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Employment and Wage Effects of Import Competition

Imports, particularly from Japan, have become a hot topic in Washington. Business and labor claim severe damage from imported automobiles, consumer electronic goods, and so on. Some economists have tended to put most of the blame for such injury on recession or other major economic trends. In *Working Paper No. 1041, The Employment and Wage Effects of Import Competition in the United States*, NBER Research Associate **Gene M. Grossman** takes a fresh look at this question of whether imports can deprive American workers of their jobs or reduce their pay level.

Grossman maintains that some earlier examinations of import damage, using only certain simple accounting procedures, are not really able to separate one possible cause of reduced employment or wages in an industry from another. That damage to U.S. workers, he says, may be not only the result of increased imports, but also of changes in conditions of supply in the domestic industry.

In this paper, Grossman uses an econometric estimation procedure and looks at hourly earnings, employment as measured by average man-hours per week, prices, the supply of imports, the price of energy, plant and equipment expenditures, and other factors. His study examines nine industries regarded as having suffered intense competition from imports in the recent past: hardwood veneer and plywood; leather tanning; footwear; pottery and related ceramic products; bolts, nuts, rivets, and washers; ball and roller bearings; radios and television; photographic equipment; and dolls, games, and toys.

Grossman finds that the sensitivity of employment

to import price varies significantly across industries. In the past, a large drop in the import price was needed to produce a significant loss of jobs in the cases of leather tanning, nuts and bolts, ball bearings, photographic equipment, and toys. In the case of footwear, pottery, and hardwood, it took only a moderate size change to have a significant impact. In the radio and television industry, a small price drop for imports hurt the domestic industry. In all of these domestic industries, however, the levels of wages were not very sensitive to import competition.

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One further conclusion of the paper is that tariffs on a number of goods could be reduced or eliminated with only minimal effect on the number of jobs in the corresponding domestic industry or the wages paid there. Nor, Grossman says, will the protection provided by such measures as “escape clauses” at any reasonable level do much to preserve many jobs in an industry nor to halt a decline in the relative wages of a group of workers, if that industry is not highly sensitive to imports.

Grossman calculates that in four of the industries that he examines, import competition has been responsible for the loss of only a moderate amount of employment. In the radio and television manufactur-

ing industry, however, employment would have been 71.3 percent greater in 1979 if import competition had not intensified over the previous 12 years. That difference in the employment level corresponds to a loss of approximately 60,000 jobs. In contrast, in three other industries there actually might have been a gain in employment because of import competition.

Finally, in only two of the nine industries that Grossman examined was there a loss of hourly earnings of greater than 10 cents an hour attributable to imports.

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Moving and Housing Expenditure

Potential programs of housing subsidy would transfer funds to low-income families to help them obtain better rental housing. How effective such programs would be is the question asked by NBER Research Associate **David A. Wise** and **Steven F. Venti** in *Working Paper No. 1012, Moving and Housing Expenditure: Transaction Costs and Disequilibrium*.

Specifically, Wise and Venti ask how large the transaction costs (that is, the monetary and non-monetary gains and losses) of moving are and what these costs imply for the effectiveness of government subsidy programs. They use data on a random sample of low-income families in Phoenix and Pittsburgh who were part of an Experimental Housing Allowance Program; the participants were surveyed over a three-year period, between 1973 and 1977.

The authors concentrate on two types of transfer programs: (1) lump sum programs, in which an unconstrained payment is given to a family; and (2) minimum rent plans, wherein an allowance is paid only if a minimum amount of total income is spent on rent.

First, Wise and Venti find that the transaction costs of moving are, on average, high among the renters in the sample, but these costs vary widely both geographically and among families. According to the authors, "Large average differences between the two cities in our sample suggest that market and cultural factors may create very different barriers to moving in different locations."

Although the transaction costs of moving are found to reflect primarily nonmonetary factors, the average family in the sample would forego \$60 per month in income to avoid moving. Not surprisingly, though, the larger the difference between a family's rent and what they would like to pay, the more likely the family is to move.

Wise and Venti also find, as do earlier studies, that low-income renters change their housing expenditures very little if their incomes change (in economic

terms, this is called low-income elasticity with respect to housing expenditures). In addition, the authors find quite different elasticities in the two cities sampled. "The low-income elasticities together with the transaction costs of moving mean that the effect of income transfers on rent are very small in general and the differences among cities suggest that the same program could generate quite different effects in different locations."

What are the merits of the different types of transfer programs? Minimum rent plans are, by their nature, somewhat wasteful (or involve what economists term deadweight loss) because many families have to devote a larger proportion of their income to rent than they otherwise would, just to take advantage of such plans. Wise and Venti estimate this deadweight loss at 15–32 percent of the transfer payments.

"In particular," the authors continue, "minimum rent plans that condition the transfer payment on meeting a minimum rent requirement have a relatively small effect on families with chosen market rents below the minimum, the families that the plan is most intended to affect . . . changing the proportion of income devoted to housing, together with the moving transaction costs, are such that most families will not increase rent enough to receive the payment." The families who do move under these circumstances tend to be those with low transaction costs.

"...the effects of any given government rent program are likely to vary substantially by region."

Wise and Venti estimate that, on average, for every dollar paid out under a minimum rent plan, rent paid increases by only 10–30 cents. Depending upon the nature of such plans and the geographic location, rent increases can range from 8–69 percent of payments.

Still, the minimum rent plans have a larger effect on housing expenditures than do the lump sum plans. The authors estimate that a one dollar unconstrained transfer will increase housing expenditure by only 2–7 cents on average in the two cities.

