localization” (1970s), “global integration versus local responsiveness” (1980s), and, most recently, “scale versus sensitivity” (1990s). Terms have changed, but the quintessence of the strategic supply-side and demand-side dilemma that multinational companies face today has not changed and will probably remain unchanged for many years to come.

One thing that has changed, however, is the ability and willingness of these companies to coordinate various activities in an attempt either to circumvent or to nullify the impact of differences in local markets to the extent possible. It may be more correct to say that these companies have been increasingly compelled to take a global view of their businesses, due primarily to increased competition, particularly among the triad regions of the world, namely, North America, Western Europe, and Japan. This contemporary view of competitive urgency is shared by an increasing number of executives of multinational companies, irrespective of nationality.

While U.S. multinational companies have subsidiaries all over the world, they have been somewhat reluctant to develop an integrated and well-coordinated global strategy that European and Japanese multinational companies have managed to establish. In addition, U.S. multinational companies have historically managed their outsourcing activities on an arm’s-length basis only to achieve efficiency. Indeed, European and Japanese multinational companies have heavily invested in, and improved upon, their strengths in manufacturing that many U.S. multinational companies have tended to ignore. Furthermore, foreign multinationals, with Japanese in particular, have capitalized on differentiated outsourcing to achieve both efficiency and effectiveness. In contrast, U.S. companies tend to rely more on a sequence of new product introductions as a way to maintain their competitive advantage than on well coordinated manufacturing strategy. The lack of emphasis on manufacturing activities has been traced to U.S. management’s strategic
emphasis having drifted away from manufacturing to marketing and to finance over the years.

As a result, manufacturing management gradually lost its influence in the business organization. Production managers’ decision-making authority was reduced such that R&D personnel prepared specifications with which production complied and marketing imposed its own delivery, inventory, and quality conditions, but not productivity considerations. In a sense, production managers gradually took on the role of outside suppliers within their own companies. Production managers’ reduced influence in the organization led to a belief that manufacturing functions could be transferred easily to independent operators and subcontractors, depending on the cost differential between in-house and contracted-out production. Thus, in order to lower production costs (i.e., to improve ROE) under competitive pressure, U.S. multinational companies turned increasingly to outsourcing of components and finished products from such countries as China, South Korea, Taiwan, Singapore, Hong Kong, and Mexico, among others. Akio Morita, a cofounder of Sony, a highly innovative Japanese electronics company, once chided such U.S. multinational companies as “hollow corporations” that were increasingly adopting a “designer role” in global competition—offering innovations in product design without investing in manufacturing process technology and simply putting their brand names on foreign-made products (Business Week, 1986).

However, we should not rush to a hasty conclusion that outsourcing certain components and/or finished products from foreign countries will diminish a company’s competitiveness. Many multinational companies with plants in various parts of the world are exploiting not only their own and their suppliers’ competitive advantages (e.g., R&D, manufacturing, and marketing skills) but also the locational advantages (e.g., inexpensive labor cost, certain skills, mineral resources, government subsidy, and tax advantages) of various countries. Thus, it is also plausible to argue that these multinational companies are in a more advantageous competitive position than are domestic-bound companies.

Then, is the “hollowing-out” phenomenon not indicative of a superior management of both corporate and locational resources on a global basis? What is wrong, if any, with IBM procuring most of its components for its personal computers from independent domestic and foreign suppliers? How about Honeywell marketing in the United States the products manufactured in its European plants? Answers to these questions hinge on a company’s ability and willingness to integrate and coordinate various activities and also strategically capitalizing on outsourcing activities based on the types of advantages desired.

6. Long-term consequences

There are two opposing views of the long-term implications of offshore sourcing especially for strategic inputs, dependent on whether the company would differentiate outsourcing activities based on an arm’s-length or a strategic partnership basis. Many successful companies have established strategic partnerships with their suppliers by developing a dynamic virtual organizational network through increased use of joint ventures, subcontracting, and licensing activities across international borders. However, if suppliers for strategic inputs are managed based on an arm’s length basis, there could be negative long-term consequences resulting from a company’s dependence on independent suppliers and subsequently the inherent difficulty for the company to keep abreast of constantly evolving design and engineering technologies without engaging in those developmental activities. In this case, companies fail to coordinate and integrate their suppliers’ design and production as part of their own activities, as would be the case using strategic partnerships. These two opposing arguments will be elaborated below.

6.1. Benefits of virtual network

A network of loosely coupled strategic alliances allows each participant to pursue its particular competence. Therefore, each network participant can be seen as complementing rather than competing with the other participants for the common goals. Strategic alliances may even be formed by competing companies in the same industry in pursuit of complementary abilities (new technologies or skills) from each other.

