

The Deterioration in the Labor Market Fortunes of America's Young Adults During the Lost Decade of 2000-2010

CDF Policy Brief #2

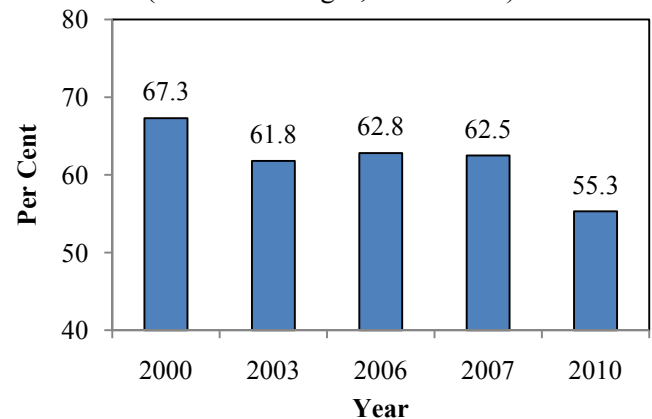
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Young Adults Fared the Worst During the Lost Decade

The decade of 2000-2010 was in many respects a lost decade for the U.S. economy, especially in terms of its labor market performance.¹ Total wage and salary payroll employment (private and public sector combined) failed to experience any net growth over the decade.² The level of payroll employment in 2010 *decreased* by nearly 2 million below its level in 2000. This is the first time that such a “jobless decade” ever occurred in post-World War II history. In contrast, in the 1980 and 1990s, the U.S. economy *added* 18 million and 22.4 million net new wage and salary jobs, respectively.³ Deep job losses during the Great Recession of 2007-2009 and its immediate aftermath were accompanied by mounting levels of unemployment and underemployment. There were also substantial rises in the mean and median durations of unemployment to new record highs.

Every single age group of workers from 16-54 years old was less likely to be employed in 2010 than they were in 2000, but young adults (16-29) fared the worst of all.⁴ In 2010, the employment rate of the nation's young adults (16-29 years old) was 55.3 percent, the lowest such employment rate for all youth in this age group combined since the end of World War II. In contrast, the employment rate of young adults stood at 67.3 percent at the height of the labor market boom in 2000. The nation's young adults experienced steep declines in their employment rates during the national recession of 2001 and the largely jobless recovery of 2002-03. They gained very few jobs during the recovery of 2003-2007 and then experienced devastating job losses during the Great Recession and its aftermath.

Chart 1:
Trends in the Employment Rates of the Nation's
16-29 Year Olds from 2000 to 2010
(Annual Averages, in Per Cent)



Age Differences

The employment rates of young adults in each single age group from 16-29 years old were substantially lower in 2010 than they were in 2000. In relative terms, the declines were considerably greater for the youngest groups and declined with age through age 25. The decline for 16-18 year olds was in the 44-60 percent range and in the 20-26 percent range for 19 to 21 year olds.

Persons age 30 through age 54 also experienced declines in their employment rates, although they were smaller than those for young adults. In substantial contrast, the employment rates of virtually every group of persons 55 and older (with one exception) were higher in 2010 than they were in 2000 with substantial increases for those ages 62-70. This age twist in employment rates is historically unprecedented.

Chart 2:
Percentage Point Changes in the
Employment/Population Ratios of
Persons 16 Years and Older by Single Age,
U.S., 2000-2010 (Annual Averages)



Race-Ethnicity Differences

The deterioration in labor market outcomes affected young adults in every race-ethnic group. The employment rates of the nation’s 16-29 year olds in each major race-ethnic group fell steeply over the past decade. Double-digit declines around 12 percentage points took place among Blacks, Hispanics, and Whites and Asian youth experienced a near 10 percentage point drop in their employment rate over the last decade. At the end of the decade, however, large gaps in employment rates existed across race-ethnic groups, ranging from a low of 44 percent among Black youth to a high of nearly 60 percent among White, non-Hispanic youth.

