Designing Global Strategies: Profiting from Operational Flexibility

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The first article in this two-part series explored the rise of the value-added chain in order to analyze the sources of international strategic advantages. The distinction was drawn between competing on the competitive advantages possessed by a firm and the comparative advantages possessed by a country. In this article, the author proposes that the unique feature of an international strategy lies less in its content than in creating the operational flexibility to profit from uncertainty regarding exchange rates, government policy, and competitors' moves. After examining in length the example of exchange rate uncertainty, he analyzes six sources of strength by which a firm with international activities can acquire an advantage over a purely domestic or export-oriented company. The author concludes by arguing that the key issue in achieving a global advantage is whether a firm has the managerial skills and organizational resources to coordinate its international activities in response to market and political fluctuations. *Ed.*

In a companion article, global strategies were analyzed in terms of their interplay of competitive and comparative advantages. Comparative advantage is driven by differences in the costs of inputs (e.g., unskilled and skilled workers or capital equipment) among countries.[1] Competitive advantage is driven by differences among firms in their abilities to transform these inputs into goods and services at maximum profit. The outstanding feature of global competition is the uncertainty over these advantages. This uncertainty stems from three factors:

1. The world economy is undergoing a fundamental shift in terms of the comparative advantages of countries. This shift is manifested in changes in the *intersectoral* allocation of world industry and trends toward protectionism.

2. Global competition consists of firms which differ radically in the constellation of bets they have placed along the value-added chain and on different sourcing and marketing sites.

3. Global competition is often characterized by a lack of historical rules for industry competition. As a result, there is uncertainty over the initial moves and competitive reactions in terms of pricing and market penetration.

From this perspective, the thesis is developed that the unique content of a *global* versus a purely domestic strategy lies less in the methods to design long-term strategic plans than in the construction of flexibility which permits a firm to exploit the uncertainty over future changes in exchange rates, competitive moves, or government policy. This flexibility can be attained, for example, by building excess capacity into dispersed sourcing platforms or by arbitraging between different tax regimes. In short, flexibility is gained by decreasing the firm's dependence on assets already in place.

A largely neglected question is whether firms have indeed developed the organizational structures and incentives to profit from changes in the environment and coordinate an international response. The question is more than a matter of whether subsidiaries are integrated into headquarters' strategic plans or whether they report data which reflects their contribution to these plans. Rather, the question is whether there exists either a centralized organizational unit which is responsible, for example, for the shifting of production schedules and the transshipment of goods or a decentralized system which provides the proper incentives to subsidiaries to respond to changes in exchange rates and relative price movements. The exercise of strategic flexibility is a moot question unless the organizational wherewithal exists to coordinate activities internationally.

This article explores the creation of the operational flexibility of the multinational corporation in order to benefit from being global. There are many sources of environmental volatility, such as new product entries, new government policies, or new international competitors, to which firms can respond and exploit to their advantage. Section one examines only one of these sources, namely, fluctuations in exchange rates and the impact on the real cost of labor. The second section continues to examine exchange rate fluctuations, but this time in terms of the impact upon the decision of where to source and how much risk should be borne. The third section of the article

Table 1 **Hourly Wage Rates in Manufacturing (in U.S. dollars)**

	Sri Lanka	Singapore
1973	.13	.36
1974	.16	.45
1975	.16	.50
1976	.14	.54
1977	.11	.56
1978	.15	.61
1979	.12	.88
1980	.11	.80
1981	.11	1.05
1982	.14	1.17

Source: Compiled from Yearbook of Labour Statistics, 1983, ILO; International Financial Statistics, IMF.

