# THE SHEEPSKIN DIVIDEND

## A college degree is still the best predictor of financial success, but that's not all

BY BETTY JOYCE NASH

hen Debbie Barr was a high school senior in Sophia, W.Va., she happened to bump into a college recruiter at lunch. Barr wanted very much to go to college, but her father had been injured in a mining accident, and her family's income was next to nothing. She'd written off the idea.

Although Barr was an "A" student, her high school counselor had never mentioned college. "The girls got married and had kids," Barr recalls. "And this was the 1980s." Her chance meeting with a Concord College representative proved fruitful, and Barr slogged through intimidating financial aid forms. She earned her bachelor's degree in English Education from Concord, located in Athens, W.Va.

"I'm trying to push my niece and cousins [to go to college] because it is important," she says. "Wal-Mart can't support you all your life."

Today, Barr is the lead counselor for West Virginia's Talent Search, a federally funded effort produced by the Higher Education Act of 1965. The idea is to identify low-income sixthgraders and track them through high school, making sure they build skills and take college prep classes. Along the way, the counselors help with inspiration, study habits, financial aid forms, and field trips.

To forgo college is a costly choice,

despite rising tuition. A college education is pulling in a higher premium than ever to workers' paychecks. Graduates with a four-year degree not only make more money than nongraduates — 62 percent more in 2003 and 73 percent more over a working life of 40 years — but they're also more likely to volunteer, give blood, use a library, and open retirement accounts than nongraduates. They're healthier (less than 15 percent smoke) and (by some measures) make better parents.

Economists continue to study the effects of going to college, just one institution through which "human capital" is nurtured. They aim to figure out how public resources ought to be directed at helping more young people enter and finish college.

#### **Education's Black Box**

While more people may be going to college than ever before, completion rates have stagnated. A recent study by the Higher Education Research Institute at the University of California at Los Angeles reports that among freshmen who entered fouryear colleges in fall 1994, 36.4 percent completed a degree within four years, compared to 39.9 percent 10 years earlier and 46.7 percent in the late 1960s. The rate of completion rises after six years to 61.6 percent.

And income matters. Among poor students, an estimated 7 percent earn a

bachelor's degree by the age of 24 compared with 39 percent from the middle-income group and 52 percent from those with the highest income.

Usually, people balance the money they'll spend on college with the time in forgone earnings and add up what they'll gain by earning a degree. A special report published by the College Board, "Education Pays," found that by the time a graduate is 33, he has earned enough to make up for tuition and forgone earnings, if he entered a public, four-year college at age 18.

Some benefits of postsecondary education are less quantifiable. For example, economists Janet Currie and Enrico Moretti found that higher maternal education improves infant health: "Our results add to the growing body of literature which suggests that estimates of the returns to education which focus only on increases in wages understate the total return."

But the earnings signal is loud and clear. In 1979, people with a bachelor's degree or higher earned about 45 percent more per hour than high school graduates — and that difference has risen over time. In 2003, the average full-time worker in the United States with a four-year degree earned \$49,900 compared with \$30,800 earned by a high school graduate, about 62 percent more. Those with master's degrees earned nearly twice as much, \$59,500, and medicine and law graduates earned almost three times as much, \$95,700, according to "Education Pays."

Understanding the relationship between money and education is central to policy discussions. The question has prompted economists to ask whether education is responsible for the added value or whether it's a product of the smart, motivated people (who grew up in middle- and upper-income families that make early and continual investments in education) who typically finish college and make more money.

#### The Economic Keystone

Amber Godfrey, a senior at Virginia Commonwealth University, is the first in her family to attend college. Her parents, who joined the military to get the training they needed, have encouraged her since she was very young. "I have a lot more opportunities having my degree," she says. "I just know that's what we have to do the way our world is changing. The minimum requirement is becoming, 'Do you have a bachelor's?" Godfrey, a former high school basketball player and "people person," hopes to work in sports and entertainment as a public relations specialist. She just made the cut as a finalist for an internship with the National Basketball Association.

College graduates have better outcomes all the way around. But it's hard to break inside the black box to figure out why. Sarah Turner, an economist at the University of Virginia, asks whether that's caused by college per se. The answer is complicated. "But there certainly remains a robust premium for the types of general skills that come out of a college education."

The hurdles are financial as well as academic. "Now more than ever if you are a low-performing, high-income kid, your odds of going to college are extraordinarily high," Turner notes. Minority students are likely to have fewer resources, and financial aid simply hasn't kept up with growth in tuition, according to Donald Heller of Pennsylvania State University's Center for the Study of Higher Education. He spells out the problem: Poor and minority students go to poorer schools, receive less in the way of academic preparation, and often have no one to propel them toward college. "Since they don't have the experience, they don't know how to take the steps to go to college, how to take the tests, which math courses to take — a whole slew of things, the advantages that largely white middle class has," he says.

