Factors in Youth Employment

Training directed toward job related tasks does not enhance post-high school labor force experience, but attributes associated with traditional measures of academic success do, according to a recent study by Robert Meyer and David Wise, NBER and Harvard University. In High School Preparation and Early Labor Force Experience, Working Paper No. 342, Meyer and Wise investigate the three factors most often thought to influence the way youths find, perform, and keep jobs: general education, vocational training, and work experience. Their approach specifically focuses on the effects of high school curriculum, work experience, and academic achievement on early labor force experience and wage rates.

Using data collected by the National Center for Educational Statistics through the 1972 National Longitudinal Study of High School Seniors (involving 23,000 seniors at 1,300 high schools nationwide), Meyer and Wise are able to review the school experience, family background, and early labor force experience of a large sample of male high school graduates. Follow-up surveys done in 1973, 1974, and 1976 allow the authors to study this group's experience during the four years following high school graduation as well. Their findings indicate that high school work experience is strongly related to later employment and that academic performance is also related to post-high school employment. However, they find that vocational training does not significantly affect later work experience.

Specifically, the authors' estimates show that on the average an additional five hours of work per week in high school (at least up to twenty hours per week) is associated with 1 to 1.5 more weeks worked per year in each of the four post-high school years. Moreover, persons who work while in high school receive higher hourly wage rates in the next four years than those who do not. In fact, their estimates show that those who work sixteen to twenty hours per week in high school earn 12-13 percent more than those who do not work in high school. Taking into account both weeks worked and wage rates, the estimated effect on earnings of high school work could be as high as 30 or 35 percent for some persons. This effect is about the same for all four years after graduation.

Finding almost no relationship between any measure of high school vocational training and later weeks worked or wage rates, the authors suggest that "programs that emphasize work experience in high school may have a much greater impact on later labor market experience than will programs that emphasize job skill training without work experience."

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The authors caution, however, that the measured effect of differences in work experience may tell us more about the kinds of boys who work in high school than about the impact of the experience as such. In analyzing the academic performance of the youths surveyed, Meyer and Wise find that both class rank and test scores have positive effects on postgraduation weeks worked and wage rates. These measurements, especially class rank after controlling for test scores, may also reflect individual specific characteristics of youth. After controlling for these characteristics, there is little relationship between weeks worked in the first year after high school graduation and weeks worked four years later. In fact, there is little persistence of early experience that cannot be attributed to individual characteristics of youth.
The authors further find that youth wage rates at a given date are affected much more by the immediately preceding work experience than by earlier experiences. Moreover, there is almost no relationship between initial wage rates and wage rates four years later. Any effect of early post-high school weeks worked on wage rates in subsequent years declines rapidly over time. Weeks worked in the most recent year are considerably more important than work experience in earlier years in determining a youth's current wage.

Among this sample, average wage rates are similar for whites and nonwhites. Whites earn slightly more per hour after the first year following graduation, but with all nonrace variables controlled, the converse is true.

Even after controlling for nonrace variables, nonwhites work fewer weeks per year on average than whites. This "race effect" is as high as 3 percent in some years. In addition, the probability of being in school in each of the four years after high school is one-tenth higher (ten per one) for nonwhites than whites. However, although the employment ratio is found to be lower for nonwhites, the gap between the races closes almost completely after four years out of high school. Based on their data collection, Meyer and Wise find very few chronically out-of-school, unemployed youth and little indication of severe employment problems in this nationwide sample of high school graduates.

Economic Prospects for Britain

The economic outlook for the United Kingdom in the 1980s turns on when (or whether) it will be possible to expand employment without increasing inflation and driving the current account into deficit, according to NBER Research Associates Rudiger Dornbusch and Stanley Fischer. The authors, professors of economics at MIT, analyze the behavior of Britain's current account and exchange rate through the 1970s and discuss the outlook for the eighties in Sterling and the External Balance, Working Paper No. 327.

The authors begin with a comprehensive review of macroeconomic developments in the United Kingdom during the 1970s, a particularly bad economic period. Both inflation and unemployment reached their highest levels since World War II during the seventies, with the United Kingdom experiencing more severe inflation than other OECD countries. In 1975, inflation was nearly 25 percent and real growth was negative. Beginning in 1976, the budget deficit was sharply reduced and monetary growth was kept low. Inflation was finally brought to below 10 percent in 1978, the current account began to show a surplus, and the currency was appreciating. The authors argue that "the end of 1976 marks the turning point for both the exchange rate and the inflation rate; however, success (perhaps temporary) on those fronts has been bought at the expense of continued employment."

Dornbusch and Fischer then analyze the current account and exchange rate experiences individually. During the 1960-77 period, they find that UK exports grew by less than 5 percent compared to an average 8.5 percent growth rate in other industrialized countries. However, UK exports became somewhat more competitive toward the end of that period, after 1970.

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The UK current account, which was in surplus at the beginning of the decade, went into a large deficit from 1973 to 1976, but in 1977, North Sea oil production began to contribute to improving the current account. The authors find that current account balance has been maintained in part because British growth has been relatively slow, in part because the price of traded goods has risen relative to that of home goods, and in part as a result of oil revenues.