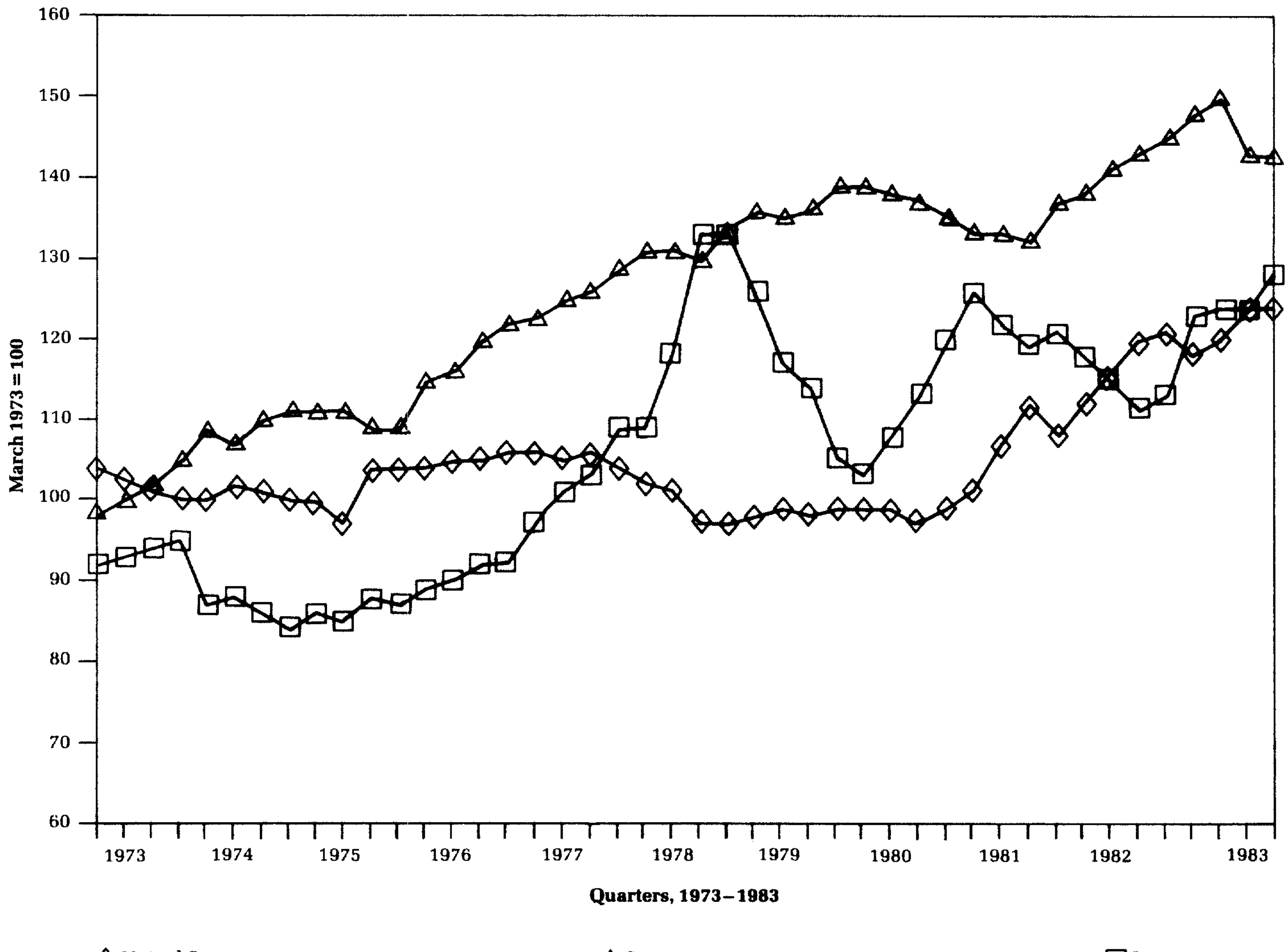
widens the analysis to look more broadly at the kinds of strategic flexibility that the multinational corporation can exercise. Two kinds of flexibility are described, one is the arbitrage of market imperfections, the second is leverage, by which a firm's position in one national market is enhanced by its position in a second. A key question is whether firms recognize and have created organizational structures to respond proactively to

exploit economies of scale and scope in upstream links.

The value-added chain exercise outlined above does not appear to be greatly different if conducted in an international or national setting with regional differences in wage rates and market prices. Yet, there is a critical difference that cannot be underestimated, and that is the tremendous variability of macroeconomic parameters between countries. Though southern parts of the United States tend toward lower wage rates than the North, this differential will not be strongly affected by fluctuating exchange rates or by changes in other macroeconomic parameters, such as interest rates.[2] On the other hand, the international economy is rocked to a much greater extent by the variability of exchange rates and movements in the relative factor costs between countries.

