

Book The Competitive Advantage of Nations

Michael E. Porter Palgrave Macmillan, 1998 First Edition:1990

Recommendation

The causes of national advantage include much more than a country's reserve of affordable workers and raw materials. This in-depth study of 10 nations from the post-World War II period through the 1980s provides a useful framework for fully assessing national economic prowess and momentum. Although Michael Porter's research covers a limited time period, the seminal author and Harvard Business School professor has developed a clear method for distinguishing economic cause from effect and for demystifying complex global trends. His four-point "diamond"-shaped analysis of national advantage in the world economy remains apt and applicable. Porter, a pioneer, says some readers may prefer "shorter paths through the book," a nearly 900-page tome. To that end, he organizes the content into self-contained, thematic sections of selective readings. *BooksInShort* recommends his enlightened explanation of why certain industries, and their home nations, either grow or shrivel in the heat of world competition.

Take-Aways

- Globalization has triggered big shifts in the economic competitiveness of nations, benefiting some countries and punishing others.
- To depict the "determinants of national competitiveness," visualize them as a diamond's four points.
- First, a country needs strong "factors of production" such as labor and natural resources.
- Second, a nation must have clusters of associated businesses, suppliers and industries.
- Third, a state's economic development depends on the depth and quality of domestic buyers' demand for goods and services.
- Fourth, a land's industries grow based on the vitality of their internal "domestic rivalry."
- A nation facing a competitive disadvantage ideally will use that lack as impetus to create an offsetting advantage.
- Once downward momentum in national competiveness begins, reversing it is difficult.
- Production factors, investment, innovation and wealth drive different stages of a country's competitive development.
- Government policy should influence, not dictate, national competitive advantages.

Summary

The Luster of "Diamonds"

Since the end of World War II, globalization has triggered big shifts in national economic competitiveness, benefiting some countries and punishing others. It also is raising new questions about how a nation can compete economically with the rest of the world. But theorists generally have failed to agree on the multifaceted reasons for these swings in economic advantage.

"Nations, in an important sense, are either moving ahead or falling behind in the upgrading of competitive advantage. Standing still is difficult."

The best gauge of national economic advantage is labor productivity. Economic output per worker must be the center of any analysis of national competitiveness. Increasing productivity is the clearest sign that a nation has strong industries with leading positions in global markets. Other purported proxies for national competitiveness – including low-cost labor and trade surpluses, among others – are misleading measures of a nation's competitive might and momentum. Ideally, the internationalization of a nation's economy will have a positive impact on its growth, but it will weaken national competitiveness if industries move high-skill jobs to foreign markets and keep low-skill jobs at home.

The Four "Determinants of National Competitive Advantage"

A four-point framework, visualized as the corners of a diamond, offers a useful analytical approach for assessing national competitiveness. The four points of a nation's diamond determine the development or demise of every industry operating within its borders, and each national diamond has industry-specific benefits and detriments. The four determinants of a country's economic competitiveness – or the four points in the diamond – are: 1) its supply of "factors of production" such as labor, natural resources and infrastructure; 2) the presence of clusters of associated businesses, suppliers and industries; 3) the depth and quality of domestic buyers' demand for goods and services; and 4) the degree of "domestic rivalry" within industries.

"The pursuit of competitiveness defined as a trade surplus, a cheap currency or low unit labor costs contains many traps and pitfalls."

These four determinants often interact in a self-reinforcing manner, moving the national diamond for each industry to a better, or worse, position with respect to its foreign competition. For example, the presence of sophisticated, demanding buyers in the home base can intensify competition among companies, leading to product and service innovations that further heighten buyer expectations. The absence of sophisticated domestic purchasers, on the other hand, will undermine an industry's efforts to achieve global market leadership.

"Few factors of production are truly inherited by a nation. Most must be developed over time through investment."

Different industries operating under the same national constraints will have different results and prospects. Firms expand in some nations and retrench in others, depending on how the determinants of national competitiveness affect their industry; almost any industry's prospects improve in nations where the business climate allows improvement and innovation.

National Competitiveness in Select Industries

"No nation can be competitive in (and be a net exporter of) everything." However, specialties are sustainable. Each country has special advantages that others might lack and might struggle to replicate. Many nations try to preserve their economic advantages rather than to improve them; in fact, recognizing and building on existing national economic advantages is better public policy than trying to invent new ones.

"The attitude toward wealth...varies across nations. It is a big motivator in the US, while looked upon with some suspicion in Sweden."

The post-World War II development of four industries – Germany's printing press industry, the United States' patient-monitoring equipment industry, Italy's ceramic tile industry and Japan's robotics industry – illustrates the differences in determinants of national competitiveness. At the end of the 1980s, all four of these examples were international leaders in their industries:

- 1. Japan's 1960s shortage of labor, a critical factor of production, contributed to its ascension as a competitive force in the field of robotics.
- 2. In Germany, the clustering of related businesses benefited the printing press industry; it gained from the presence of capable producers of German ink, paper and chemicals.
- 3. The United States' leadership in the world market for patient-monitoring equipment stemmed partially from sophisticated domestic buyers such as universities, hospitals and clinics. Spending on medical goods and services is relatively high in the United States. Its cluster of leading semiconductors, computer and software suppliers has helped its patient-monitoring equipment industry grow internationally.
- 4. In Italy, domestic rivalry within the industry spurred the nation's global leadership in the production of ceramic tiles. Manufacturers and suppliers cluster in and around Sassuolo. They compete fiercely against each other, often by serving specialized market segments.

Turning Disadvantages to Advantages

In many countries, the lack of one kind of national advantage helps to create offsetting benefits. For example, the Japanese government encouraged the nation's companies to develop factory-automation technology to counter labor shortage. The government thereby fostered an intensely competitive domestic industry in robotics, which went on to dominate markets outside Japan. Expertise in the deployment of factory robots spread across multiple industries and contributed to a long-term upgrade in the general quality of Japanese manufacturing of automobiles, appliances and many other goods.

