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Multinationals' Exports from Developing Countries

How important is direct foreign investment to economic growth in developing countries? In one aspect of development—the growth of exports—foreign multinationals sometimes play a key role in moving certain manufacturing industries from domestic markets into export markets. However, direct foreign investment by multinationals is not necessary for successful export-oriented manufacturing.

In **Multinational Firms and Manufactured Exports from Developing Countries** (*NBER Working Paper No. 2493*), **Magnus Blomström**, **Irving Kravis**, and **Robert Lipsey** examine data on exports of foreign subsidiaries of American, Japanese, and Swedish multinationals from developing countries in Latin America and Asia. They find that multinationals, primarily from the United States, were responsible for a large and rising share of manufactured exports in Latin America. In 1983, about 20 percent of manufactured exports from Latin America were produced by foreign multinationals. In 1982, U.S. multinationals produced over one-third of Mexico's manufactured exports. By contrast, the share of foreign multinationals in the exports of Korea and some other very successful developing countries in Asia was much lower.

Blomström, Kravis, and Lipsey estimate that U.S. multinationals' share of manufactured exports of developing countries rose more than 58 percent from 1966–83. U.S. multinational firms were concentrated more in the chemical, transport equipment, and machinery industries than in foods, metals, and other manufacturing.

Through 1982, the U.S. multinationals' share of

the manufactured exports of their host countries increased in Latin America and in developing Asia. However, after 1977, their share of exports decreased in Hong Kong, Korea, Singapore, and Taiwan, where total exports were growing much faster than in Latin America and the rest of developing Asia. Overall, the authors find, the role of U.S. multinationals in LDC exports of manufactured goods increased steadily from the late 1950s to the early 1980s.

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The situation was similar for Japanese multinationals: their share of LDC exports of manufactured goods rose from 1974–83, particularly in electrical machinery. While their role in Latin America was small, it did increase from 1974–83; their role in developing Asia as a whole was large—about the same as that of U.S. firms—and increased only slightly during that period. One major difference between U.S. and Japanese multinationals was that the U.S. firms had a substantial stake in Latin America while the Japanese hardly were represented there at all.

There are fewer Swedish multinationals and they are smaller than their U.S. and Japanese counterparts. Also, their affiliates are less export-oriented. Swedish multinational investments are concentrated

in Latin America now, but Swedish exports before 1978 came largely from other areas, especially Africa.

Japan, Sweden, and the United States—and their multinational affiliates—export very little food relative to the LDCs. The United States and its multinationals export a larger share of chemicals than Japan, Sweden, and the LDCs do; Japan and its multinationals lead this group in their export share of metals.

Almost half of the exports of U.S.-based LDC affiliates, and about one-third of the exports of Japanese companies doing business in the LDCs, are in electrical machinery. This leads Blomström, Kravis, and Lipsey to conclude that “the combination of U.S. and Japanese firm characteristics (mainly technology) with LDC country characteristics (cheap labor) seems to be the optimum combination in this industry.”

Finally, the authors find that the multinationals' share of exports grew most rapidly in machinery and transport equipment—industries in which the multinationals and their home countries are stronger than their LDC hosts are. Overall, the industry distribution of exports from U.S. and Swedish multinationals was more like the home countries' than the host countries', while the opposite was true for Japanese multinationals.

Are Government Workers Overpaid?

Past studies by economists have found that, even for workers of the same age and education, those in the federal sector receive 10 to 20 percent higher wages on average than those in the private sector do. However, higher pay for federal workers may reflect their higher average skills and ability, not overpayment. In a new study for the NBER, **Alan Krueger** adjusts for such differences in worker productivity and still finds that federal workers are paid more than their counterparts in the private sector are.

In **Are Public Sector Workers Paid More Than Their Alternative Wage? Evidence from Longitudinal Data and Job Queues** (*NBER Working Paper No. 2500*), Krueger avoids the problem of differences in productivity by comparing the wages of individual workers who move between the public and private sectors. If a worker leaves a job in the private sector for one at a higher wage in the public sector, the wage increase cannot be attributed to innately higher productivity. The same reasoning applies for a worker who leaves a job in the public sector to work in the private sector. Krueger finds that the average worker who leaves the private sector for a civilian, nonpostal job with the federal government gains 12 percent in real wages

(that is, wages adjusted for inflation). On the other hand, workers who leave the federal government for the private sector seem to gain 5 percent in real wages.