The advantage of forming a virtual network is claimed to be its structural flexibility. Such a network of loosely coupled partnerships can accommodate a vast amount of complexity while maximizing the specialized competence of each member, and provide much more effective use of human resources that would otherwise have to be accumulated, allocated, and maintained by a single organization. In other words, a company can concentrate on performing the task at which it is most efficient. This approach is increasingly applied on a global basis with countries participating in a dynamic network as multinational companies configure and coordinate product development, manufacturing, and sourcing activities around the world.

First, due to the need for fast internationalization and related diversification, such alliances provide a relatively easy option to access the world markets, thus allowing the firms in the network to create and maintain a sustainable competitive advantage by combining capabilities and technologies in a unique way. Second, reduced investment requirement for each participating company helps improve its ROE. Thus, for example, AT&T needed Olivetti’s established European network to enter the European market for telephone switchboard equipment. Similarly, Toyota established a joint venture with General Motors so that the Japanese carmaker could learn to work with UAW union members while General Motors could learn just-in-time inventory management from Toyota.
6.2. Dependence

In contrast with outsourcing based on strategic partnerships, companies that rely on independent external sources of supply of major components tend to forsake part of the most important value-creating activities to, and also become dependent on, independent operators for assurance of component quality. Furthermore, those multinational companies tend to promote competition among independent suppliers, ensure continuing availability of materials in the future, and exploit full benefits of changing market conditions. In addition, in an arm’s length arrangement, competing firms (e.g., in the United States) tend to share a common set of suppliers (Dyer et al., 1998), thus diluting the degree of differentiation of these major components to the buying firms. By attempting to maintain various sources of supply and a high degree of relative bargaining power, companies (e.g., in the United States) may have also restricted the size and scale of their suppliers. Furthermore, individual suppliers are forced to operate in an uncertain business environment that inherently necessitates a shorter planning horizon. The uncertainty about the potential loss of orders to competitors often forces individual suppliers to make operating decisions that will likely increase their own long-term production and materials costs. In the process, this uncertain business environment tends to adversely affect the multinational companies sourcing components and/or finished products from independent suppliers. The rapid decline of IBM offers a vivid classic example of the problems caused by its dependence on independent suppliers for crucial components in the personal computer market.

6.3. Gradual loss of design and manufacturing abilities

Those multinational companies that depend heavily on independent suppliers on an arm’s-length basis (i.e., without integrating their suppliers into their activities) also tend in the long run to lose sight of emerging technologies and expertise, which could be incorporated into the development of new manufacturing processes as well as new products. Thus, continual sourcing from independent suppliers, as opposed to sourcing based on strategic partnerships, is likely to forebode companies’ long-term loss of the ability to manufacture at competitive cost and, as a result, loss of their global competitiveness. However, if technology and expertise developed by a multinational company are exploited within its multinational corporate system (i.e., by its foreign affiliates and by the parent company itself), the company can retain its technological base to itself without unduly disseminating them to competitors. The benefit of such internalization is likely to be great, particularly when technology is highly idiosyncratic or specific with limited alternative uses, or when it is novel in the marketplace. For such a technology, the market price mechanism is known to break down as a seller and potential buyers of the technology tend to see its value very differently. Potential buyers, who do not have perfect knowledge of how useful the technology will be, tend to undervalue its true market value. As a result, the seller of the technology is not likely to get a full economic benefit of the technology by selling it in the open market.

In addition, by getting involved in design and production on its own or through strategic partnerships, the multinational company can keep abreast of emerging technologies and innovations originating anywhere in the world for potential use in the future. Furthermore, management of the quality of major components is required to retain the goodwill and confidence of consumers in the products, which may be impossible using arm’s-length outsourcing. Maintaining the ability to develop major components and finished products in-house or via strategic partnerships allows the company to better understand the cost and quality implications of its sourcing relationship even with its suppliers.

7. Global sourcing strategy in an unstable world economy

Since the Asian financial crisis took place in 1997, the world economy has continued to stagnate with many uncertainties that have ensued. The financial crisis in Asia was followed by the terrorist attack on America in 2001, and Argentina’s financial crisis worsened in 2002. These crises have finally sent the world economy into a global slowdown. Furthermore, the aftermath of the U.S.-led war against Iraq and the mysterious illness, known as severe acute respiratory syndrome (SARS) spreading from China in 2003 continue to curb the weak world economy from recovering.