"Pressure from demanding and sophisticated buyers is widespread in Japanese consumer industries."

Italy's government has a history of putting bureaucratic roadblocks in the path of economic growth. As a result, business leaders in Italy are especially adept at working around obstacles to growth and profitability, rather than surrendering to them. In Sweden, the government imposed a system of "solidarity wages" that narrowed differences in compensation between the highest-paid and lowest-paid workers. The system kept Sweden's average pay levels above those in many other states, and it prompted major cost overhauls at Swedish textile producers, shipbuilders and other large-payroll companies that were "faster and less painful" than such upheavals elsewhere.

Losing the Competitive Edge

Even imperfect national diamonds can help companies operating within them achieve international prominence. Select industries can prosper even if one of the determinants of national competitiveness is negative for their sector. But a nation's economic disadvantages can accumulate until the country's diamond goes dark – that is, until all four points are negative. Negative momentum across the full spectrum of national competitiveness is difficult to reverse, as Britain's economic history shows. The United Kingdom lost significant economic vitality from the end of World War II through the 1980s, but decline in its national diamond began long before the war.

"Government policy must provide an environment in which any industry can prosper if firms are innovative and achieve high productivity."

Education, which is usually an important element of labor force development, was one of the chief culprits. A study shows that workplace skills "lagged badly" in the United Kingdom, compared with other nations. The British educational system's failures include de-emphasizing scientific curricula in universities and failing to give

technical schools adequate support. Slow wage growth and poor market demand have done little to prepare UK-based industries to compete successfully in foreign markets. When buyers have high expectations, they push domestic companies to provide better value, which can make those firms more competitive abroad. But British consumers generally have refrained from demanding more from their companies; they are "more resigned to poor service or substandard quality" than consumers in other nations.

"Many see government as a helper or supporter of industry...Government's proper role is as a pusher or challenger."

The United States' economic competitiveness has wavered without wilting. America has held onto its world-leading market share in aerospace, biotechnology, software publishing and other fields. But it has lost ground in industries that have gravitated to other nations, like the manufacture of autos, machine tools, computer chips and consumer electronic devices. Despite relatively high spending on education, "an extraordinary rate of functional illiteracy" exists in the US labor force.

"The Four Stages of National Competitive Development"

Each nation is in one of four stages in the advancement of its global competitiveness:

- 1. "The factor-driven stage" Low-cost labor, raw materials and other facets of production characterize this phase, where most developing nations operate.

 The economic advantage of cheap labor and materials can prove fleeting, and nations find it hard to sustain growth in labor productivity.
- "The investment-driven stage" At this point, growing companies bid more money for labor, materials and other production factors. Industries benefit from increasing demand in the home market. Labor force skills become more diverse and sophisticated as educational institutions adjust to higher-order workplace requirements.
- 3. "The innovation-driven stage" In this phase, a nation has optimized its diamond. Collectively, the four determinants of national competitiveness encourage investment and ongoing invention, which is vital to the dynamic process of upgrading a nation's economic advantages. In this creative stage, a growing number of industries enjoy "the full fruits of self-reinforcement" among the four points of the diamond.
- 4. "The wealth-driven stage" A country in this stage of its competitive development rests on its laurels, thus becoming less dominant in the world economy. Its diamond gets duller for multiple reasons, including reduced incentives to invest, increased corporate spending on acquisitions unrelated to core businesses, and decreased outlays on research and development. Companies tend to "harvest" their market positions rather than plow money into new and improved competitive advantages.

Policy Implications

The private sector bears most of the responsibility for upgrading a nation's competitiveness, though government can make the process easier. Companies in the United States and United Kingdom, in particular, often fail to compete aggressively against foreign rivals. For instance, they don't do enough to ensure a deep domestic pool of skilled workers, reliable suppliers and discerning customers.

"National economic prosperity is not a zero-sum game in which one nation's gain is at the expense of others."

Trade associations should do more to upgrade their industries' competitive capabilities. Too often, trade groups lobby on behalf of vulnerable industries for protection from foreign competition, looser antitrust standards, guaranteed business with government procurement agencies and other legislative measures that erode competitiveness. Public policy alone is insufficient to ensure a country's competitive advantage. Although global commerce has become increasingly borderless since World War II, government still influences national competitiveness. Government doesn't determine competitiveness, but it does play a supportive role. Declines in trade barriers do not mask gaps in national competitiveness; they magnify them.

"Firms, not nations, compete in international markets."

Giving certain industries direct government subsidies is an unreliable way to promote national competitiveness. Tax incentives are better for that purpose because they are contingent benefits that encourage a company to invest only if doing so produces a profit for them.

Government must recognize that the diamond is a system, so public policy affecting one point of it could influence others. The role for government is to encourage industries to upgrade their competitive advantages through investment, invention and improvement, and to avoid "the false allure of concentration, collaboration and protection."

The Role of Chance

The four determinants of national competitive advantage and the role of government alone may not explain the rise of every successful industry. Luck also plays a part. Chance events – such as war, sudden increases in global demand or political decisions in foreign countries – "create discontinuities that allow shifts in competitive positions" and shift the position of the elements in the diamond. For example, the Korean wig industry prospered when America banned imports from China during the Cold War. How a country takes advantage of chance events depends on the strength of its existing diamond.

"Complacency and an inward focus often explain why nations lose competitive advantage."

About the Author

Michael E. Porter is a professor at the Harvard Business School and the author of *Competitive Strategy* and *Competitive Advantage*. He served on President Ronald Reagan's Commission on Industrial Competitiveness.