Looking next at the exchange rate, Dornbusch and Fischer note a 20 percent depreciation of sterling relative to the dollar since 1970. However, the effective exchange rate, taking into account multilateral trade, has depreciated over 35 percent during that period. Since exchange rate movements affect import prices, which may in turn affect domestic prices, the authors next analyze consumer price inflation from 1972-77. They find that while import price increases were the most important source of inflation in 1974, they had a smaller impact on inflation than wage increases between 1975 and 1977. In fact, a one percentage point increase in import price inflation would raise retail price inflation by .18 percent, while the same increase in wage inflation would raise retail price inflation by .79 percent. Therefore, they conclude that "wage inflation is central to domestic inflation and the external value of sterling, to the competitiveness of manufacturing, and thereby to the full employment current account."

By the end of 1978, UK inflation was down to around 8 percent, the budget deficit had been reduced to about £4 billion, the current account was in surplus, and sterling had stabilized in terms of an effective exchange
rate. In fact, everything but unemployment appeared to have been brought under control.

Dornbusch and Fischer see two major challenges facing UK policymakers in the eighties. The first is attaining noninflationary growth at full employment. The second is maintaining the competitive position of British manufacturing industry in the face of its declining relative productivity. Further depreciation of the real exchange rate will be needed to achieve both goals. The authors note that the freeing of foreign exchange controls, as part of a strategy to reduce the real exchange rate, and expanding domestic demand through "policies that shift the output mix to investment and thus tend to increase productivity," would contribute to both growth and competitiveness.

Money Stock Revisions and Unanticipated Money Growth

It has been widely recognized for some time that monetary shocks—in the form of unforeseen changes in the money supply—have a strong, positive impact on economic activity. Money growth that exceeds expectations gives rise to greater output and lower unemployment, and money growth that falls short of expectations has the opposite effects. While the importance of money shocks is well known, it is less clear why money matters so much. It is obvious, of course, why growth in the supply of money that exceeds the growth of output will result in inflation, but it is not so obvious why monetary policy affects economic activity as well as prices.

One explanation, identified with the natural employment rate rational expectations theory, is simply that people are fooled. This theory holds that people are temporarily influenced by monetary disturbances because they are not immediately aware of what is going on and they confuse absolute changes in the price level (inflation) with changes in relative prices. That is, producers incorrectly assume that the higher prices they can get for their goods result from favorable shifts in relative demand, and individuals believe that inflation related increases in wages are real income gains. As a consequence, producers are fooled into increasing output, and individuals are induced to work more.

One major shortcoming of this theory, though, may be its emphasis on the role of unperceived money stock movements. It implies that people could make superior decisions—and that the business cycle would be less volatile—if they paid more attention to money supply and price level information. A counterargu-

ment is that individual fortunes may be much more dependent on relative price and income changes than on general business fluctuations, which explains why individuals do not spend a great deal of time assessing contemporaneous movements in global variables.

A second explanation for the effect of monetary policy on economic activity is the fact that money shocks are unanticipated. This theory holds that people enter into long-term nominal contracts within the framework of a set of expectations about the future, including expectations about the money supply and the price level. According to this theory, unanticipated—but not necessarily unperceived—deviations from expectations can be a cause of business fluctuations. One shortcoming of this theory is that such behavior is not consistent with mutually beneficial contractual arrangements. That is, in a world with substantial but unpredictable price movements, both parties to a contract would be better off with arrangements based on real rather than nominal prices. In any case, even contracts that specify nominal wages in advance should be written to insulate employment and output decisions from perceived fluctuations in the general price level.

Robert Barro, NBER, and Zvi Hercowitz, University of Rochester, have produced some new empirical evidence regarding the two types of theories in Money Stock Revisions and Unanticipated Money Growth, Working Paper No. 329. Earlier studies by Barro have shown a significant relationship between economic activity and deviations in money supply growth from the growth that could have been predicted a year earlier (based on a set of explanatory variables). Barro uses these deviations as a measure of "unanticipated money growth." His findings are consistent with either of the theories, since the unanticipated money growth that was related to output and unemployment may or may not have been perceived at the time it occurred.

"... unanticipated rather than unperceived money shocks are the ones that affect economic activity."

In the new study, Barro and Hercowitz examine whether the unanticipated money growth in the earlier work has explanatory power because it is a proxy for unperceived money growth. They do so by using revisions in the money supply data as a measure of the unperceived component of growth. For example, if the M1 figure for 1972 was revised upward in 1973, the revision is treated as the portion of money growth that was unperceived in 1972. They test whether the revisions provide a statistical explanation of economic activity during the period from 1950 through 1975. Barro and Hercowitz find that there is no significant
relationship between the revisions (to M1 figures one year later) and either unemployment or output. They interpret their finding as evidence for the theory that unanticipated rather than unperceived money shocks are the ones that affect economic activity. They caution, however, that the evidence is far from conclusive because it is difficult to distinguish between unperceived and merely unanticipated money supply growth. For one thing, it does not seem reasonable to presume

that there is a one-to-one relationship between the data revisions and the amount of money growth that went unperceived while it was occurring. Moreover, there is a short lag between the actual money growth and the time when it is initially reported, and there may be a further lag between the initial reports and the time when monetary changes are fully perceived within the economy.

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