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Enterprise Zones Create Jobs But Lose Tax Revenues

In the early 1980s, many state governments created enterprise zones (EZs) in order to bring jobs into local areas where unemployment and poverty rates were high. By 1991, 37 states and the District of Columbia had such zones. All the existing programs provide tax preferences to capital and/or labor, but until recently little has been known about their effects.

Now, in **Tax Policy and Urban Development: Evidence from an Enterprise Zone Program** (*NBER Working Paper No. 3945*), NBER researcher **Leslie Papke** presents detailed findings of the effects of Indiana's EZ program. That program did increase jobs inside the zones, she finds. Firms reported 2897 new jobs in the zones in 1988, but less than 15 percent of these jobs were held by zone residents. Papke estimates that the program permanently reduced annual claims for unemployment insurance at nearby claims offices by 19 percent; in an average year, that translates into a decline of 1500 claims.

Of course, the increase in jobs comes at a cost. To create EZs, Indiana's government gives firms a full credit against local property taxes for the portion of that tax that is imposed on their inventories located in the zone. The government also gives these firms a total exemption for incremental income they derive from sources in the zone. Further, employers get a tax credit for hiring zone residents, and zone residents get an income tax deduction equal to half their adjusted gross income, with a ceiling of $7500. Lenders can get a tax credit, too, equal to 5 percent of the interest income they receive from loans, either to zone businesses or residents, used to improve property, either business or residential.

Papke estimates that these tax preferences cost Indiana's state and local governments $13.6 million in foregone tax revenues in 1988. Of this cost, 84 percent was borne by local governments in foregone tax revenue on inventories. The governments' annual cost per new job reported by the zone firms was $4564; per new zone resident job it was $31,113. At the same time, the average annual wage for all new workers in EZs was $20,434 in 1988. Zone residents in these new jobs earned an average of $11,746.

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Papke finds that the strong tax bias created in favor of inventories causes firms in the zones to substitute away from machinery and equipment and into inventories. Specifically, zones have 13 percent less machinery and equipment and 8 percent more inventories than if the tax incentives had not existed. However, she cannot determine whether the decline in machinery and equipment is permanent or transitory.

DRH

Drug Abuse, Transfer Programs, and Low Birthweights

Babies who weigh less than 2500 grams (5 1/2 pounds) at birth are far more likely to die or require intensive hospital care than larger babies. Low birthweight (LBW) explains more of the variation in health over the first 12 months of life than any other single factor. In New York City, the fraction of LBW babies declined steadily from the late 1960s to the mid-1980s, primarily because of increased prenatal care, better nutrition, and a declining number of births to adolescents.

Since then, the downward trend has been reversed, especially among non-Hispanic blacks. According to a new NBER study, their LBW rate rose from 11 percent of live births in 1984 to 13.5 percent in 1987. At the same time, the proportion of pregnant non-Hispanic blacks who took illegal drugs rose from 2 percent in the early 1980s to 6 percent later in the decade. The percentage who received no prenatal care nearly doubled.

> "While illicit substance abuse was clearly a major factor in low-weight births among blacks, the evidence is less conclusive for whites and Hispanics."

In **The Consequences and Costs of Maternal Substance Abuse in New York City: A Pooled Time-Series Cross-Section Analysis** (*NBER Working Paper No. 3987*), **Theodore Joyce, Andrew Racine,** and **Naci Mocan** note that the average neonatal cost per LBW is about $13,700. They estimate that the number of additional LBW births in New York City in 1985–9 caused by illicit substance abuse ranged anywhere from 1900 to 3800. They calculate that this resulted in extra neonatal hospital costs of between $22 million and $53 million. While illicit substance abuse was clearly a major factor in low-weight births among blacks, the evidence is less conclusive for whites and Hispanics, they find.

In a related paper, **Janet Currie** and **Nancy Cole** examine the relationship between birthweight and a pregnant woman's participation in various transfer programs. Perhaps surprisingly, they find that there is no statistically significant relationship between a pregnant woman's receipt of AFDC, Food Stamps, or housing and her baby's birthweight.

In **Does Participation in Transfer Programs During Pregnancy Improve Birthweight?** (*NBER Working Paper No. 3832*), Currie and Cole analyze data from the National Longitudinal Survey of Youth on 4900 children born between 1979 and 1987, about half of whom were black or Hispanic.

> "There is no statistically significant relationship between a pregnant woman's receipt of AFDC, Food Stamps, or housing and her baby's birthweight."

The authors find that delaying prenatal care beyond the first trimester has a large negative effect on birthweight. Smoking cigarettes and drinking alcohol during pregnancy also lower birthweights. Further, ". . . more generous welfare programs are associated with reductions in the probability of a pregnancy loss [miscarriage] and more tenuously, with increases in the probability of an abortion. However, [there is] no evidence that participation in welfare programs increases the probability of either pregnancy losses or of abortions."

How Investors Set Stock Prices

The ups and downs of the U.S. stock market have puzzled generations of speculators, investors, and economists. Of particular interest to theorists are the market's large fluctuations away from what is known as the "perfect foresight" fundamental—the value, discounted and adjusted for inflation, of future dividends actually paid.

In this century, the stock market has ranged anywhere from twice as high to half as much as it should have been by this measure. In a new NBER study, **Robert Barsky** and **Bradford De Long** set forth a theory of the mechanism underlying the market's excess volatility.

