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Hot Hands on Wall Street

Believers in the efficiency of securities markets claim that no one can beat the market consistently. Investors in mutual funds think they know better. Many track the past performance of mutual funds in newspaper tables and examine the historical data on returns in fund prospectuses. Others entrust their money to a particular investment manager with a reputation for good results. Some subscribe to advisory services that recommend particular funds for investment based on those funds' past success. If above-average performance occurs at random, none of these actions would be worthwhile. Clearly, many investors believe that knowing how a fund did in the past helps predict how it will do in the future, allowing them to beat the market.

In **Hot Hands in Mutual Funds: The Persistence of Performance, 1974-87** (*NBER Working Paper No. 3389*), **Darryll Hendricks**, **Jayendu Patel**, and **Richard Zeckhauser** find that investors' common wisdom may be correct. Mutual funds that have performed well recently also are likely to perform well in the near future, while funds with below-average performance are likely to continue performing relatively poorly. But beating the market consistently requires switching among funds, not picking a winner and sticking with it, they conclude.

Hendricks, Patel, and Zeckhauser studied the performance of 96 no-load equity funds with the stated objectives of growth, aggressive growth, or growth and income, from 1974 until 1984. Assuming that all dividends were reinvested, they find that funds that produced above-average returns in the most recent year are extremely likely to produce above-average returns in the coming quarters up to one year. Funds

with an average recent performance are likely to outperform funds that have been below average. Superior performance, however, diminishes with time; four years after an above-average quarter, a fund is no more likely to attain above-average returns than any other fund.

The way to maximize returns, the authors find, is to pick the two mutual funds that had the best record over the past year and hold them for up to one year. By following that strategy and updating the portfolio at the end of each quarter, an investor would have earned 4-8 percent a year more than the group average over the entire decade under study. It is also possible to beat the market by buying several funds with above-average performance in the recent past, but including more funds in the portfolio drags down the performance: the more funds that are included, the closer the return gets to the mean for all funds. Contrarian strategies appear not to work: an investor who consistently purchased the worst-performing fund and held it for a year would have earned 9 percent per year less than the group average.

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Hot hands don't last forever: above-average returns do not come simply from choosing superior

funds. "Like baseball teams and pop singers, stellar mutual funds typically fade away after a few years," the authors observe. "Substantial gains are available from investing in the mutual fund equivalents of last year's pennant winners." ML

Mergers Don't Merely Reshuffle Existing Wealth

Do mergers increase corporate earnings? If so, do higher earnings reflect the creation of new wealth, or merely the reshuffling of existing wealth? A new NBER study by **Paul Healy, Krishna Palepu,** and **Richard Ruback** concludes that takeovers typically increase operating returns. "Our finding that cash flows increase following mergers advances the debate from whether . . . to why these cash flow improvements occur."

In **Does Corporate Performance Improve After Mergers?** (NBER Working Paper No. 3348), the authors contradict earlier analyses of post-merger operating earnings based mostly on data prior to 1979. They analyze 50 large deals completed between 1979 and 1983, including Coca-Cola's takeover of Columbia Pictures and U.S. Steel's acquisition of Marathon Oil. Sifting through annual reports, proxy statements, and merger prospectuses, Healy, Palepu, and Ruback compare the companies' operating results five years before, and five years after, each merger.

Focusing on pretax cash flow rather than aftertax earnings sidesteps some of the pitfalls of profit comparisons that plagued earlier studies. That's because cash flow isn't skewed by factors that typically distort reported profits: changes in the tax code; differences in the way takeovers are financed; or the method used to account for the merger, for example. Further, the authors' cash flow measure reflects the merged company's performance relative to the industry average. That eliminates the impact of cyclical forces that affect similar companies equally.

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The annual median pretax excess return (measured by cash flow) was 2.8 percent greater than the industry average in the five post-merger years versus 0.4 percent greater prior to the merger. Put another way,

merged firms' pretax operating returns are about 15 percent higher than their industries' average returns. What's more, stock prices generally foreshadow the subsequent improvement in cash flow: "The stock price reaction at mergers is driven by economic gains after the merger."

Where does the extra cash flow come from? The authors round up the usual suspects but then find that they all have alibis. Tax savings don't explain the extra cash flow, since the authors' yardstick is pretax. The companies aren't skimping on long-term investments. Post-merger outlays for new plant and equipment and R and D track the industry average. They're also not fattening profits mainly by charging monopoly prices or by slashing payrolls and squeezing pensions. If that were the explanation, post-merger cash flow margins—cash flow as a percentage of sales—should have widened. They didn't.

What's really happening, the authors conclude, is that the merged companies come by their higher returns virtuously: "Firms seem to use their assets more productively." The evidence is that while cash flow margins on sales held steady after mergers, the ratio of companies' sales to assets rose sharply.

