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Infrastructure Investment Not a Primary Source of Growth

In recent years, there has been much written about the role of investment in infrastructure—that is, highways, airports, mass transit, and the like—in driving economic growth. But two recent studies for the National Bureau of Economic Research suggest that infrastructure may not be as important as some people believe.

In **Infrastructure in a Structural Model of Economic Growth** (*NBER Working Paper No. 4824*), **Douglas Holtz-Eakin** and **Amy Ellen Schwartz** find little support for claims of "a dramatic productivity boost" from increased outlays on infrastructure. Using panel data for the 48 contiguous states, they conclude that raising the rate of infrastructure investment would have had a negligible impact on annual productivity growth in the United States between 1971 and 1986. A 10 percent increase in investment in infrastructure would have boosted *total* productivity growth by only about 1 percent, they estimate. Thus, the effect on average *annual* productivity growth would have been quite small.

In the second study, **Ishaq Nadiri** and **Theofanis Mamuneas** ask how public-sector-financed capital, used both for infrastructure and R and D, affects total factor productivity (TFP) in manufacturing. Focusing on twelve U.S. manufacturing industries between 1956 and 1986, they find that the influence of infrastructure capital and R and D capital on TFP growth are statistically significant and vary by industry. However, the magnitude of the contribution of infrastructure capital to TFP growth is much smaller than reported in the literature.

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In **Infrastructure and Public R and D Investments, and the Growth of Factor Productivity in U.S. Manufacturing Industries** (*NBER Working Paper No. 4845*), Nadiri and Mamuneas calculate that the contribution of infrastructure is about twice that of publicly funded R and D. The magnitude of both their contributions to TFP growth is relatively small when appropriate account is taken of other relevant sources of TFP growth. The authors' calculations show that often "it is the growth of aggregate demand, rise in real input prices, and particularly the growth rate of technical change which are the principal actors in determining TFP growth at the industry level."

Ethnic Patterns in Self-Employment

Chinese–Americans in the United States own a disproportionate number of restaurants, while Koreans are overrepresented in small retail stores. Many people have observed or read about these and other ethnic or racial tendencies. Now a new NBER study by **Robert Fairlie** and **Bruce Meyer** spells out in some detail the differences among various groups in self-employment (that is, working for oneself as proprietors, consultants, professionals, and so on, rather than working for others).

In **The Ethnic and Racial Character of Self-Employment** (*NBER Working Paper No. 4791*), they find that the self-employment rate for all working Americans was about 11 percent for men and 6 percent for women in 1990. That is up from 10.4 percent for men and 4 percent for women in 1980. Among 60 ethnic or racial groups of men in this study, though, self-employment rates in 1990 ranged from 3.2 percent for Laotians to almost 29 percent for Israelis.

All of the European groups had self-employment rates either near or above the average U.S. rates for men and women. The French, Portuguese, and Belgians had self-employment rates of 10.5 percent for men and close to 7 percent for women. Among Russians, self-employment rates were 25 percent for men and 12 percent for women. For Greeks, who had the highest rates of any European group, it was 23 percent for men and 10 percent for women.

Asian groups differ substantially: the low self-employment rates of Filipinos (5 percent for men and 3 percent for women) contrast with the high rates of Koreans (28 percent and 19 percent, respectively). Self-employment rates for Hispanics typically are below average. They range from 3.6 and 2.3 percent for Puerto Rican men and women to 16 and 6 percent for Cuban men and women. Blacks from Central America and South America have about the same low self-employment rate as African–Americans: around 4 percent for men and 2 percent for women.

There is also a substantial variation in the types of business owned by different ethnic and racial groups. Russians and Poles appear to concentrate in very profitable industries, such as general building construction, health services, and legal, engineering, and accounting services. Italians and Greeks are overrepresented in eating and drinking places. The Japanese have the highest concentration in horticultural services. Asian Indians and Filipinos have some of the highest concentrations in health services. Black ethnic groups are underrepresented in the more profitable professional industries.

Fairlie and Meyer find that although there are large differences in self-employment across racial and ethnic groups, the processes that determine self-employment within each ethnic and racial group are not substantially different. Individuals tend to choose self-employment when it pays better than wage and salary work. For example, those with higher levels of education find that they get a better return on that education by being self-employed than as a wage and salary worker. Immigrants within a racial or ethnic group also tend to have a higher rate of self-employment than the native-born in that group, and, older immigrants are more likely to be self-employed than younger immigrants.

The large differences among ethnic and racial groups hold up even after Fairlie and Meyer adjust for differences in individual characteristics, such as age, education, and the number of years living in the United States. These differences are important for at least three reasons. First, conflicts between racial and ethnic groups sometimes have been caused in part by business ownership patterns.

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Second, self-employment historically has been a route of economic advancement for some ethnic groups. For example, the success of Chinese and Japanese immigrants in the United States is substantially the result of their ownership of small businesses. Many states and the federal government promote self-employment as a way to leave welfare, the unemployment insurance rolls, and poverty.

Finally, small business owners have an important effect on political decisions in the United States. The underrepresentation of many ethnic and racial groups in business may mean that these groups possess less political power than is suggested by their proportion of the population. DRF

Can We Insure the Equity in Our Homes?

A house is the primary asset for tens of millions of Americans. For that reason, a decline in the value of the family home can have catastrophic consequences. In extreme cases, the home may not resell for enough to pay off the mortgage. In other situations, the nominal value of the house may increase, but not at a rate adequate to keep up with inflation. Under all circumstances, the absence of a method of insuring or hedging against a fall in the home's real value leaves the homeowner exposed to significant risk.

