

JEFFREY M. LACKER

Children's Education Is a Smart Investment

Early childhood development may seem like an odd topic for a Federal Reserve Bank president. But as a regional Reserve Bank in a federated central banking system like the Fed, we spend a good deal of time trying to understand the economies that make up our district, which includes Maryland, D.C., Virginia, West Virginia and the Carolinas.

Data on the growth of income per person across the United States and across cities and metropolitan areas reveal that at least one important measure of skills is consistently correlated with future growth. That measure is education, and a typical finding is that the share of the population of a U.S. city or state that had a college degree in 1990 was positively associated with growth in family income between 1990 and 2000. In other words, the more educated the population, the greater the subsequent growth in economic well-being.

Furthermore, population growth is correlated with education levels, suggesting that places with highly skilled populations create opportunities that attract newcomers.

What is striking about the empirical evidence is that higher skill levels predict faster growth, all else equal. One possible interpretation of this fact is that skills, in addition to boosting current income, enhance an area's ability to further build its skill base: "Human capital begets more human capital," you might say. Economists have identified two distinct ways this might come about. One is the straightforward notion that certain general skills make people better at learning new skills. Another involves what economists call "externalities" or "increasing returns," meaning that a skilled worker is more productive in a marketplace or work environment with other skilled workers.

The idea that human capital promotes growth is, perhaps, not too surprising. After all, and as I mentioned, it's quite natural to think of differences in skills as explaining a substantial part of the differences in income between individuals — why shouldn't this logic extend to communities, cities, states and so on? At the level of individual workers, in fact, there is abundant evidence that the importance of skill to one's economic well-being has grown over the last several decades. This is seen in a growing gap between the average wages earned by high school graduates and those with college or advanced degrees.

The growth in this pay differential, or "skill premium," is a major factor behind the increase in income inequality that has received so much attention of late. The apparent reasons for this widening dispersion are germane here. Wages paid to workers at any particular skill level generally reflect the productivity of those workers — how much economic value their work

creates. If the wages of higher-skilled workers have grown more rapidly than the wages of the less-skilled, it must be that the work environment has changed in a way that has made the productivity of higher-skilled workers rise more rapidly.

One change that has had a tremendous effect on the way people work in recent decades is the application of information technology. And this change appears to have had differing effects on the productivity and wages of workers at different skill levels. It's become commonplace to talk about jobs that have been replaced by automation. These tend to be relatively low-skilled jobs, involving tasks that you can program a machine to perform. On the other hand, jobs that require judgment and adaptability to changing conditions do not lend themselves as easily to automation. In fact, the application of information technology is likely to enhance workers' effectiveness in such jobs by relieving them of routine aspects of their jobs.

It is worth noting that the skills that have become most valuable over time seem to be general skills that come with higher levels of education — as opposed to the very specific skills gained through experience in a particular job or occupation. This is an important distinction. It means that more than ever, the path to economic success lies in education rather than in on-the-job experience. And if these general skills are the key to success, it follows that a lack of skills presents a formidable barrier to success — for an individual, a community, a state or a nation.

What does this have to do with early childhood? I mentioned that acquiring skills improves one's ability to acquire further skills. Could this logic extend back to the earliest investments in human capital — those that occur between birth and age 5? I believe the evidence indicates that the answer is yes.

Economists like to think about investment in terms of rate of return, and there is reason to think that the rate of return on early childhood investment could be particularly high. Like any investment in human capital, some of the return accrues directly to the individual in increased lifetime earning ability. But a substantial share of the return — perhaps as much as three-quarters of the total — is a broader, social benefit coming from such sources as reduced costs of remediation and other special services in primary and secondary school, as well as from the reduced incidence of the array of social problems often associated with low educational achievement.

There are many explanations for the apparent high economic returns to early childhood education, but a key difference between early childhood investments and investments at primary and secondary



BY CHRIS KEANE — BLOOMBERG NEWS

Jeffrey Lacker, president of the Richmond Federal Reserve Bank, says early childhood education is key to developing high-income workers.

education levels is the potential for compounding. That is, enhancing early childhood development appears to improve a child's ability to learn at later stages. This means the return on early education comes not just from the direct effects, say on the development of cognitive ability, but also from the fact that these early investments increase the productivity of later educational investments. Nobel Prize-winning economist James J. Heckman has emphasized this point in his writing on early childhood education.

This compounding effect means disparities in early childhood development have potential to exacerbate inequality within our society. People with limited means are more likely to have difficulty providing their children with high-quality early childhood environment, leaving those children less able to benefit from later investments in human capital. This possibility creates a legitimate public interest in helping people of modest means find and afford quality early childhood education. It holds the promise of expanding the development of human capital more broadly across our society and in so doing, widening our potential for skill-based economic growth.

Jeffrey M. Lacker is president of the Federal Reserve Bank of Richmond. This commentary is an excerpt from his remarks at the Governor's Summit on Early Childhood Development in Virginia.