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# The Stock Market Ignores Evidence on Share Buybacks

When corporations repurchase their own stock, managers often are signaling to a less-informed marketplace that they believe the shares to be undervalued. If markets are efficient, the theory says, the stock price should rise quickly to fully reflect the true value of this new information.

But in a new NBER study, **David Ikenberry, Josef Lakonishok,** and **Theo Vermaelen** find that the information conveyed by share repurchases in the open market is largely ignored. Firms repurchasing their own shares generally appear to be correct in assuming that they can buy shares at bargain prices, thereby benefiting the firm's long-term stockholders. Beginning in the month after a buyback is announced, the average return to a long-term holder over the next four years is more than 12 percent above the return on a reference portfolio of similar stocks.

In **Market Underreaction to Open Market Share Repurchases** (*NBER Working Paper No. 4965*), Ikenberry, Lakonishok, and Vermaelen examine the long-run stock price performance of companies that announced stock buybacks during 1980 to 1990. They find that the best returns from the buyback strategy are on "value stocks": stocks generally out of favor with investors. Stocks in the bottom 20 percent of their sample, based on price as a percentage of net worth, produced an average total return of 136 percent for the four years after a buyback announcement. That is an annual compound return of 24 percent, compared with an annual compound return of 17.5 percent, or about 91 percent over four years, from similar stocks with no buybacks.

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Companies distribute substantial returns to shareholders by repurchasing their own stock. From 1980 to 1990, the total amount of stock repurchases on the major U.S. exchanges was $142.6 billion, one-third the value of cash dividends. Toward the end of the decade, this ratio was even higher, becoming nearly half the amount paid out as cash dividends. Between 1985 and 1993, the dollar value of stock repurchases was nearly three times *larger* than the total raised through initial public offerings.

The authors hypothesize that the market treats repurchase agreements with skepticism, leading prices to adjust slowly over time. Thus the average return following the repurchase announcement is 2 percent more than the reference portfolio in the first year, increasing to 4.6 percent in the third. The phenomenon seems to dissipate by the fourth year.

This study adds to a growing body of research that finds that the market reaction to news is not always completed over short time periods. In light of these results, the authors suggest that serious concerns should be raised about the appropriateness of using short-term stock performance to assess the economic impact of corporate decisions. RN

## Government Encouragement of Investment Fueled Asian Growth

Over more than three decades, South Korea and Taiwan have posted unprecedented records of economic growth. South Korea's economy expanded at an average annual rate of 6.8 percent from 1960 to 1989, leading to a six-fold increase in real income per capita; Taiwan's 6.2 percent growth rate over the same period caused per capita income to increase 500 percent. A standard explanation for both countries' success has been their strong orientation toward exports. But according to NBER Research Associate **Dani Rodrik**, the source of the South Korean and Taiwanese miracles is not exports, but skillful government intervention that raised interest rates.

In **Getting Interventions Right: How South Korea and Taiwan Grew Rich** (*NBER Working Paper No. 4964*, to appear in *Economic Policy*, April 1995), Rodrik shows that although both countries sought to promote exports in the second half of the 1950s, this had little impact on economic performance. In South Korea, government incentives increased profitability starting in 1959–60, but an export boom came along five years later. "Even though exports rose very fast from 1964 onward, they were not to regain their 1959–60 level of profitability until the early 1970s, and then again only briefly," Rodrik points out.

Taiwan's major incentives were implemented even earlier, but by the time of the country's first export spurt in 1963–4, the profitability of exports was on the decline. In any case, Rodrik adds, in both countries the rapid rate of export growth came from such a small base that it cannot have had large macroeconomic effects.

Rodrik suggests that it was investment that propelled growth for both South Korea and Taiwan. Both countries experienced an investment boom starting in the early 1960s, when capital goods became their major import. The rise in exports, Rodrik asserts, reflects the need for foreign currency to finance those capital goods. "This story reverses the causality between growth and exports," he notes. "Export orientation enables growth (by allowing imports to increase), but it is not its ultimate determinant. Ultimately, the reasons for growth must be traced back to reasons why it became profitable to invest."

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Foremost among those reasons, Rodrik argues, is that by 1960 both countries were far more advanced in social development than most countries at a similar level of income. South Korea's literacy rate in 1960 was twice what would have been predicted from its income level alone. In Taiwan, which had a higher per capita income, literacy was one and one-half times as great as the norm.

Not only did both countries have unusually well-educated work forces, but they also had exceptionally equal distributions of wealth and income. When Rodrik examines the growth rates of 41 countries from 1960 to 1985, he finds that primary school enrollment is positively related to growth, while inequality of income and wealth are negatively related. "Almost 90 percent of the two countries' growth experience since 1960 can be 'explained' by these initial conditions," he says.

However, these social indicators do not directly explain the rapid rates of economic growth in South Korea and Taiwan. Rodrik points out that several other poor countries, including the Dominican Republic, the Philippines, Paraguay, and Sri Lanka, had literacy and school enrollment rates similar to those of South Korea and Taiwan in 1960. Yet those countries grew far more slowly.