In **Why Does the Stock Market Fluctuate?** (*NBER Working Paper No. 3995*), Barsky and De Long find that the large long-run swings in the stock market could be explained if investors were estimating fundamental values using a long moving average of past dividend growth to forecast future growth. For example, the market's price–dividend ratio would be low when dividend growth over the preceding generation has been rapid, if investors believed that dividends tended to return to a stable trend. However, the authors find that the price–dividend ratio at such times is in fact high—a pattern consistent with the hypothesis that investors are extrapolating past dividend

growth rates into the future. Each 10 percent relative increase in dividends over a 20-year period is associated with a 6 percent rise in the price–dividend ratio.

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Such behavior would have been reasonable if investors were uncertain of the structure of the economy, and had to make forecasts of unknown and possibly changing long-run dividend growth rates. The authors note that uncertainty about the economy is substantial; the process by which stock dividends were set during the twentieth century is difficult to describe even today, near the century's end, and investors in the past had even less information about it. Many analysts in 1929 or 1962, examining the state of the economy and the past track of dividend growth, believed not unreasonably that future dividend growth would be more rapid.

Barsky and De Long suggest that their analysis of investor behavior can support two different interpretations. The first is that investors who extrapolate past dividend growth rates into the future are forming rational-expectations estimates of present values given their limited information. The second is that such investors are adopting a less-than-rational process of extrapolation—by following fads or fashions—which would lead to the failure of the efficient-markets hypothesis. The difference between these two interpretations, the authors conclude, may not be testable. Thus, one possible conclusion of the study is that the very question of whether or not stock prices have been rational forecasts of fundamentals may be unanswerable. RN

Can Europe Cope with Monetary Union?

Europe is proceeding rapidly toward monetary union. By 1999, if all goes as planned, at least some members of the European Community (EC) will abandon their national currencies in favor of a common currency issued by a new European Central Bank. By eliminating the risks of exchange rate fluctuations and the costs of changing money, this move may promote economic integration, and perhaps growth, in the participating nations. But there is a disadvantage as well: monetary union will preclude countries from using monetary policy to respond to changes in economic conditions. If "shocks" have different effects in different parts of the currency area, then a single monetary policy will not be able to meet the needs of all member nations equally well.

In **Shocking Aspects of European Monetary Unification** (*NBER Working Paper No. 3949*), NBER Research Associate **Barry Eichengreen** and **Tamim Bayoumi** analyze the variation in the response of EC members to three negative supply shocks (a large disturbance in 1968 and the oil price hikes of 1973–5 and 1979–80), a positive demand shock in 1977, and negative demand shocks in the 1980s. They find that in five "core" EC countries—Germany, France, Belgium, the Netherlands, and Denmark—the supply shocks were strongly correlated. But the timing and magnitude were very different in other, "peripheral" EC members: supply shocks in the United Kingdom and Greece were related only slightly to those in Germany, and shocks felt strongly in Germany did not resonate at all in Ireland. Demand-side shocks in Germany were felt only weakly in the other member states, although again they were more significant in Denmark, France, and Belgium than elsewhere. The divergence among the European countries is not diminishing over time, Eichengreen and Bayoumi find.

"The European Community may find [it] more difficult to operate a monetary union than the United States [does] ."

For comparison, the authors examine the regional impact of shocks within the United States, a large and diverse area with a single currency. They find a far more uniform response to both demand-side and supply-side shocks here than in Europe. Although the oil-producing states of the Southwest and the Rocky Mountains reacted differently than other parts of the country, in general the response indicates that regional economies of the United States are more closely linked than those of Europe. In addition, the United States responds far more quickly to shocks than does the EC, perhaps because labor, capital, and other resources flow more easily across the United States than across Europe.

These results, the authors write, "underscore that the European Community may find [it] more difficult to operate a monetary union than the United States [does]." The effects of supply shocks, such as the oil price increases of the 1970s, are similar in Germany, France, Belgium, Luxembourg, the Netherlands, and Denmark, so they may be able to adopt a common

currency relatively easily. But the remaining EC countries—Greece, Ireland, Italy, Portugal, Spain, and the United Kingdom—may find that losing their own currencies makes adjusting to economic shocks more difficult.

In a companion paper, **Is There a Conflict Between EC Enlargement and European Monetary Unification?** (*NBER Working Paper No. 3950*), Eichengreen and Bayoumi evaluate the seven members of the European Free Trade Association (EFTA) as participants in the Economic and Monetary Union (EMU). They find that in three EFTA countries—Austria, Sweden, and Switzerland—supply and demand disturbances are relatively small and highly correlated with those in Germany. Those countries could fit into the EMU more readily than such peripheral EC members as the United Kingdom, Spain, and Greece.

On the other hand, EFTA members Finland and Norway experience larger disturbances in response to shocks, and Norway's shocks are correlated only weakly with those in Germany. Iceland, also an EFTA member, has much larger disturbances than any other country, and responds to demand shocks far more slowly. These three nations, Eichengreen and Bayoumi contend, would have great difficulty responding to macroeconomic disturbances if they joined the EMU at a later time. "Our analysis suggests that the EC core, the EC periphery, and EFTA are not the relevant categories for discussion of EMU membership," the authors conclude. ML

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