SN

One Secret of Japanese Export Success

Although, in principle, exchange rates can have lasting effects on a country's "competitiveness," the way a country responds to currency fluctuations can have substantial influence on its long-run success in international markets. In a new NBER study, Research Associate **Richard Marston** shows that Japanese firms have been much more willing than American manufacturers to mitigate adverse swings in exchange rates by reducing their profit margins.

In **Price Behavior in Japanese and U.S. Manufacturing** (NBER Working Paper No. 3364), Marston finds that Japanese firms "neutralized" roughly one-half of the 42 percent appreciation of the yen from 1985 through the end of 1988 by reducing export prices expressed in yen relative to Japanese domestic prices. In sharp contrast, during the earlier appreciation of the dollar from 1981 to 1984, such "pricing to market" behavior by U.S. manufacturers ranged from a low of 7 percent for precision instruments to a high of 26 percent for chemicals.

Marston obtained his figures by measuring changes in Japanese export prices expressed in yen relative to changes in Japanese domestic prices of the same products. Then, he compared these price changes with changes in "real effective exchange rates" de-

fined for each sector. His figures show that Japanese firms, when faced with an appreciation of the yen, tend to lower export prices relative to the domestic prices of these products. As a result, these firms are able to hold down increases in the foreign currency prices of their exports, thus helping to preserve market shares abroad.

Only for nonferrous metals, with international prices set in well-organized commodity markets, did Japanese export prices fail to adjust downward substantially relative to domestic prices. In textiles, Marston's "pricing to market" index was 40, meaning that for every 10 percent appreciation of the yen, in real terms, the price of textile exports expressed in yen fell by 4 percent compared with Japanese domestic prices. In the three sectors that together account for about 70 percent of Japan's exports, Marston's index ranged from 41 for transportation equipment, to 54 for general machinery, and 63 for electrical equipment. For chemicals, where there is little nonprice competition, the ratio of export prices to domestic prices actually fell one-for-one with each percentage strengthening of the yen.

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Although pricing to market was more evident in chemicals than in other American industries, the U.S. index was less than one-fourth of the Japanese level. In electrical machinery, it was 23; in general machinery, 8; and in precision instruments, 7. (Figures on transportation equipment were distorted by the special effects of U.S.-Canadian trade agreements.) Even looking at more detailed industry data, Marston found only one product group in which lowered export prices were even close to the Japanese level: refrigeration and heating equipment rated an index of 41.

One possible reason why American manufacturers are less willing to defend their export positions with lower prices, Marston suggests, is that they have diversified production geographically so that it is less necessary. When the dollar rises and American goods become less competitive, U.S. multinationals can shift their production to factories in other countries. Thus they can keep their market share in countries around the world without adjusting their U.S. prices. Recent investment by the Japanese in overseas production facilities also may lead to less pricing-to-market behavior in the future. LB

Increasing International Competition Reduces Power of U.S. and Canadian Unions

Since 1960, manufacturing industries in the United States and in Canada have faced increasing competition from foreign producers. This competition has reduced the power of unions in both countries, according to NBER researchers **John Abowd** and **Thomas Lemieux**. In **The Effects of International Competition on Collective Bargaining Outcomes: A Comparison of the United States and Canada** (*NBER Working Paper No. 3352*), the authors note that Canadian imports plus exports as a percentage of GNP—a rough measure of "internationalization"—grew from less than 40 percent in 1960 to almost 60 percent in 1980. During that same time, the comparative U.S. figure grew from 7 percent to over 20 percent.

Increases in imports increase the competition faced by workers in unionized industries. This new competition reduced domestic employment in unionized industries and cut the traditional wage premium paid to union workers. Abowd and Lemieux find that a 1 percent increase in the import penetration ratio in an industry (imports divided by the sum of domestic production plus imports) decreases domestic employment of unionized workers by 1.4–1.6 percent in the United States and by 0.5–1.2 percent in Canada. But Abowd and Lemieux's evidence on wages is more mixed. For the United States, they find that a 1 percent increase in import penetration decreases unionized workers' real wages by 0.2–0.4 percent, as expected. But for Canada, the same increase in import penetration has no significant effect on real wages.

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Focusing just on Canada, Abowd and Lemieux also find that increases in world prices for manufactured goods cause an increase in the number of union workers employed in producing those goods. A 1 percent increase in export prices stimulates Canadian production and increases employment by 0.1 to 0.3 percent. A 1 percent increase in world prices of Canadian imports leads Canadian buyers to buy fewer imports and more domestic goods, raising domestic

union employment by 0.2 percent. However, the authors find that when world prices of manufactured goods increase, real wages in competing Canadian industries fall slightly.

The researchers' U.S. data are from 250 companies and unions that negotiated a collective bargaining agreement (bargaining pairs) in the manufacturing sector for 1959-84. Their Canadian data are from

299 bargaining pairs in the manufacturing sector for 1968-83.

Abowd and Lemieux note that the negative effect of import competition on union employment may explain the widespread protectionist sentiment among union leaders. They conclude: "... bargaining units in the United States may now be operating in a more open economy than in previous decades." DRH

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