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## U.S./Japan Labor Markets in the 1980s

In the United States in the 1980s, college graduates saw their position in the labor market improve dramatically relative to less-educated workers. The improvement was particularly pronounced for those just entering the labor market. From 1979-87, the earnings of young male college graduates rose by more than 20 percent relative to the earnings of young male high school graduates. Because average living standards in the United States have been growing rather slowly, the relative loss in wages for unskilled young people translated into an *absolute* decline in their inflation-adjusted wages of as much as 20 percent. In contrast, young, less-educated workers in Japan actually gained ground in the 1980s.

In **Changes in the Structure of Wages: The United States versus Japan** (NBER Working Paper No. 3021), NBER Research Associate **Lawrence Katz** and **Ana Revenga** explain, "The rate of growth of college grads as a fraction of the labor force decreased dramatically in the United States, and did not decrease as much in Japan, in the 1980s. This sharp deceleration in the United States helps to account for the much larger increase in the college wage premium here than in Japan." At the same time, they continue, "... increased openness, trade deficits, and labor market slack, and the decline in unionization amplified each other in contributing to an unprecedented decline in earnings of young, less-skilled males in the United States in the 1980s."

Katz and Revenga estimate that the average wages of U.S. college graduates rose by about 13 percent

relative to the wages of high school graduates in the 1980s. They note that in the United States "The annual rate of growth of college graduates as a fraction of the male labor force declined by approximately 2 percent from 1973-9 to 1979-87, while the annual rate of growth of the college/high school wage differential for males aged 18-65 increased by 2.5 percent."

In Japan, on the other hand, there was virtually no change in the rate of growth of the male college-educated labor force. Moreover, real net Japanese exports as a share of Japanese GNP rose 6.5 percent from 1979-87, while real net U.S. exports as a share of GNP declined 3.3 percent. The share of total employment in manufacturing fell from 23 to 19 percent in the United States, but stayed at around 25 percent in Japan. As a consequence, the differential in wages of college versus high school graduates remained fairly stable in Japan.

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Also, the share of less-educated workers in U.S. manufacturing fell dramatically in the 1980s. These

workers ended up in low-wage retail trade jobs, while the reverse occurred in Japan. A tight labor market could have raised the relative wages of less-educated, less-skilled young American workers. But since 1973, the U.S. labor market has been slack, with high average unemployment and sluggish growth. Finally, unionization can boost the relative wages of the least-skilled or least-experienced workers. But unionization declined in the United States in the 1980s, falling over 17 percent for young high school males.

## States Benefit Through Arbitrage

The interest on many bonds issued by state and local governments is not subject to federal income tax. As a result, these bonds offer lower interest rates than comparably risky bonds issued by private firms. Because of the lower interest rates paid, states have an incentive to issue tax-exempt bonds and then to invest the proceeds in assets with higher yields. This incentive increases as the spread between tax-exempt and taxable interest rates widens. However, this practice is illegal, and the IRS has made vigorous efforts to prevent state and local governments from taking advantage of this interest rate spread.

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In a new NBER study, **Arbitrage and the Savings Behavior of State Governments** (NBER Working Paper No. 3017), **Gilbert Metcalf** finds that the IRS has not been very successful. Metcalf reports that states held almost \$700 billion in cash and securities in September 1987. Most of these assets were held by state pension funds, but \$253 billion was in other state accounts. Total financial assets of the states grew at an annual rate of 14.5 percent from 1977 to 1985, substantially faster than the 11.6 percent annual growth rate of their long-term debt or the 9.7 percent growth rate of states' general expenditures.

Metcalf estimates that each basis point increase in the spread in interest rates between state debts and the financial assets that states invest in results in an increase of \$6.73 in their per capita holdings of such assets. This strongly suggests that states are able to evade IRS rules against borrowing in the tax-free market and investing in taxable assets solely to make a profit.

Metcalf explains that IRS rules are ineffective because they apply only to situations in which states *directly* invest the proceeds of borrowing in taxable assets. When they borrow to finance outlays and then use tax revenues to finance investments in financial assets, the IRS rules do not apply.

## Mariels Had Little Effect on Miami Labor Market

Between May and September 1980, about 125,000 Cubans arrived in Miami by boat from the port of Mariel. Half of them settled permanently in Miami, increasing its population and labor force by 7 percent. Mostly unskilled, the Mariels expanded the local *Cuban* population and labor force by 20 percent. Yet an NBER study by **David Card** shows that “. . . there was essentially no effect of the Mariel immigration on the wages or employment of non-Cuban workers in the Miami labor market.” And, perhaps more surprising, “there was no strong effect . . . on the wages of other Cubans.”

In **The Impact of the Mariel Boatlift on the Miami Labor Market** (NBER Working Paper No. 3069), Card notes that for at least a decade before the boatlift, Miami had the highest concentration of immigrants in the United States. In 1980, about 35 percent of Miami residents were foreign born, versus 22 percent of Los Angeles residents, and 6 percent nationally. Of Miami's immigrants, 56 percent were Cuban. The city also had a large black population: 15 percent in 1970 and 17 percent in 1980.