What a drag. On the economy.

Economic research shows that education contributes to productivity, adds to personal earnings, and leads to efficiency. People can adjust to change in the workplace more quickly, among other benefits. But sluggish educational attainment spells trouble. "Slower growth of the educational attainment of the workforce directly reduces economic growth by slowing growth in labor force 'quality' and may have an adverse impact on the rate of technological advance," writes Harvard economist Larry Katz.

The connection between economic performance and education is strong. For example, the U.S. Census Bureau reports Maryland's percentage of the population with a bachelor's degree at 35 percent, more than 8 percent higher than a decade ago. During the same period, total personal income in Maryland rose by 13 percent, according to the National Center for Public Policy and Higher Education. And in South Carolina, where nearly 25 percent of the over-age-25 population has a bachelor's degree, the state's per-capita income is \$27,153, about 82 percent of the national average of 33.041 - 44th in the nation. In West Virginia, 15.3 percent of people over 25 have degrees and per-capita income is \$25,681 - 50th among states.

If a region is looking to build a solid economic base, then knowledge is the cornerstone.

Even with rising tuition levels, college is still a good deal, according to Lisa Barrow and Cecilia Rouse, authors of the 2005 article "Does College Still Pay?" published in The *Economists' Voice*. Even though there are more college graduates — the share of the population with bachelor's degrees went from 26 percent in 1996 to 30 percent in 2004 — they continue to earn more money, indicating increased demand. But average wages of lower-skilled workers have gone up recently too. The authors conclude that the economic boom of the late 1990s explains the rise in average wages of all workers. Despite that and the hefty increases in tuition, the payoff from getting a college degree continues to outstrip the evermounting costs.

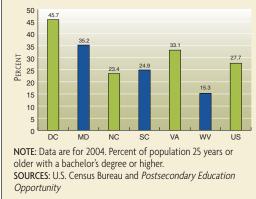
The authors calculated the cost of an education this way: Take four years of tuition and fees at a typical university and then add four years of lost wages, using average annual earnings of a high school graduate. That amounted to about \$107,277. According to the study, the lifetime boost to wages of a college degree is about \$403,000. Subtract the cost of college and still wind up with a benefit of nearly \$300,000.

What's good for the labor market is good for the economy. And today's labor market requires higher-level skills, says Penn State's Heller.

"We used to talk about the middleclass lifestyle," he says. "You could go off and get a union job and live that lifestyle, but more and more those jobs aren't here anymore. People are requiring more training to live that lifestyle."

### Population with a College Degree

The connection between education and economic performance is strong.



#### **Barriers to Entry**

Many high schools, especially rural and inner city, just don't groom students for college. Stanford University's Bridge Project found that state high school tests often focus on different knowledge and skills than college entrance and placement requirements, leaving students in the lurch academically. Guidance counselors are overworked by state test requirements, often irrelevant to college preparation.

An even bigger problem is that rising college costs have left some students priced out of the market. The problem is, naturally, worse for lowincome kids, arguably the group needing education the most. And if they do start, they are unlikely to finish.

"It's true that more low-income students enroll in college now than in the 1970s — but they are less likely to graduate than their wealthier peers," writes Ross Douthat in "Does Meritocracy Work?" in the November 2005 Atlantic Monthly. Fifty-five percent of need-based Pell Grant recipients, for example, attended twoyear rather than four-year schools in 2002, compared to 38 percent in 1974.

A 2002 report of the independent Advisory Committee on Student Financial Assistance, which counsels Congress and the U.S. Secretary of Education, found that nearly half of qualified high school graduates from poor and moderate-income families in 2002 did not enter four-year colleges within two years of graduation and 22 percent, 170,000, did not go to college at all.

The report, "Empty Promises: The Myth of College Access in America," places the number of students who are qualified but can't attend four-year schools for financial reasons at 400,000. That number isn't trivial, says Heller, who worked on the report.

"We know in certain regions, in certain labor markets, there are shortages," Heller says. "If we were able to get these students, we'd be able to have much more flexibility in labor markets to ensure we've got enough to meet demand of the work force."

#### Moving the Mountain

Among Fifth District states, the percentage of college graduates varies widely, with West Virginia's 15.3 percent the lowest. The Mountain State's low percentage of graduates makes Debbie Barr's protégés at Talent Search a primo resource. (West Virginia's population is aging with few moving in. According to the U.S. Census Bureau, by 2025, there will be nearly 19 percent fewer traditional college-age students in the state, the biggest decline in the nation.)

Educators in the state are working hard to send students to college. About 70 percent of West Virginia's Talent Search seniors enroll in college, according to state coordinator Bob Long of the West Virginia Higher Education Policy Commission. The search reaches students with family incomes of less than \$12,000 in 74 schools in 55 counties.