As a result, Asia’s once booming economies are still fragile, liquidity problems are hurting regional trade, and losses from Asian investments are eroding profits for many multinational companies. Many U.S. companies that have large investments in Asia have reported less than expected earnings. For example, the unsettling ups and downs of the Dow Jones Industrial Average reflect the precarious nature of U.S. investments in Asia. These economic, political, and natural crises and their ramifications could not only have far-reaching economic consequences but also force many companies to adopt new business views and practices for competing around the world at the dawn of the new century.

The global strategy models popularized by Bartlett and Ghoshal (1989) and Porter (1986), among others, are predicated on a complex configuration of assets and capabilities that are specialized but also dispersed. Let us focus on Asia as it is a major region in which many multinational companies have established procurement bases. Many foreign companies operating in Asian countries tend to procure certain crucial components and equipment from their parent companies or from strategic suppliers overseas. Now that Asian currencies depreciated precipitously during the
region’s financial crisis, those foreign companies are faced with those imported components and equipment whose prices have gone up enormously in local currencies. In other words, the more dispersed the company’s and its suppliers’ assets and capabilities are, the more difficult it is for them to manage wild currency fluctuations. Financial hedging has failed to help much.

Companies that have localized procurement do not have to be affected easily by fluctuating exchange rates. As a result, many companies are also scurrying to speed steps toward making their operations in Asian countries more local. Suffering from the recession in their domestic market as well as being most seriously affected by the Asian financial crisis, Japanese companies seem to stay one step ahead of U.S. and European competitors in this localization strategy. Since the yen’s sharp appreciation in the mid-1980s, Japanese manufacturers have moved to build an international production system less vulnerable to currency fluctuations by investing in local procurement and more recently have begun to transfer R&D activities to local markets (Nikkei Weekly, 1998, 2001). In addition, these Japanese companies have demanded that their strategic suppliers also locate their supply base in these local markets. A case in point: After Honda set up its production in Marysville, OH, many Honda’s Japanese suppliers have also invested in Ohio or elsewhere in the United States for producing components and parts to be close to Honda’s assembly plant.

When financial hedging could not cope with the extensive currency fluctuations, companies are known to resort to operational hedging. Operational hedging is to shift production and procurement abroad to match revenues in foreign currency. For example, by producing abroad all of the products a company sells in foreign markets, this company could create an operational hedge by shielding itself from fluctuating exchange rates (Bodnar & Marston, 2002).

This localized production and marketing strategy is fundamentally different from local responsiveness, as originally envisioned by Bartlett and Ghoshal (1989). Current localization movement is to address the wild, and sometimes unexpected, currency fluctuations rather than local market needs per se. On the other hand, due to constant cost pressures from many competitors, the need for global integration still remains strong for the sake of cost efficiency.

However, a number of new questions have begun to emerge. In an era of technological obsolescence, no one company possesses the capabilities needed to maintain a sustainable competitive advantage for long. Would outsourcing based on strategic partnerships take on a more important role than in-house sourcing? How could the benefits of global integration be achieved in a localization strategy? Could the results of homegrown R&D activities be easily transferred to local subsidiaries or affiliates for local product development? How could a transnational company manage increasingly localized production and marketing without relinquishing too much autonomy to local subsidiaries and affiliates? These questions beg for answers.

8. Summary and future directions

The scope of global sourcing has expanded over time. Whether or not to procure components or products from abroad was once determined strictly on price and thus strongly influenced by the fluctuating exchange rate. Thus, the appreciation of the dollar prompted companies to increase offshore sourcing, while the depreciation of the dollar encouraged domestic sourcing. Today, many companies consider not simply price but also quality, reliability, and technology of components and products to be procured. These companies design their sourcing decision on the basis of the interplay between their competitive advantages and the comparative advantages of various sourcing locations for long-term gains.

Global sourcing strategy requires close coordination of R&D, manufacturing, and marketing activities on a global basis. Managing geographically separated R&D, manufacturing, and marketing activities, those companies face difficult coordination problems of integrating their and their suppliers’ operations and adapting them to different legal, political, and cultural environments in different countries. Furthermore, separation of manufacturing activities involves an inherent risk that manufacturing in the value chain will gradually become neglected. Such neglect can be costly as continued involvement in manufacturing tends to lead to pioneering product design and innovation over time. An effective global sourcing strategy calls for continual efforts to streamline manufacturing without sacrificing marketing flexibility.

The global strategy model of the 1980s–1990s drove home why it is imperative for globally operating companies to develop an organizational mechanism by which to benefit from both global integration and local responsiveness. Depending on dispersed assets, specialized operations, and interdependent relationships among units of a company, Bartlett and Ghoshal (1989), for example, described the plausible parent–subsidiary relationships for “peacetime” transnational solutions. However, they fell short of offering specific solutions as to how to cope with the world market not so peaceful, characterized by wild and unpredictable currency fluctuations as well as other unfortunate regional events. They developed a very useful conceptual framework to address the climate of the time of the 1980s–1990s. The climate has changed since the Asian financial crisis that wreaked havoc over what could otherwise have been a stable and growing world economy.