The extent of this variability can be suggested by considering, first, movements in wage rates between sourcing platforms over time and, second, movements in real (i.e., inflation) adjusted exchange rates over time. The impact on profitability because of unexpected movements in exchange rates can be naively illustrated by considering the deci-

Figure 1 **Fluctuations in Nominal Exchange Rates***



*Trade weighted.

Table 2 **Changes in Nominal and PPP-adjusted Wage Rates* (in U.S. dollars)**

	U.S.	Germany		Japan	
	Nominal	Nominal	PPP-adjusted	Nominal	PPP-adjusted
1973	100	100	100	100	100
1974	108	123	116	115	114
1975	118	128	129	133	124
1976	128	153	140	157	134
1977	139	177	153	200	143
1978	151	199	168	246	158
1979	164	218	189	209	180
1980	178	214	218	274	204
1981	195	216	240	295	228
1982	208	227	254	302	244

Source: Compiled from Yearbook of Labour Statistics, 1983, ILO; International Financial Statistics, various years, IMF.

*Calculated at purchasing power parity exchange rates by consumer price index.

dollar's value is fairly stable until its rapid rise beginning in 1982. Curiously, the Japanese yen appears to evidence the greatest volatility, fluctuating dramatically between 1978 and 1983.

The impact of these changes on competitive positions becomes more transparent when the effect of movements in real exchange rates on nominal wages is isolated. In Table 2, manufacturing wages for Germany, Japan, and the United States are listed. All wages are calculated in dollars. The wages have been calculated in two ways, the first showing nominal wages calculated using the prevailing exchange rate for each year, the second showing wages if purchasing power parity had held. (Under PPP, changes in exchange rates would only reflect differences in inflation rates between the United States and its trading partners, Germany and Japan.) As seen in the PPP-adjusted rates, if PPP had held, the wage bill paid by German and Japanese firms in the 1970s would have tracked more closely that of their American competitors. In nominal

for exchange rates and transportation costs. Based on this supposition, and holding

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Risk Profiles and Investment Decisions

The absence of financial markets to lay off this risk does not mean, though, that firms cannot affect their risk profiles in reference to these variables. On the contrary, sourcing

the higher labor costs. The first gamble represents a bet on the comparative advantage of Japan; the second, a bet on the competitive advantage of the firm.

In the absence of large economics of scale or technological advantages, a firm can reoptions incur costs in terms of loss of scale economies, their distinctive feature is that they become more valuable the greater the unpredictability of the environment. Under this strategy, variance implies greater profit opportunities.

Identifying and Managing Global Opportunities

The value of these opportunities depends on the answer to three questions: the first is a strategic issue, the second, cognitive, and the third, organizational.

— Are the benefits sufficient to justify the costs attached to the loss of scale economies in production or to the organizational support systems?

— Do managers perceive and identify potential options generated by being multinational?

— Are there organizational mechanisms that permit the coordination of the international activities essential to the exploitation of flexibility?

collection of national companies. Running a truly global company is costly, and a policy of home organization extension or local market adaptation may be the most cost effective choice in many environments.

Whatever these cost tradeoffs may have been, though, several elements have increased the benefits of developing organizational structures along global lines. These elements are, principally, the continual reduction of tariffs since 1950; a greater similarity in incomes in developed countries; a reputed convergence in cultures and consumer tastes; and a growth in the economies of scale of production in some industries such as steel, auto components, and television tubes. Evidence from numerous case and cross-sectional studies over the past decade and more have shown a remarkable trend toward organizational structures better suited to a global orientation.[7] These structures include the creation of world product lines, divisions along regions — with the United States being one or part of North America — and matrix structures.

This transformation notwithstanding,

Arbitrage Opportunities

its ability to minimize its tax bill through price and remittance policy and also by innovative financial products, such as parallel loans and back-to-back loans. By similar mechanisms, a multinational corporation can often benefit from subsidized loans intended for local investment, but, in fact, transfer the loans outside a country by its remittance, transfer pricing, and financing flexibility.