"Historically, all the studies and all the data show even the bright kids of low income do not go to college at the same rates as intelligent kids from more affluent backgrounds," Long says.

West Virginia aims to improve its college matriculation rate partly by developing relationships between each stage of schooling: elementary, middle, and secondary. The state jacked up the levels of science and math classes so students enter college prepared to take college-level courses without spending half a year in remedial classes.

In 2004, West Virginia was rated as a top-performing state in the proportions of high school students enrolled in upper-level math, 59 percent, and science, 44 percent, according to "Measuring Up 2004," a report by the National Center for Public Policy and Higher Education. The state's Promise scholarships, funded by lottery proceeds, reward students who maintain a 3.0 average and score 21 or above on the ACT.

They're seeing results. Since 1996, college matriculation rates of West Virginia high school graduates has risen from about 47 percent to 59.4 percent, exceeding the national average of 56.7 percent.

"We're starting to do a good job at the front end, now we have to focus on the back end, which is retention," Long says. "Student services, including intervention once students get on campus, with mentors, is the other end of the pendulum."

#### Lifelong Learning

Many students never make it to fouryear schools. In the 1960s and 1970s, in an effort to "democratize" higher education, public policies expanded community colleges.

"That did more to access in higher education than any other movement over the last 100 years," Heller says. The community colleges opened doors especially for minorities and women. Women today comprise 57 percent of all college students, and 58 percent of community college students.

Nearly half, about 46 percent, of undergraduates attend community colleges, where the average age is 29. Community colleges were designed to give students the first two years of basic studies, after which they'd transfer to a four-year school to complete a degree. Ultimately, the mission expanded to vocational training.

Typically, community college students are the first in their families to attend college. While community colleges clearly play a role in human capital accumulation, the student retention rates can't match those of four-year schools.

In a paper published in 1999 in the *Journal of Economic Perspectives*, Thomas Kane and Cecilia Rouse found that of all students enrolling in two-year colleges, more than half don't complete any degrees, about 15 percent earn a certificate, another 16 percent obtain an associate's degree, and about 16 percent complete a bachelor's degree. At four-year colleges, nearly 60 percent complete bachelor's degrees.

The community colleges can respond quickly to demand, though, especially in economic downtimes. And an associate's degree holder in 2003 earned \$37,600 compared to the \$30,800 earned by a high school graduate. Enrollment increased at community colleges by about 5 percent between 1990 and 2004 as tuition at four-year schools rose.

Overall, today more older students attend postsecondary institutions than traditional-age college students, according to Sondra Stallard, a professor and dean of the School of Continuing and Professional Studies at the University of Virginia.

"We've had students who left because they need to work part-time so they don't incur so much debt," Stallard says. She notes that students can begin at Piedmont Virginia Community College and transfer to the University of Virginia for a lot less money. The students in the program typically work full-time. Shelley Tattersall is 42. She had attended a New Jersey community college in her 20s, but never finished. She now works at the University of Virginia in administration and needed education to advance. "I wanted more challenging work and a degree would give me more options," she says.

#### What to Do?

While the educational premium seems irrefutable and the argument that economic growth depends on capital, physical and human, remains strong, policy experts differ on the best way to ramp up educational attainment.

About 14 states are giving students merit scholarships. The idea is to nurture human capital and encourage students to stay in their home states after graduation from high school and hopefully even after college. Eligibility criteria vary from state to state and include minimum grade point averages and standardized test scores. In the Fifth District, South Carolina and West Virginia offer merit scholarships.

Problematically, those awards typically go to higher-income students who would have gone to college anyway. Also, state merit scholarships can help with rising tuition costs, but can't compensate for poor early schooling, a ragged home life, or rock bottom confidence.

Debbie Barr has been there. She remembers her fears: "Could I make it? What if I get down here and mess up?"

She did make it through, and her case illustrates the myriad benefits of an education. "It's opened up doors for me to give back to my community." **RF** 

#### READINGS

Barrow, Lisa, and Cecilia Elena Rouse. "Does College Still Pay?" The *Economists' Voice*, 2005, vol. 2, no. 4, article 3.

Douthat, Ross. "Does Meritocracy Work?" *The Atlantic Monthly*, November 2005, pp. 120-126.

Heckman, James J., and Alan B. Krueger. *Inequality in America: What Role for Human Capital Policies?* Cambridge, Mass: MIT Press, 2003. Kane, Thomas J., and Cecilia Elena Rouse. "The Community College: Educating Students at the Margin between College and Work." *Journal of Economic Perspectives*, Winter 1999, vol. 13, no. 1, pp. 63-84.

"Empty Promises: The Myth of College Access in America." A Report of the Advisory Committee on Student Financial Assistance, June 2002.

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