Brand managers know one way to achieve steady sales growth is to segment products to appeal to niche markets. Hartmut Berghoff, a historian at Germany’s Goettingen University, explores the roots of brand segmentation with the story of 19th-century German harmonica maker Matthias Hohner.

Harmonicas were created in the 1820s as a piano-tuning device. Production was soon centered in the German town of Trossingen, where skilled farmers took a second job making harmonicas.

There were many harmonica makers in Trossingen, but Matthias Hohner took two steps to ensure that his product would stand out and dominate the market. He used the finest materials possible, charging accordingly. And, as early as 1860, Hohner insisted on stamping
his name on every harmonica he made. By the mid-1880s, Professor Berghoff writes, Matthias Hohner “had become a worldwide synonym for superior quality.”

Hohner’s children refined a global market-segmentation strategy in the period between 1890 and World War I. Hohner’s marketers decided to appeal to patriotism in different countries.

You could buy the “Viva España,” “Advance Australia,” “Le Drapeau Belge,” or “Uncle Sam” models. Even emerging nations of the period had a Hohner harmonica designed for them: Czechs eagerly bought the “Ted je Praha, Prahou” (“Now Prague Is Prague”) model. Hohner sold British colonialists in Africa a “Cape to Cairo” harmonica, and he sold a “Jewel of Africa” model, which had a looped chain on one end so it could be suspended from the owner’s ear like jewelry, in South Africa.

Hohner also kept a keen eye on popular culture and tastes. Hohner harmonicas saluted the “Pioneers of the Poles” and the zeppelin. Titles of popular songs of the day were used to name models. The company produced harmonicas for almost every conceivable interest group, even tee-totalers (the “Blue Cross Harp”). Hohner also made sure its harmonica was in souvenir shops — Catholic pilgrims to Rome, for example, could buy a harmonica embellished with the Pope’s portrait.

During World War I, German, British, and French soldiers on the Western Front often relaxed by playing the harmonica. The German might take a “Der gute Kamerad” (“The Good Comrade”) model. The French soldier might play a “Le Poilu” (literally, “The Hairy One,” a moniker for French infantrymen), and the British soldier, a “Tommy Atkins.” All three models were made in Hohner’s Trossingen factory.

Wine Futures: An Idea That’s Passé

Although conventional wisdom holds that investing in art and other collectibles can be profitable, many economists argue empirically that investing in collectibles actually yields very poor returns.

A classic study by economist William J. Baumol looked at the annual real rate of return on paintings purchased over the period 1652 to 1961 and found these pieces of art annually appreciated by a mere 0.55 percent.

Returns on wine, another popular collectible, may also be less than satisfying. In their studies, Benjamin J. Burton, an associate at Lehman Brothers Holdings Inc. in New York, and Joyce P. Jacobsen, an economics professor at Wesleyan University, show that buying wine is a far less sound investment than purchasing stocks. Mr. Burton and Professor Jacobsen looked at red wine from France’s Bordeaux region, which is typically bought as an investment. They found that between the summers of 1986 and 1996, this wine appreciated by 7.9 percent a year — far less than the 13.5 percent gain in the stock market during the same period, and slightly above the 5.5 percent return of one-year U.S. Treasury bills.

Slightly better returns could be realized by having selected vintages from exceptional years (such as 1961 and 1982). But by the time
the wine world realizes that a particular vintage is exceptional, most of the available wine from that year has been bought, making for a higher initial investment and a lower annual return.

Moreover, wine investments have hidden costs. Unlike stocks, wine does not pay dividends. In fact, you may pay $1.50 per case per month to store it. In addition, auction houses usually charge a 15 percent commission and a 1 percent insurance fee. These charges reduce the annual rate of return of a portfolio of exceptional 1985 French wines from 9.4 percent to 5.7 percent.

“Wine should not be saved, but savored,” the authors write.

An End to Energy Crises?

Many futurists who follow energy markets see ever-higher prices in the coming decades. Robert Grosse, director of research at Thunderbird – the American Graduate School of International Management, and Juan Yañes, an independent management consultant, hold a contrary view. They foresee a confluence of trends that will cause oil demand to fall and supply to increase. In the long term, they believe, energy prices will dramatically decrease.

Oil will continue to be important, primarily as jet fuel, but alternative energy sources (particularly fuel cells and natural gas) will become more widely used as costs come down and technologies are refined.

In the next decade, Professor Grosse and Mr. Yañes predict that competition from non-oil energy sources and more efficient usage of oil could cause the price of oil to fall by as much as 75 percent from current levels. The authors suggest these features of the future oil market will drive this decline:

- According to the U.S. Energy Information Administration’s (EIA) *International Energy Outlook 2000*, overall demand for energy (oil representing one-third of the total today) is projected to grow at about half the rate of GDP growth in the industrialized economies because of efficiency improvements in technology, especially car engines.
- Because of various technology improvements related to natural gas distribution, storage, and production, natural gas is now less expensive than oil as a fuel for electric power plants. A 1998 EIA report says that “natural gas will likely be the fastest growing primary energy source in the world” between now and 2025.
- It will be some time before fuel cells, which allow cars to run on hydrogen rather than gasoline, are more economical than gasoline-powered automobile engines. Today it costs about $9,000 to install a fuel-cell engine in a new car, compared to $3,000 for a conventional gasoline engine. But, in other fields, fuel cells are already price competitive. For example, fuel cell–based power plants cost about the same (about $3,000 per kilowatt) as natural gas–based power plants.
- Because better technology is reducing the cost of finding and producing crude oil, oil reserves are steadily increasing. In 1970, geologists estimated that there were 540 billion barrels of oil reserves. By 2000, the estimate had risen to 1 trillion barrels.

