Modern or Firm-Based Trade Theories

In contrast to classical, country-based trade theories, the category of modern, firm-based theories emerged after World War II and was developed in large part by business school professors, not economists. The firm-based theories evolved with the growth of the multinational company (MNC). The country-based theories couldn't adequately address the expansion of either MNCs or intraindustry trade, which refers to trade between two countries of goods produced in the same industry. For example, Japan exports Toyota vehicles to Germany and imports Mercedes-Benz automobiles from Germany.

Unlike the country-based theories, firm-based theories incorporate other product and service factors, including brand and customer loyalty, technology, and quality, into the understanding of trade flows.

Country Similarity Theory

Swedish economist Steffan Linder developed the country similarity theory in 1961, as he tried to explain the concept of intraindustry trade. Linder's theory proposed that consumers in countries that are in the same or similar stage of development would have similar preferences. In this firm-based theory, Linder suggested that companies first produce for domestic consumption. When they explore exporting, the companies often find that markets that look similar to their domestic one, in terms of customer preferences, offer the most potential for success. Linder's country similarity theory then states that most trade in manufactured goods will be between countries with similar per capita incomes, and intraindustry trade will be common. This theory is often most useful in understanding trade in goods where brand names and product reputations are important factors in the buyers' decision-making and purchasing processes.

Product Life Cycle Theory

Raymond Vernon, a Harvard Business School professor, developed the product life cycle theory in the 1960s. The theory, originating in the field of marketing, stated that a product life cycle has three distinct stages: (1) new product, (2) maturing product, and (3) standardized product. The theory assumed that production of the new product will occur completely in the home country of its innovation. In the 1960s this was a useful theory to explain the manufacturing success of the United States. US manufacturing was the globally dominant producer in many industries after World War II.

It has also been used to describe how the personal computer (PC) went through its product cycle. The PC was a new product in the 1970s and developed into a mature product during the 1980s and 1990s. Today, the PC is in the standardized product stage, and the majority of manufacturing and production process is done in low-cost countries in Asia and Mexico.

The product life cycle theory has been less able to explain current trade patterns where innovation and manufacturing occur around the world. For example, global companies even conduct research and development in developing markets where highly skilled labor and facilities are usually cheaper. Even though research and development is typically associated with the first or new product stage and therefore completed in the home country, these developing or emerging-market countries, such as India and China, offer both highly skilled labor and new research facilities at a substantial cost advantage for global firms.

Global Strategic Rivalry Theory

Global strategic rivalry theory emerged in the 1980s and was based on the work of economists Paul Krugman and Kelvin Lancaster. Their theory focused on MNCs and their efforts to gain a competitive advantage against other global firms in their industry. Firms will encounter global competition in their industries and in order to prosper, they must develop competitive advantages. The critical ways that firms can obtain a sustainable competitive advantage are called the barriers to entry for that industry. The barriers to entry refer to the obstacles a new firm may face when trying to enter into an industry or new market. The barriers to entry that corporations may seek to optimize include:

- research and development,
- the ownership of intellectual property rights,
- economies of scale,
- unique business processes or methods as well as extensive experience in the industry, and
- the control of resources or favorable access to raw materials.

Porter's National Competitive Advantage Theory

In the continuing evolution of international trade theories, Michael Porter of Harvard Business School developed a new model to explain national competitive advantage in 1990. Porter's theory stated that a nation's competitiveness in an industry depends on the capacity of the industry to innovate and upgrade. His theory focused on explaining why some nations are more competitive in certain industries. To explain his theory, Porter identified four determinants that he linked together. The four determinants are (1) local market resources and capabilities, (2) local market demand conditions, (3) local suppliers and complementary industries, and (4) local firm characteristics.



- 1. Local market resources and capabilities (factor conditions). Porter recognized the value of the factor proportions theory, which considers a nation's resources (e.g., natural resources and available labor) as key factors in determining what products a country will import or export. Porter added to these basic factors a new list of advanced factors, which he defined as skilled labor, investments in education, technology, and infrastructure. He perceived these advanced factors as providing a country with a sustainable competitive advantage.
- 2. Local market demand conditions. Porter believed that a sophisticated home market is critical to ensuring ongoing innovation, thereby creating a sustainable competitive advantage. Companies whose domestic markets are sophisticated, trendsetting, and demanding forces continuous innovation and the development of new products and technologies. Many sources credit the demanding US consumer with forcing US software companies to continuously innovate, thus creating a sustainable competitive advantage in software products and services.
- 3. **Local suppliers and complementary industries.** To remain competitive, large global firms benefit from having strong, efficient supporting and related industries to provide the inputs required by the industry. Certain industries cluster geographically, which provides efficiencies and productivity.
- 4. **Local firm characteristics.** Local firm characteristics include firm strategy, industry structure, and industry rivalry. Local strategy affects a firm's competitiveness. A healthy level of rivalry between local firms will spur innovation and competitiveness.

In addition to the four determinants of the diamond, Porter also noted that government and chance play a part in the national competitiveness of industries. Governments can, by their actions and policies, increase the competitiveness of firms and occasionally entire industries.

Porter's theory, along with the other modern, firm-based theories, offers an interesting interpretation of international trade trends. Nevertheless, they remain relatively new and minimally tested theories.