However, Krueger contends that the 12 percent gain in real wages may be more representative of the true difference between the federal government and the private sector. Since federal pension rules tend to impose a large penalty on workers who quit their jobs, federal workers are less likely to move to the private sector unless they receive large offsetting wage gains. In addition, part of the 5 percent gain in wages for workers who leave the federal government may be attributable to a better match between the workers' skills and the requirements of the jobs in the private sector.

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Using a similar approach, Krueger finds that wages of state and local government workers are roughly equivalent to, or slightly less than, the wages of private sector workers.

Krueger also compares the number of applications for jobs in the federal and private sectors: if the number of people applying for each federal job exceeds the similar ratio in the private sector, this suggests that workers overall find federal jobs more attractive than jobs in the private sector. He finds that the application rate for federal jobs (that is, the number of applications per federal worker hired) is 25 to 33 percent higher than the average application rate for private sector jobs. This also suggests that federal workers are overpaid.

In a related paper, **The Determinants of Queues for Federal Jobs** (*NBER Working Paper No. 2499*), Krueger finds that application rates for federal jobs are affected strongly by wages of federal workers relative to workers in the private sector. For every 1 percent increase in the wage of federal workers relative to the wage of private sector workers, the application rate increases by more than 2 percent. Krueger also finds that a one percentage point increase in the unemployment rate is associated with an increase of 3 to 6 percent in the application rate for federal jobs. On the other hand, a large increase in the index of help wanted ads, reflecting more available jobs in the private sector, results in only a small decline in the application rate for federal jobs.

Surprisingly, the level of fringe benefits in the federal government relative to the private sector is not related to the application rate for federal jobs. This suggests that offering more generous fringe benefits would not enhance recruitment of workers for federal jobs.

Finally, Krueger finds that increased federal wages

relative to private sector wages leads to an increase in the number of *qualified* applicants per federal job. For every 1 percent increase in federal wages relative to private sector wages, the number of qualified applicants per new hire rises by 4 percent. DRH

Stock Prices, Earnings, and Expected Dividends

Past earnings are a good predictor of future returns on common stocks, according to a new study by NBER Research Associates **John Campbell** and **Robert Shiller**. In **Stock Prices, Earnings, and Expected Dividends** (*NBER Working Paper No. 2511*), Campbell and Shiller find that the dividend-price ratio and certain earnings-price ratios help to predict returns. Their forecasting power is statistically significant for one-year returns, but they explain only a minuscule portion of the variability of returns. For example, the dividend-price ratio explains only about 4 percent of the variance of one-year returns.

The predictive power of these variables increases dramatically, however, as the return horizon increases. That is, the dividend-price ratio explains 27 percent of the variance of returns over the next 10 years, and the 30-year average of the earnings-price ratio explains 55 percent of the variance over that same period. Dividend growth, in contrast, does not predict stock returns at any horizon.

These findings imply that simple present value models of stock prices are incorrect. Those models assume that stocks are priced to yield a constant real return or a constant excess return over short-term interest rates. They imply that the current stock price is the best possible forecast of the present value of future dividends. Campbell and Shiller find, instead, that the best forecast of future dividends is a weighted average of past earnings combined with the current stock price—with two-thirds to three-fourths of the weight on the earnings measure.

“Past earnings are a good predictor of future returns on common stocks.”

Campbell and Shiller also show that the stock market is more volatile than it would be if returns were unpredictable. Dividend-price ratios (that is, the yields on common stocks) are much more variable than the present value models imply, and are virtually uncorrelated with the values indicated by the models. Annual stock returns, on the other hand, are highly correlated with the theoretical present values, but are two to four times more variable than the theoretical values are.

Campbell and Shiller use data from Standard & Poor's Composite Index, and related earnings and dividend series, from 1871 to 1987. The earnings measures are the current earnings-price ratio and ratios based on 10-year and 30-year moving averages of earnings. The moving averages measure fundamental value more accurately. Indeed, the 30-year average allows for the possibility that earnings may vary more than fundamental values do, for as long as a decade. The other variables they include are the stock price, expressed as the dividend-price ratio, and the dividend growth rate. AE

Unemployment Benefits and Unemployment Spells

An increase of ten percentage points (for example, from 65 percent to 75 percent) in the share of aftertax earnings that are replaced by unemployment benefits lengthens the average unemployment spell by 1½ weeks, according to a new NBER study by **Bruce Meyer**.