Often, however, governments cooperate to provide financial incentives for multinational corporations. To this extent, governments by policy intention create arbitrage incentives. For example, export credits have been a heated point of competition between western governments in recent years. Among some developed, and a considerable number of developing countries, competition has centered around investment incentives such as tax holidays, duty relief on imported components, and guaranteed loans. As a result, some corporations centralize the decision of where to locate export activity in order to benefit from the best package of export credit and investment incentive programs.

4. Information Arbitrage. The final arbitrage opportunity for the multinational corporation concerns information. This information may concern scanning world markets to match sellers and buyers. An increasing characteristic of world trade is the growth of countertrade demands by governments. Estimates of countertrade vary substantially, with some corporations reporting that as much as 25 percent of their world business is in this form. The export firm is dramatically hindered in its ability to absorb the countertraded goods and use them externally or trade them on world markets. On the contrary, a number of large American firms, following a Japanese and, to a lesser extent, European tradition, have created world trade divisions that exploit profitably their multinational subsidiary network for the location of potential buyers for the traded goods. These trading services also reflect arbitrage benefits in terms of avoiding capital constraints on trade as well as tariffs imposed on the monetary value of the traded goods.

In addition to arbitraging informational imperfections in product markets, the multinational corporation can also benefit by transferring new product and process developments from one location to the next. For example, innovations are often stochastic in nature. With differences in expenditures on research and development between nations growing smaller, it is often necessary to monitor multiple national markets in order to exploit potential innovations. In some industries, the impetus to being global consists largely of scanning innovations in foreign markets. For this reason, it has been a common practice for firms in technologically advanced industries to set up research and development offices in the United States, and similar trends are apparent for American firms regarding monitoring the Japanese market.

Leverage Opportunities

1. Global Coordination. Unlike arbitrage, leverage reflects not the exploitation of differences in the price of an asset, product, or factor of production between markets, but rather, the creation of market or bargaining power because of the global position of the firm. One of the more important sources of this power for the international firm is the ability to differentiate prices according to its world competitive posture. For example, in response to Michelin's entry into North America, Goodyear dropped its prices on tires in Europe, forcing the family-held French company to slow its investment program and, eventually, to issue outside equity. Much like the reputed benefits embedded in portfolio models that encourage firms to diversify in order to cross-subsidize between product lines, a benefit of global activity is the possibility of carrying out an aggressive price cutting strategy in one region by relying on profits gained in other regions of the world. Of course, laws, as well as political pressures in the form of government retaliatory policies, limit the extent to which prices can be cut.

large American corporation was pleased at headquarters that one of its subsidiaries in Asia had won a major order, eventually to learn that the only significant competition was its Japanese subsidiary. A division of another large American corporation recently agreed to an overseas joint venture to offset its perceived weakness in international marketing despite the fact that a second division in the corporation had several decades of experience selling to the targeted market segments.

The multinational corporation faces, therefore, a fundamental dilemma. On the one hand, its multinationality creates valuable opportunities to arbitrage markets and to exercise competitive leverage. The exploitation of these opportunities rests on the efficiency of the organization to coordinate its overseas operations and subsidiaries. On the other hand, the centralized coordination of these activities entails significant fixed costs and variable costs in communicating information from subsidiaries to corporate headquarters. Changes in environmental and competitive conditions may only be evident at the local subsidiary level. As a result, the subsidiaries often possess the best knowledge concerning the country environment and the know-how for local adaptation.

Because of the limits on centralization and the need to maintain local adaptation, the realization of global benefits is significantly dependent upon the formalization of *integrative systems* to decentralize some of the responsibilty for effective exploitation of these opportunities. Two of the most important systems are human resource management and planning and control. Curiously, there have been few studies which have linked these systems to decentralized mechanisms to enhance the strategic flexibility of the multinational corporation.

To the extent that studies have been carried out, the results have tended to show a surprising conflict between the corporate strategy and the embedded incentives of the two systems. Planning and control systems for American firms have tended to export the home organization overseas.[11] Recently, a number of firms have tried to tackle the problem of setting targets and monitoring performance in a multiple currency world.