Although it is beyond the scope of this article, one broad solution may be found in modular production, or the application of modular design capabilities in product development (Bettis & Hitt, 1995; Sanchez, 1999; Schilling, 2000). Again, this view is consistent with global marketers’ four alternative specifications on global product policy. Modular production generally refers to the process of assembling final products from a number of predetermined and interchangeable modules. The fundamental difference,
however, is that modular production could reduce the inherent difficulty in technology transfer, in particular, that of tacit knowledge, between units of a company, thereby making decentralized/localized production feasible without losing the benefits of global integration. Another solution is attaining strategic flexibility in sourcing. Companies should design their structure to include a combination of a quasi-hierarchical and a pure hierarchical governance structure for different activities or operations in order to “integrate, build, and configure internal and external competences to address rapidly changing environments” (Teece, Pisano, & Shuen, 1997, p. 516). A combination of a quasi-hierarchical (e.g., strategic partnerships with suppliers) and a pure hierarchical governance structure allows a firm not only to exploit its own capabilities, but also to explore new capabilities or technologies through learning from its partners, sharing risks and gaining synergy.

Clearly, more research is needed. One thing is clear: Globally operating companies need to be in constant search of methods to “kill two birds with one stone,” or meeting supply-side and demand-side counteracting forces head-on for their sustainable competitive advantage.

References

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Barney, J. B. (1999). How a firm’s capabilities affect boundary decisions. *Sloan Management Review, 137–145.*

Bartlett, C. A., & Ghoshal, S. (1989). *Managing across borders.* Boston: Harvard Business School Press.

Baumol, W. J., Nelson, R. R., & Wolff, E. N. (1994). *Convergence of productivity: Cross-national studies and historical evidence.* New York: Oxford University Press.

Bettis, R. A., & Hitt, M. A. (1995). The new competitive landscape. *Strategic Management Journal, 16,* 7–19 (Special Issue).

Bodnar, G. M., & Marston, R. C. (2002). *A simple model of foreign exchange exposure* (Working Paper). University of Pennsylvania.

*Business Week* (1986, March 3). Special report: The hollow corporation, 56–59.

Dyer, J. H., Cho, D. S., & Chu, W. (1998). Strategic supplier segmentation: The next “best practice” in supply chain management. *California Management Review, 40*(2), 57–77.

Hamdan, K. (1999). The role of foreign direct investment in export strategy. (A paper presented at) 1999 Executive Forum on National Export Strategies, International Trade Centre, the United Nations, September 26–28.

Kotabe, M., & Helsen, K. (2004). *Global marketing strategy* (3rd ed.). Hoboken, NJ: Wiley.

Kotabe, M., & Swan, K. S. (1994). Offshore sourcing: Reaction, matura-
tion, and consolidation of U.S. multinationals. *Journal of International Business Studies, 25*(First Quarter), 115–140.

Levin, R. C., Klevorick, A. K., Nelson, R. R., & Winter, S. G. (1987). Appropriating the returns from industrial research and development. *Brookings Papers on Economic Activity, Issue 3,* 783–831.

Murray, J. Y., Kotabe, M., & Wildt, A. R. (1995). Strategic and financial performance implications of global sourcing strategy: A contingency analysis. *Journal of International Business Studies, 26*(First Quarter), 181–202.

*Nikkei Net Interactive* (2002, December 4). Toyota, Nissan, Mitsubishi to expand overseas development bases (Available: http://www.nni.nikkei.co.jp).

*Nikkei Weekly* (1998, January 12). Manufacturers reshape Asian strategies. 1 and 5.

*Nikkei Weekly* (2001, June 18). Japanese R&D trickling overseas: Skilled, cheap work forces in other Asian nations attracting Japanese firms (Available: http://www.nni.nikkei.co.jp/).

Porter, M. E. (Ed.) (1986). *Competition in global industries.* Cambridge, MA: Harvard Business School Press.

Sanchez, R. (1999). Modular architecture in the marketing process. *Journal of Marketing, 63,* 92–111 (Special Issue).

Schilling, M. A. (2000). Towards a general modular systems theory and its application to inter-firm product modularity. *Academy of Management Review, 25,* 312–334.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.

Masaaki Kotabe is the Washburn Chair Professor of International Business and Marketing at the Fox School of Business and Management at Temple University.

Janet Y. Murray is the Associate Professor of Marketing and International Business at John Cook School of Business at St. Louis.