The key to successful development, Rodrik contends, was government intervention to promote investment. "From the perspective of an individual investor, it will not pay to invest in the modern sector unless others are doing so as well," he says. Government helped overcome this failure of coordination by subsidizing investment, giving investors confidence that others would also invest, creating local markets, and assuring a supply of locally produced inputs. Both South Korea and Taiwan used tax and trade policies, as well as open governmental direction, to promote the creation and expansion of desired industries, from steel to electronics. They were able to do so successfully because the relative lack of inequality meant that technocrats could set policies free of pressure to redistribute income or aid particular interest groups. While these policies worked well for South Korea and Taiwan, Rodrik cautions, they might not work in countries where inequality is greater, or where the quality of the labor force is inferior. ML

## Immigrant Earnings Are Down in Recent Decades

Since World War II, the skills of successive waves of immigrants have been declining relative to the skills of workers born in the United States. This trend accelerated in the 1970s. Furthermore, between 1970 and 1990, there was a steady decline in the average wage of immigrants relative to natives: in 1970, the typical immigrant earned about 1 percent more than the typical native; by 1980, immigrants earned approximately 10 percent less than natives; by 1990, the wage gap had grown to almost 17 percent.

In **Assimilation and Changes in Cohort Quality Revisited: What Happened to Immigrant Earnings in the 1980s?** (*NBER Working Paper No. 4866*), NBER Research Associate **George Borjas** concludes that the earnings of post-1970 immigrants will not reach parity with the earnings of typical U.S.-born workers during their working lives. Although the relative wage of the typical immigrant entering the United States grows by about 10 percentage points during the first two decades in this country, this rate of wage convergence is much too small to compensate for the low entry wage of recent waves of immigrants. As a result, it is likely that the relative wages of post-1970 immigrants will remain about 15 to 20 percentage points below those of natives throughout much of their working lives.

The 1980s began with the Mariel boatlift, when Fidel Castro decided to let Cuban nationals migrate freely to the United States, and over 125,000 people quickly took advantage of this offer. Fueled by charges that perhaps 10 to 20 million illegal aliens were overrunning the country, Congress enacted the 1986 Immigration Reform and Control Act. This gave amnesty to about 3 million illegal aliens, and introduced a system of employer sanctions designed to stem the flow of illegal workers.

In addition, the 1980s witnessed the continuation of a historic shift in the size and national origin mix of legal immigrant flows. In the 1950s, about 252,000 legal immigrants entered the United States annually, and more than two-thirds of them came from Europe or Canada. During the 1970s, the annual immigrant flow increased to 449,000, with about 22 percent coming from Europe or Canada, 35 percent from Asia, and 40 percent from Latin America. By the 1980s, the annual flow had risen to nearly 600,000 (net of the newly legalized illegals), with close to 13 percent originating in Europe or Canada, 37 percent in Asia, and 47 percent in Latin America.

> "[I]n 1970, the 1965–9 arrivals earned 18 percent less than American-born workers. By 1980, the 1975–9 arrivals earned 32 percent less than natives. And by 1990, the wage disadvantage between the most recent immigrant wave and natives had grown to 38 percent."

Borjas divides the immigrant population into eight waves, beginning with pre-1950 arrivals

and ending with those entering between 1985 and 1989. He finds that in 1970, the 1965–9 arrivals earned 18 percent less than American-born workers. By 1980, the 1975–9 arrivals earned 32 percent less than natives. And by 1990, the wage disadvantage between the most recent immigrant wave and natives had grown to 38 percent.

Immigrants in particular suffered in the 1980s when the wage gap—between those with more education and experience and those with less—grew. Between 1970 and 1990, the proportion of natives who were high school dropouts fell from nearly 40 percent to about 15 percent. Among immigrants, the dropout rate only fell from 48 percent to 37 percent during that period.

While the fraction of both native and immigrant workers who were college graduates rose steadily between 1970 and 1990, the fraction of natives who were college graduates rose faster. In 1970, 19 percent of immigrants versus 15 percent of natives were college graduates; by 1990, immigrants and natives had the same 27 percent probability of being college graduates. Borjas concludes that the relative decline in the education level of immigrants is responsible for much of the drop in their relative wage.

Borjas also divides the immigrants into four broad ethnic categories: Mexicans, other Hispanics, Asians (excluding the Middle East), and "whites," defined as immigrants from Europe or Canada. He finds that the relative wage of Mexican immigrants has declined even when compared to natives of Mexican ancestry, who earned 17 percent less than natives as a whole in 1990. The gap between recent Mexican immigrants and Americans of Mexican ancestry was 34 percent in 1970 and 50 percent in 1990, a change reflecting the better education of native Mexican–Americans. The same is true for other Hispanics: the relative wage gap grew from 19 percent in 1970 to 38 percent in 1990. In the case of "whites," on the other hand, the most recent arrivals earned 6 percent less than natives in 1970, but less than 1 percent less in 1990.

Borjas uses the 1970, 1980, and 1990 Public Use Samples of the U.S. Census. The study is restricted to men aged 25–64 who work in the civilian sector, who are not self-employed, and who do not reside in group quarters. DRF

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