Simulations of the effects of a lump sum and two types of minimum rent plans in the two cities point to a very small total effect in Pittsburgh and a modest total effect in Phoenix. In both cities, the minimum rent plans could have a greater effect according to the simulation results: lump sum plans would increase rent 6 cents per dollar in Phoenix and 2 cents per dollar in Pittsburgh; a larger minimum rent plan would make a 17-cent difference in Phoenix and an 8-cent difference in Pittsburgh; a less generous minimum rent plan would yield larger per-dollar increases in rent of 68 cents and 14 cents, respectively.

The authors caution, however, that because the costs of moving vary geographically, the effects of any given government rent program are likely to vary substantially by region.

Explaining National Price Levels

In *NBER Working Paper No. 1034, Toward an Explanation of National Price Levels*, Research Associates **Irving B. Kravis** and **Robert E. Lipsey** call attention to the need for a theory of comparative national price levels and explore some of the elements that would comprise such a theory.

Historically, the most prominent discussions in economic literature have assumed that price levels worldwide tend toward equality, but strong evidence has been accumulating that there are large and longstanding differences among national price levels. In 1975, for example, price levels of gross domestic product (GDP) in high-income countries were more than double those in countries with very low income.

Theories stating that the equality of price levels is achieved through shifts in exchange rates, for example, thus may need to be reconsidered. Kravis and Lipsey note that "it has already been established that in the real world price levels are not the same in different countries, and it is preferable to leave open the possibility that some influences may operate on exchange rates with an incomplete or delayed adjustment in domestic-currency price levels, and others on domestic-currency price levels with an incomplete or delayed adjustment in exchange rates."

Both long-run factors, which determine the underlying price level, and short-run factors, which cause deviations from the basic level, must be considered in formulating a comprehensive theory of national price levels. The long-run factors may be viewed as real, or structural, while the short-run factors are mainly monetary. Structural factors characterize a country's economic framework; they include real per capita GDP, factor endowments, the industrial composition of GDP, and the extent of the country's participation in national trade (that is, openness).

Long-run factors may affect the price level through their impact on the relative prices of goods (tradables) versus services (nontradables). Wealthier countries tend to have a greater advantage in producing goods; poorer countries tend to have a smaller disadvantage in producing services. These relative differences may be explained in terms of the productivity of labor alone or in terms of the productivity of labor and capital (or, all factors of production). Whatever the reason, the prices of services are relatively low in low-income countries and these low prices of services pull down the national price levels for GDP as a whole.

Having established this theoretical framework, the authors go on to an empirical analysis based mainly on 1970 data for 16 countries and 1975 data for 34 countries (from the UN International Comparison Project). Their analysis shows that a large part of the differences in price levels can be explained by structural factors. Although Kravis and Lipsey observe a shift in the relation of price levels to income after 1970, it is real income (or real GDP) per capita that explains most of the differences in price levels throughout the period.

They also find that the degree of openness of an economy is positively related to its price level. Both high income per capita and a high degree of openness are associated with high price levels.

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The share of services in a country's output is another important structural factor. Given the levels of real per capita income and openness, a high share of services in GDP is associated with a high price level.

On the nonstructural or short-run side, the only important factor that emerges from their analysis is the rate of growth of the quantity of money. A high rate of past growth in money is associated with a lower price level because the depreciation of the currency more than makes up for the rise in prices measured in domestic currency. Finally, there appears to be a negative relationship between price levels and changes in the exchange rate (that is, they move in opposite directions).

SSI and the Health of the Poor

In *NBER Working Paper No. 1062*, Research Associate **Paul J. Taubman** and **Robin Sickles** find that the federal Supplemental Social Insurance (SSI) program has had beneficial effects. "In general, the results from the pre- and post-SSI program suggest that it has improved the health of the SSI recipients," concludes their study, **Supplemental Social Insurance and the Health of the Poor**.

SSI was instituted by the federal government in 1974 to increase the transfer payments, income, and medical care of the elderly on welfare, the blind, and the disabled. Monthly cash payments in 1974 ranged from \$140 per single individual to \$210 per couple with a maximum additional allowance of \$70 per

ineligible spouse or relative living with the recipient. SSI recipients could also receive state supplemental aid and were eligible for Medicaid in states where it was available.

“...people...would be at a higher risk of poor health if their SSI income were reduced.”

To examine the impact of SSI on individual health, Taubman and Sickles use data from the Retirement History Survey, a sample of heads of household aged 58-63 in 1969 who were resurveyed every two years through 1977. For comparative purposes, they divide the sample into four groups: (1) those receiving SSI in 1975 or 1977; (2) those who retired early and were receiving minimum (Social Security) benefits in 1975; (3) those who retired at age 65 and were receiving minimum benefits in 1975; and (4) all others.

The authors observe that in 1969 the SSI group

was the least healthy of the four; also, the early retirees were less healthy than those who retired at age 65. In 1971 and 1973, there was an overall worsening of health, with similar patterns among groups. But in 1975, all groups were healthier, with the SSI group showing above-average improvement; that improvement continued through 1977.

In a second type of analysis, Taubman and Sickles include a number of other factors that might affect health. Holding such factors constant, they still find the SSI group in worse health in 1969, 1971, and 1973. In 1975 and 1977, though, the health differences among groups are small and insignificant.

Taubman and Sickles conclude that “. . . people benefited from SSI and thus would be at a higher risk of poor health or death if their SSI income were reduced. For example,” they continue, “in 1977, a white male living with his spouse would be at a 71 percent greater risk of death if his SSI benefits were cut \$3000 per year. Interestingly, the effect of reduced SSI income on risk of death is significantly higher than is the effect on the risk of worse health.”

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