The Mariels on average had less education, were younger, and a greater percentage were male compared with the other Cuban immigrants. They also were less attached to the labor force and earned less. Compared to other Cubans, Mariels held fewer sales or clerical jobs, and more were laborers or had service jobs. They also earned 18 percent less than the other Cubans with equivalent education and experience. In these respects, the Mariels resembled Miami's black workers.

Yet Card finds that from 1979–85, the real earnings of whites and non-Cuban Hispanics in Miami were fairly constant. For blacks, wages were roughly constant in 1979–81, fell slightly in 1982–3, and returned to earlier levels in 1984. Only Cubans saw their wages decline, particularly relative to those of whites, during this period.

Since Mariels are less educated and less skilled than the average Miami worker, presumably they compete most directly with other less-educated workers. To focus on low-skilled labor markets, Card compares the wages of blacks with fewer than 12 years of schooling in Miami to similar blacks in other cities that did not experience an influx of Cubans. He finds no systematic change in the relative wages or unemployment rates of blacks in Miami during the years following the Mariel boatlift.

How could Miami's labor market have absorbed this 7 percent increase so smoothly? Card suggests that the Mariels may have displaced others who would have moved to Miami. Indeed, he finds that 80 percent of the 1979–84 population growth in Miami occurred between April and July 1980. Also, Miami has a high concentration of textile, apparel, and other low-wage industries that readily provide jobs for immigrants.

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In related work, **The Effects of Immigration on the Labor Market Outcomes of Natives** (*NBER Working Paper No. 3123*), Card and **Joseph Altonji** consider the effect of immigration on native workers in 120 cities across the United States. Using data from the 1970 and 1980 Censuses, they find a modest degree of competition between immigrants and less-skilled natives, which varies by race and sex.

Immigrants in the labor market compete most with black females and least with black males, Card and Altonji find. Overall, though, immigrants are not concentrated enough in industries with less-skilled natives to have large effects on their employment or unemployment rates.

Finally, Card and Altonji compare changes in the fraction of immigrants in a city between 1970 and 1980 to changes in native wages over the same period. Immigrants tend to move to cities with better labor market opportunities, making it difficult to assess the negative effects of immigration. However, when Card and Altonji adjust for this tendency, they estimate that “an increase of 1 percent in the fraction of immigrants in an SMSA [city] reduces less-skilled native wages by roughly 1.2 percent.”

## The Relationship Between Cost and Demand for Weapons

A 10 percent increase in the cost of a weapon results in the Department of Defense (DOD) purchasing 5.5 percent fewer weapons, according to NBER Research Associate **Frank Lichtenberg**. He analyzes how decisionmakers in the Pentagon and Congress respond to new information about the cost of weapons acquisitions. There is considerable uncertainty at the beginning of the weapons development process about the true cost of producing the weapon, so the estimated cost may change significantly by the time development is complete.

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In **How Elastic Is the Government's Demand for Weapons?** (*NBER Working Paper No. 3025*), Lichtenberg examines changes in the costs and quantities of 84 major weapon systems described in a 1988 DOD report to Congress. He finds that a change in weapons' costs often leads to a change in the number of weapons that DOD finally purchases. Lichtenberg estimates that a 10 percent increase in the number of units purchased results in a decline of about 2.5 percent in the unit cost of the weapon. In other words, Lichtenberg finds economies of scale in weapons production. DRH

## The Demand for Money Has Not Changed

Keynes's liquidity preference function has been a staple of macroeconomics for over 50 years. It states that consumers and businesses boost their cash balances when incomes go up but trim them when interest rates head higher. Policymakers and forecasters have relied heavily on this relationship to predict the

impact of monetary policy. Unfortunately, since the 1970s, researchers have not found much confirmation that the relationship among money, income, and interest rates is at all stable.

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But this lack of evidence is more apparent than real, according to an NBER study by **Dennis Hoffman** and **Robert Rasche**. In **Long-Run Income and Interest Elasticities of Money Demand in the United States** (NBER Working Paper No. 2949), Hoffman and Rasche argue that “. . . there is strong evidence in support of a stable equilibrium demand function for real balances in the post-World War II economy.” Despite innovations like NOW accounts, ATMs, and credit cards, there are few signs that the behavior

of money demand is “any different in the 1980s than during the previous twenty-five years.”

Using monthly data from 1953 to 1987, Hoffman and Rasche estimate that, at any given level of interest rates, a 1 percent increase in real personal income tends to boost the real demand for M1—cash plus checking balances—proportionately. Although the effect of income on the demand for money looks random when income and money are considered by themselves, including the interest rate produces a predictable relationship between money and income, Hoffman and Rasche find.

The authors also estimate that a 10 percent hike in the three-month Treasury bill rate (for example, from 7.0 to 7.7 percent) causes real M1 to fall by 5 percent. A similar increase in the 10-year government bond rate prompts a slightly larger reduction of 6 percent. Theory suggests that the responses to short and long-term interest rates ought to be identical. But Hoffman and Rasche point out that the gap between the two elasticities is so small that most economic projections would not be affected much.

Money demand can depart from normal patterns for as long as two or three years, Hoffman and Rasche find. The average gap between predicted and actual money demand does not widen over the postwar period, though, according to the authors. SN

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