One variable in the projections put forth by Professor Grosse and Mr. Yañes is the Kyoto Protocol (or
similar greenhouse gas–reduction treaties). Strict adherence to the Kyoto Protocol emissions goals would require the United States to greatly curb gasoline use and force auto manufacturers to switch to fuel-cell technology prematurely — while fuel-cell prices remain high and before an efficient system for distributing hydrogen is in place.

If ratified by the United States Senate, such legislation would cause a spike in energy prices until about 2010, the authors predict.

Tightening European Antitrust Policy


University of Michigan economist Kai-Uwe Kühn writes that almost 100 years after the passage of the Sherman Antitrust Act in the United States, and after 40 years of competition policy enforcement in Europe, collusion is still a common antitrust violation.

The profile of the European Commission Competition Directorate-General was raised with its blocking of the merger between General Electric Company and Honeywell Inc. in 2001, and its delay in 2000 of the merger between America Online Inc. and Time Warner Inc. But Professor Kühn suggests the Competition Directorate is equally focused on anticollusion measures to ensure that competitors communicate under very strict rules.

Article 81(1) of the Treaty of Rome prohibits competitors from colluding. In the Dyestuffs decision, the European Court of Justice interpreted this article to mean that it was illegal “for a producer to cooperate with his competitors, in any way whatsoever.” Professor Kühn interprets this decision to mean that nearly all forms of communication between competing enterprises might ultimately be outlawed.

Two precedents are important. In the Fatty Acids case (1986), the three largest European producers of fatty acids (Unilever, Henkel, and Oleofina) agreed to share product information with one another. The European Commission found that such shared information enabled these large firms to gain market share at the expense of their smaller rivals, and barred it. In the U.K. Agricultural Tractor Registration Exchange case (1992, 1994), British tractor manufacturers submitted to their trade association all the information a tractor buyer had to provide to the British Ministry of Transport to obtain a tractor license, including brand, sales agent, and the postal code of the purchaser. The trade association then shared this data with all its members. The European Commission found that, even though the British tractor market was small (about 20,000 units sold a year) and there was no evidence of collusion, the detailed information could be used to manipulate the market; such information exchange was outlawed.

Professor Kühn anticipates the European Commission’s taking several steps to enforce its anticollusion policy; competitors would be banned from discussing any future sales or production plans with each other, as well as past sales that could be used to identify individual buyers. Cost and production data could be exchanged only between competitors if the Competition Directorate decreed that such information exchanges would not enable firms to

Corporations that spent the most on IT between 1995 and 1999 more than doubled their annual rate of productivity growth.
become more efficient. Trade associations could still publish general production information, as long as the information did not show how much each particular firm produced.

Such rules, Professor Kühn writes, “are quite consistent with the general direction of policy in collusion cases.”

Computers Do Enhance Productivity

Economists continue to debate how much of the productivity increase of the late 1990s was due to investment in information technology. Was the productivity surge due solely to the dramatic drops in prices for computer memory and storage, or did computers truly facilitate transformational improvements in business processes and human productivity?

Federal Reserve Bank of New York economist Kevin J. Stiroh notes that many transformations caused by IT, including how computers have flattened hierarchies, can’t be measured quantitatively. But he suggests there is some evidence that IT is causing across-the-board productivity gains in American enterprises.

Mr. Stiroh looked at 10 sectors of the economy whose growth is measured by the Commerce Department’s Bureau of Economic Analysis. He found that between 1995 and 1999, a period when American corporations were investing $2 trillion annually in hardware and software, eight of the 10 sectors studied had “accelerated productivity growth.” The two sectors where productivity slowed down, agriculture and mining, account for only 2.9 percent of U.S. GDP.

A surprising variety of industries have many of their assets tied up in IT. Predictably, computer-related equipment accounts for 38.6 percent of the telecommunications industry’s equipment. But less likely IT-intensive business sectors include transportation (30.1 percent), legal services (23.5 percent), and wholesale trade (20.7 percent). On average, however, an American corporation in 1999 had 8.9 percent of its assets tied up in computers.

Mr. Stiroh finds that corporations that spent the most on IT investments were well rewarded with higher productivity. He compared 26 industries that spent more than 3.6 percent of their capital on IT in 1995 with 29 industries that spent less than this. Between 1995 and 1999, the 26 industries collectively more than doubled their average annual rate of productivity growth, rising from 1.2 to 3.2 percent. The industries that skimped on IT investment saw their average annual productivity rise at a slower rate, from 1.9 to 2.3 percent during this period.