

Winter 2007

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Recommended Citation

Dalmia, Sonia; Lowen, Aaron; and Sicilian, Paul (2007) "Education and the Economy: The Challenge for West Michigan," *Seidman Business Review*: Vol. 13: Iss. 1, Article 6.

Available at: <https://scholarworks.gvsu.edu/sbr/vol13/iss1/6>

Education and the Economy: The Challenge for West Michigan

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Recent reports in the popular media raise concerns about a supposed “boy crisis” in the United States with regard to educational attainment. These reports cite evidence that females in the United States have caught up and surpassed males in most measures of schooling. Concern over the gender gap in schooling is misplaced, however, as racial differences in educational attainment are much more severe. This paper presents evidence on educational attainment by race and gender, nationally, within the state, and locally.

These trends are of interest because educational attainment is not only a key determinant of the economic health of the state and region, but also explain much of the earnings gaps across race and gender over time. Moreover, the U.S. economy continues to shift away from manufacturing towards service-providing industries and occupations. Since manufacturing has traditionally been a source of good-paying jobs for relatively less educated workers, this shift has profound implications for state and local government policies, especially in the areas of economic development and education, as well as for employer human resource strategies. For example, Michigan policy-makers and employers need to prepare for the impact of Proposal 2 on the quantity and quality of human capital in the state and with its distribution across its residents. As one recent study of racial and ethnic wage differences concluded, “...the key to reducing existing race and ethnicity wage disparities is the removal of obstacles that impede skill acquisition by minority children and youth” (Black, et al., 2006).

Historical educational attainment statistics for the U.S., reported by the National Center for Education Statistics (NCES) are presented in Figures 1A and 1B. Two facts stand out. First, rates of high school and college completion have risen significantly over the second half of the 20th century for all demographic groups presented. Second, Blacks and Hispanics of both genders significantly trail Whites in amounts of education completed.

Michigan’s high school graduation rates match or exceed the national averages but have historically lagged the national average with regard to college completion rates. Table 1 presents educational attainment statistics for 1980 and 2000 for relatively young people (ages 25–34).¹ In 2000 Michigan lagged the country in college graduation rates for every demographic group considered except Hispanic women, and some of these gaps were large—for example, white females had a national college graduation rate of 32.1 percent

compared to 26.1 percent in Michigan. The Grand Rapids area actually exhibits higher college completion rates for this age group among white men and women, but generally trails the nation and the rest of the state with regard to minority graduation rates. Still, women of all races had substantial gains in both high school and college graduation rates over this period. High school graduation rates for men improved, but college graduation rates were flat or falling slightly. The largest losses were registered by minority men—a 4.1 percent decline in Michigan for Hispanic men and a 5.4 percent decline in the Grand Rapids for black men.

Figure 1A High School Graduation Rates by Race, 25 Years or Older

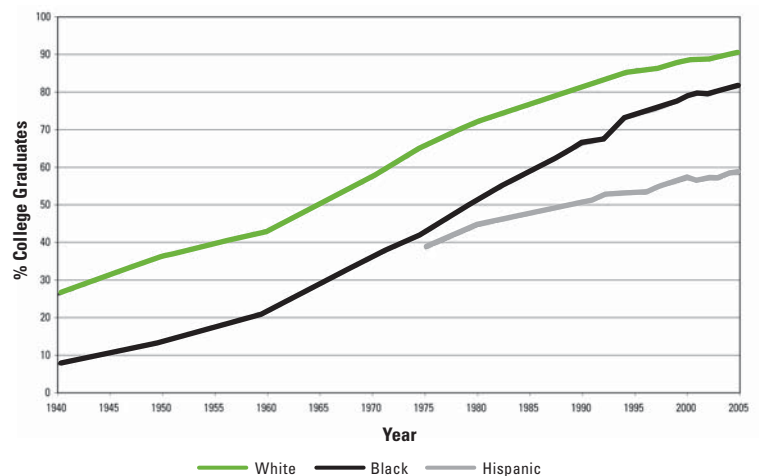
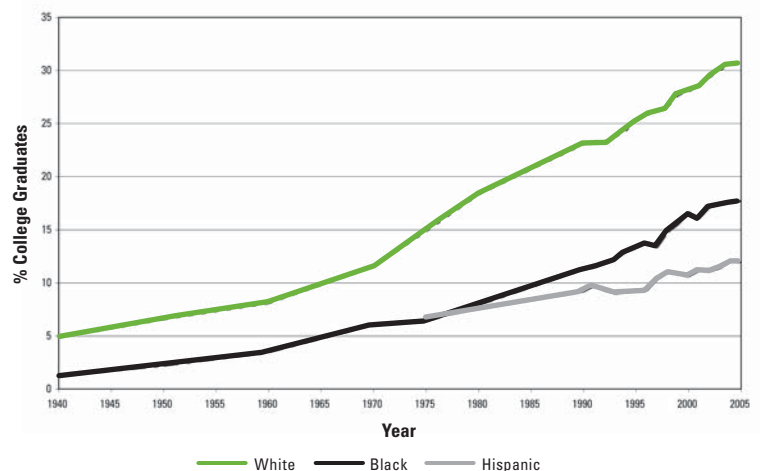