Very few firms have appeared to develop sophisticated systems that decouple the measurement of subsidiary from managerial performance. Yet, without such a decoupling, local managers are, for example, penalized for shifting production to plants in other countries. Furthermore, they are held responsible for exogenous shifts in exchange rates which affect the *competitive* position of the subsidiary but which are beyond their immediate control. A prerequisite to a planning and control system which provides incentives compatible with the overall strategy is the decoupling of exogenously caused competitive effects on the subsidiary from the measurement of managerial performance.[12] Only with such a decoupling can the inherent flexibility of the MNC be exploited without excessive centralization.

Another system to link managerial performance to strategy is human resource management. A few studies have found a tendency for career paths to be tied to frequent international reassignment when the effective deployment of strategies depended strongly on local subsidiaries.[13] Generally, though evidence for American firms has tended to show significant failure rates for expatriate managers and the frequent use of local nationals.[14]

Conclusion

Global strategies, it was explained in the previous article, rest on the interplay of the competitive advantage of firms and the comparative advantage of countries. The decision of where to invest along a firm's value-added chain is a question of competitive advantage. The decision of where to place these activities internationally constitutes a question of comparative advantage. Except for trivial and uninteresting exceptions, these decisions are based upon considerable uncertainty over future costs, market developments, and technologies. They

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are also influenced by the willingness of firms to bear the risk of betting on a single sourcing platform, product market, or technology.

No matter what the risk profile, the firm that is able to exploit this volatility possesses a competitive advantage gained by its ownership of a global network. This advantage may be in the form of arbitraging markets. In the case of American multinational corporations, this arbitrage might potentially consist of production shifting. For a Japanese trading company, it might consist of the ability to respond quickly to new information due its ownership of an international purchasing and sales organization coupled with an extensive logistics capability. An advantage of being global also includes an enhanced leverage in local marketplaces or in negotiations with governments.

The capability to exercise these arbitrage and leverage opportunities rests on the existence of centralized task groups responsible for the coordination of the international activities of the firm. However, centralization is constrained by the need to maintain a careful balance between local subsidiary responsiveness and the coordination of these global benefits. From this perspective, the *structural* configuration of dispersed investment location and market penetration is a prerequisite to, but no less important than, the *operational* flexibility of the firm to respond to changes in the international environment.

For many firms, the failure to develop systems tied to the global strategy of the firm may well reflect the significant costs attached to a sophisticated information system that supports the management of planning and control and human resources. One suspects, however, that the benefits of such a system have not been fully specified in terms of balancing the centralized coordination of the multinational network against the maintenance of local subsidiary responsiveness. Where this balancing is critical, the enhancement of integrative systems is invariably an integral element in the exploitation of the benefits gained by the global activities of the multinational corporation.

References

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Comparative advantage can also be defined in terms of the availability or abundance of factors of production. Thus, a country can be seen to have a comparative advantage in skilled workers by reason of their relative abundance, even though skilled wages may be the same for all countries.

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Even here, though, a qualification must be added, for changes in exchange rates may attract the migration of foreign labor and interest rates may affect economic growth, the first affecting the supply, the second the demand of labor. Certainly, though, these second order effects are less strong than the immediate impact that exchange rate movements have on international competitiveness.

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It would be wrong, however, to deduce from this single trend any conclusion on differences in risk tolerances between countries. The Japanese pattern might well reflect the avoidance of risk attached to operating overseas subsidiaries or the problems in transferring culturally bound practices and technologies to foreign countries. Our point here is that in terms of exchange rate exposure only, an export strategy is a high risk bet in the face of global competition.

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The procurement patterns of Japanese overseas affiliates is given in Ministry of International Trade and Industry Survey, 1980. K. Haberich kindly brought this data to my attention.

5
This latter option is suited also to a purely domestic setting. It has been argued, in fact, that the frontier of new technologies and industries is characterized by smaller scale or flexible manufacturing that is particularly well suited to the purported higher variance of the current marketplace. This argument is given by B. Kogut in the case of steel mini-mills, and, for flexible technologies, cursorily by K. Ohmae and in

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6
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