In **Unemployment Insurance and Unemployment Spells** (*NBER Working Paper No. 2546*), Meyer points out that most of the unemployed who receive benefits return to work long before their unemployment benefits run out. But among those who remain jobless for a longer period, the chances of going back to work increase rapidly as the time of exhaustion of benefits approaches. Indeed, the chances of an unemployed person getting a job quadruple between the sixth week before the end of benefits and the week before they expire.

Meyer also finds that, in an average week, unemployed married men are more likely to return to work than single men are; unemployed white men are more likely to return to work than black men; and those jobless youth aged 17 to 24 are more likely to return to work than men over 55 are. Finally, an increase of one percentage point in a state's unemployment rate decreases by 2.4 percentage points the probability of an individual's returning to work.

Meyer's study uses individual records from 12 state unemployment insurance administrations during 1978-83 on the length of unemployment spells and the level and length of benefits. In this sample of unemployed men, the average weekly wage after taxes on the last job was \$318 (1987 dollars) and the average benefit was \$195. The average benefit replaced almost 70 percent of the aftertax wage on the previous job. While unemployment benefits typically lasted 26 weeks, there were many differences across states over time. During part of this period in some states, a federal supplemental program extended benefits up to 65 weeks. DF

Recent NBER Books

International Economic Cooperation

International Economic Cooperation, edited by Martin Feldstein, is available from the University of Chicago Press. The price is \$50.00 for the cloth-bound volume and \$17.95 for the paperback. This volume, based on a 1987 NBER conference, includes four nontechnical papers by academic economists dealing with macroeconomic policy; exchange rates; international trade; and developing country debt. Personal statements by 15 individuals prominent in business and government, and an introductory essay by the editor, constitute the balance of the volume.

This important work should be of interest not only to policymakers but also to private citizens concerned with the changing role of the United States in an increasingly open world economy.

Martin Feldstein is president and chief executive officer of the National Bureau. He is also the George F. Baker Professor of Economics at Harvard University.

Unions in the Public Sector

When Public Sector Workers Unionize, edited by Richard B. Freeman and Casey Ichniowski, is now available from the University of Chicago Press for \$52.00. This volume contrasts the recent experiences of unions in the public sector with labor-management relations in the private sector. Drawing on newly collected data, the authors explore the evolution, role, and effect of labor laws in the public sector. They also investigate the effects of collective bargaining not only on wages but also on such issues as federal aid to schools, the quality of public education, and levels of employment. Public sector unions, it turns out, have a much smaller effect on wages than unions in the private sector do; but unlike their counterparts in the private sector, they raise employment and reduce layoff rates.

This volume is an important contribution to the literature on unions and should be especially inter-

esting to policymakers. Editor Freeman is the director of the NBER's Program in Labor Studies and a professor of economics at Harvard University. Co-editor Ichniowski is an NBER faculty research fellow and an associate professor at Columbia University's Graduate School of Business.

Fiscal Federalism

Fiscal Federalism: Quantitative Studies, edited by Harvey S. Rosen, is available from the University of Chicago Press for \$39.95. The seven papers in this volume, presented at an NBER conference in 1987, explore the relationships among state, local, and federal governments.

John Joseph Wallis and Wallace F. Oates look at the evolution and extent of decentralization in the state and local sector. Robert P. Inman concentrates on political issues relevant to the growth of federal grants. Jeffrey S. Zax asks how the number and types of government jurisdictions affect local public debt and expenditures. In three separate papers, Rosen and Douglas Holtz-Eakin, Lawrence B. Lindsey, and George R. Zodrow study the effects of deductibility on state and local taxes and expenditures. Finally, Charles R. Hulten and Robert M. Schwab develop estimates of income in the state and local sector.

This volume should be useful to policymakers and to those studying taxation and public finance. Its editor, Rosen, is a research associate of the National Bureau and a professor of economics at Princeton University.

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