Figure 1B College Graduation Rates by Race, 25 Years or Older



¹ Averages are calculated from the Integrated Public Use Microdata Series of the U.S. Census (IPUMS), <http://www.ipums.org>

Table 1**Educational Attainment by Race and Sex, 1980 and 2000
Ages 25–34****HIGH SCHOOL DIPLOMA OR HIGHER**

		MALE		FEMALE	
		1980	2000	1980	2000
USA	White	88.1%	92.2%	87.8%	94.0%
	Black	73.3%	85.2%	75.4%	89.2%
	Hispanic	57.9%	59.9%	56.8%	66.6%
Michigan	White	88.2%	92.4%	88.1%	93.9%
	Black	73.5%	84.4%	77.9%	88.4%
	Hispanic	65.7%	63.8%	64.7%	75.5%
Grand Rapids	White	91.4%	93.3%	90.7%	95.9%
	Black	77.0%	81.0%	74.1%	85.5%
	Hispanic	46.9%	51.9%	44.3%	62.8%

BACHELOR'S DEGREE OR HIGHER

		MALE		FEMALE	
		1980	2000	1980	2000
USA	White	29.2%	28.4%	22.4%	32.1%
	Black	11.4%	12.3%	11.7%	16.6%
	Hispanic	10.9%	8.4%	7.8%	11.8%
Michigan	White	25.1%	23.5%	18.4%	26.1%
	Black	10.5%	9.8%	9.9%	14.4%
	Hispanic	14.2%	10.2%	8.9%	15.3%
Grand Rapids	White	27.0%	30.5%	20.0%	34.1%
	Black	13.3%	7.9%	7.0%	9.1%
	Hispanic	6.3%	4.7%	4.9%	12.1%

These statistics demonstrate that a gender gap in education—the so-called “boy crisis”—exists. In 1980, men in each racial or cultural group graduated college at higher rates than women in their group (about the same for Blacks in the U.S.). This is reversed in 2000, with women graduating college at higher rates than men in all groups considered. However, focusing on gender misses both the large increases in education over time for all demographic groups and the large, persistent, and (for some groups) growing racial differences in education. The NCES reports that in 2005, 32.3 percent of white males aged 25 years and older had a bachelor's degree or higher compared to 16.1 percent of similar black males and 11.8 percent of Hispanic males. Of all white women aged 25 years or older in 2005, 28.9 percent had earned a bachelor's degree or better, compared to 18.9 percent of similar black women and 12.1 percent of Hispanic women.

As can be seen in Table 1, racial differences in attainment of higher education are greater in West Michigan than the rest of the country. Whereas nationally in 2000 white males ages 25–34 attained a bachelor's degree or higher at 2.3 times the rate of similar black males, in the Grand Rapids area the rate was 3.86 times greater. The ratios are even worse for Hispanic males as nationally white males attained a bachelor's degree or higher at 3.38 times the rate of Hispanic men and 6.5 times the rate in Grand Rapids. Similar ratios hold for women.

While graduation rates are growing over time for virtually all groups across sex and racial/cultural categories, many of the achievement gaps are growing over time. With small exceptions for black men at the U.S. and state level, the white-minority college attainment gaps are growing for both sexes. For example, the white-black attainment gap for women in Grand Rapids shows the college graduation gap widening from 13 percent in 1980 to 25 percent in 2000.

There are several good reasons for being concerned with educational attainment. First, local economic growth is strongly correlated with the local stock of “human capital” in the U.S. For example, according to one recent study, a 10% increase in concentration of college-educated residents in a metropolitan area is associated with an 8% increase in employment growth (Shapiro 2006). Second, economic research consistently finds increases in education are associated with large increases in wages. The private returns to these investments in human capital are estimated to be between 8 and 12 percent annually. Moreover, there are good reasons to believe that “positive externalities”—spillover effects—make the social return to education even higher. The presence of educated workers, for example, can raise the productivity of other workers. Recent research finds that, on average, a one percent increase in the supply of college-educated workers in a city raises the wages of high school drop-outs in that city by 1.9 percent and the wages of high school graduates by 1.6 percent (Moretti, 2004). Also, statistics show a negative relationship between local crime rates and education.