In a new study for the NBER, though, **Robert Shiller** and **Allan Weiss** conclude that that risk is needless. The decline in the market value of housing, they assert, is at least as insurable as many other events for which insurance is readily available. In **Home Equity Insurance** (*NBER Working Paper No. 4830*), Shiller and Weiss lay out methods by which such an insurance product might work.

They first point out that applying conventional financial risk management approaches to housing values presents formidable problems. Futures-market-type hedges, which are used frequently by professional investors to reduce risks in the financial markets, probably would be unacceptable for most homeowners, who might have trouble dealing with margin calls, and certainly would be afraid of contracts that presented the possibility of losing money if house prices should rise.

A workable form of insurance against risk will be difficult to design. Home prices change gradually; if insurance policies must be renewed each year, the insurer could raise premiums at the first sign of declining prices in the local market and thereby deprive the buyer of protection. Also, if the insurance protects against any loss of value, then an owner will have less incentive to maintain the home so as to obtain the maximum resale price. Homeowners who have overpaid for their properties would have a special incentive to buy insurance, while those whose properties had risen in value would find it worthwhile to cancel insurance, potentially leaving the insurer holding only policies with a high likelihood of claims.

But while such problems are serious, they are not insoluble, Shiller and Weiss assert. A viable method of insuring home values, they say, must require the homeowner to share part of any loss. Claims (or losses) should be based on an index of home values in a given neighborhood, rather than on the value of an individual home, reducing the opportunity for a homeowner to manipulate the outcome.

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To protect owners, policies should be indexed for inflation, because "the most common risk that people face with their homes in an inflationary economy is not that nominal home prices will fall, but that the nominal home prices will not keep up with the cost of living." If such coverage could be standardized, Shiller and Weiss explain, it could be traded on an exchange in the form of a pass-through option. At the time of sale, the mortgage lender or property insurer could offer the homebuyer a two-year option based on an index of local real estate prices. If the index did not decline over the two-year period, the homeowner would have no claim; if it were to fall, the insurer would pay the customer the decline in value of the home as measured by the index. Because the insurer that writes the option could trade it to others on an exchange, the insurer itself could hedge the risk from the policy.

Alternatively, Shiller and Weiss suggest, insurers could offer policies that would be triggered only by a specific event in the policyholder's life, such as a move to another city. If the eligible events are defined carefully, the insurer can calculate the likelihood of a claim and determine an actuarially sound premium. A policy on a $100,000 house that covers, without deductible, all declines in value that are realized when a homeowner moves more than a short distance away might cost relatively little. The annual premium might be no more than a few hundred dollars, possibly even less than a hundred dollars, since very few people both buy at the peak and make such a move at the trough in prices. While policies triggered by a life event are more difficult for insurance companies to manage and hedge, Shiller and Weiss say, they are more likely to be understood by homebuyers and accepted by insurance regulators. "The life-event-triggered policies will not cover households against all consequences of price declines in real estate, but the policies do significantly improve the households' ability to manage their risks," they conclude. ML

International Competition Has Not Lowered U.S. Wages

Critics of free trade long have argued that international competition impairs domestic wages. The argument gained immediacy in the past dozen years, as real U.S. wages actually declined at the same time the economy was becoming more internationalized. This is an important reason for the opposition to recent U.S. trade initiatives, such as the North American Free Trade Agreement and the extension of the General Agreement on Tariffs and Trade. Now, in a new NBER study, **Robert Z. Lawrence** finds that the poor performance of average U.S. wages reflects slow growth in domestic productivity, not international competition.

In **Trade, Multinationals, and Labor** (*NBER Working Paper No. 4836*), Lawrence summarizes and extends previous research on the relationship between low-wage international competition and wage performance in the developed countries in the 1980s. He notes that, when fringe benefits and nonproduction workers are accounted for, wages in the

United States actually showed an increase of 1.5 percent rather than an 11 percent decrease from 1979 to 1991. He disproves the claim that the poor performance of U.S. trade caused the loss of high-wage manufacturing jobs that in turn led to poor wage performance. Even if the United States had run a zero trade deficit in 1991, Lawrence shows, wages at best would be 0.25 percent higher because of the resulting increased manufacturing employment.

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Lawrence also finds little support for the conclusion of some analysts that trade, or globalization, helps explain the growing inequality in U.S. wages. The more precise studies, he finds, conclude that the impact of trade is too small. This is not surprising, Lawrence notes, when one considers that the bulk of America's manufacturing imports come from developed nations where wage levels are similar to America's, not from poor countries with very low wages. In 1990, 70 percent of America's manufacturing imports came from the industrialized nations that are members of the Organization for Economic Cooperation and Development. Lawrence finds that the role of trade in influencing wage behavior has been surprisingly small, not only in the United States, but also in Germany and Japan.

Multinational corporations have been blamed both for the poor performance of wages and for the increase in inequality. They are seen as having relocated production toward low-wage countries. While Lawrence notes that U.S. firms with foreign operations have not contributed to employment growth within the United States over the past decade, he finds that employment was falling overall in their foreign affiliates at the same time. Employment did increase in these companies' developing country affiliates, but the increase was much too small—only 5.9 percent between 1977 and 1989, for an aggregate rise in employment of 60,000—to have had much of an impact on the American labor market. During the same period, U.S. manufacturing employment dropped 1.7 million.

There is considerable empirical evidence, Lawrence concludes, that the sources of poor labor market performance, particularly in the United States, are essentially domestic. RN

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