That Michigan lags the country in concentration of college-educated workers may not be surprising given that Michigan's economy is manufacturing-based and, relative to the rest of the country, highly unionized. Manufacturing has historically provided relatively well-paid jobs for workers with less than a college education and unions tend to depress wage differences across different levels of human capital. This implies that the return to a college education, measured as the difference in earnings between college graduates and high school graduates is lower in Michigan than in the rest of the country. This is demonstrated nicely by comparing median earnings in Michigan to the rest of the country.² Despite lower rates of college completion, median earnings for white males who worked year round are higher in Michigan than for the country (\$48,764 vs. \$44,850). The same pattern holds for Blacks in west Michigan. Despite significantly lower rates of

² Median earnings data is for 2005 and comes from the American Community Survey (ACS), U.S. Census Bureau.

college graduation as compared to the rest of the country, median earnings for full-time, year round black men in the Grand Rapids MSA was higher than in the country as a whole—\$40,132 as compared to \$34,433.

Structural changes in the U.S. economy suggest that the income advantage for relatively less-educated workers Michigan has historically offered is unlikely to last. Unionization rates are falling in Michigan as well as the rest of the country. A major reason for this, of course, is the shift away from a manufacturing-based economy. **Figure 2** shows changes in employment by major industry in the U.S. between 1960 and 2005. Clearly, most of the employment growth has been occurring in services. This shift in the U.S. economy away from manufacturing does not bode well for Michigan. The loss of manufacturing jobs, of course, was a major theme in the recent campaign for governor in Michigan. It is wrong, however, to consider this shift as a change from good jobs to bad jobs (relatively high-paying manufacturing jobs to “burger flippers”). The service sector is diverse, with many high-paying jobs. For example, in 2005, median earnings in the U.S. in Manufacturing were \$40,482, as compared to \$49,248 in “Information Industries” (publishing and media) and \$57,620 in the Professional and Technical Services Industries.³ But these high-paying service sector jobs require more education than the manufacturing jobs they are replacing.

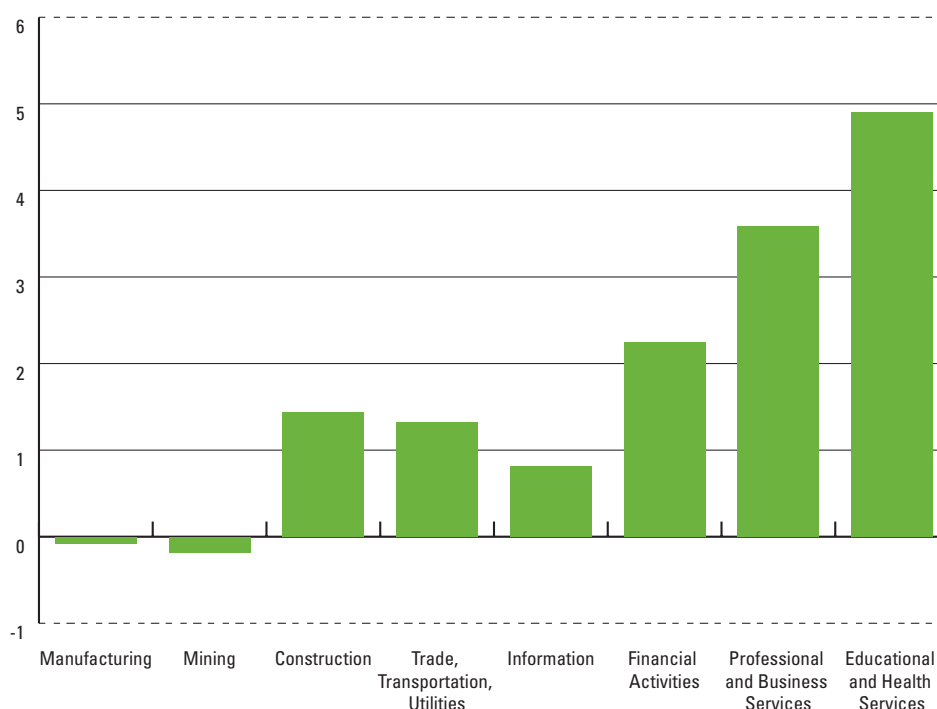
The Bureau of Labor Statistics (BLS) predicts continued job loss through 2014 (the horizon of their forecast) nationally in manufacturing and fastest employment growth in educational

and health services, and professional and business services.⁴ There is much talk in Michigan about how to stem the loss of manufacturing jobs in the state. A better long-run strategy is to invest in the kind of skills that the economy will demand in the future. Improving access to quality education for all its citizens is Michigan’s best hope for prosperity.

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Figure 2 Percentage Change in Employment by Industry Between 1960 and 2005



³ Median earnings by industry data from the ACS.

⁴ Occupational Outlook Handbook, <http://www.bls.gov>