Gender Differences

The declines in the employment rates of young adults over the past decade were sizable for both men and women. Young males in each major age group (16-19, 20-24, 25-29) were employed at a lower rate in 2010 than at any time since the end of World War II. They experienced a sharply higher percentage point decline in their employment rate than women (14 versus 10 percentage points), primarily due to a much greater drop in their employment rate over the 2007-2010 period. Young males, especially those without any post-secondary degree, were considerably more adversely affected by the deep declines in employment in construction, manufacturing and transportation industries that

reduced the demand for blue collar workers, including construction, maintenance/repair, production and transportation operatives/material handlers.⁵

Table 1:
Trends in the Employment Rates of the Nation’s 16-29
Year Olds, Selected Years 2000 – 2010, All and by
Gender (Annual Averages, in Per Cent)

	(A)	(B)	(C)	(D)
Gender	2000	2007	2010	Percentage Point Change
All	67.3	62.5	55.3	-12.0
Men	71.3	66.0	57.1	-14.2
Women	63.4	58.9	53.5	-9.9

Differences by Educational Attainment

Young adults in each of the eight school enrollment/educational attainment groups incurred a sharp drop in their employment rates over the past decade. The magnitude of these declines varied with the level of schooling. There were double-digit drops in employment rates for all groups of young adults with no post-secondary degree. Young adults with a bachelor’s degree or more advanced degree saw their employment rates drop by only five percentage points. However, many of the associate degree and bachelor degree holders experienced other types of labor market problems including underemployment and mal-employment that trapped them in jobs that did not substantively utilize the education and technical skills acquired in college.

When looking at educational attainment, the nation’s youngest workers (16-19 year old high school students) fared the worst by far. Their employment rate fell by more than half from 34 percent to 16 percent over the decade. High school students most in need of work were the least likely to receive it. Only one of every ten low income high school students (in families with an annual income under \$20,000) worked during an average month in 2010. Among low income Black and Hispanic high school students (16-19 years old), only five to six percent were employed on average in that year.

Table 2:
Comparisons of the Employment Rates of the Nation's
16-29 Year Olds in 2000 and 2010 by Race-Ethnic
Group and Educational Attainment
 (Annual Averages, in Percent)

	(A)	(B)	(C)
Race/Ethnic or Educational Group	2000	2010	Percentage Point Change
Asian	57.9	48.1	-9.8
Black, not Hispanic	56.5	44.1	-12.4
Hispanic	64.2	52.5	-11.7
White, not Hispanic	71.5	59.8	-11.7
High school students	34.3	16.5	-17.8
High school dropouts	59.2	46.1	-13.1
High school graduates	77.3	63.4	-13.9
College students	55.6	45.5	-10.1
Some college, no degree	82.2	70.7	-11.5
Associate's degree	87.3	78.8	-8.5
Bachelor's degree	88.3	83.7	-4.6
Master's or higher degree	87.7	82.5	-5.2
All	67.3	55.3	-12.0

The Lost Employment Opportunities of Young Adults in 2010

The steep decline in the employment rates of 16-29 year olds over the past decade sharply reduced the expected employment level of such youth, especially when one considers that the number of youth in that age group in the civilian population grew by eight million during the decade. The severe loss of employment at each age level reduces the cumulative amount of work experience that the average young adult will possess as he or she enters their 30s, with above average declines for men, Blacks, Hispanics, and the less educated. Employment losses were most severe among teenagers (70percent) versus relative declines of nearly 20 percent for 20-24 year olds and 12 percent for 25-29 year olds. Males lost more jobs than women both in absolute and relative terms. Young male employment was down by 4.4 million or 26 percent versus nearly 3.0 million young women or

19 percent. Overall in this age group, we estimate that as many as 7.4 million fewer young adults or close to 23 percent were employed as well as would have been if they had maintained their 2000 employment rates.

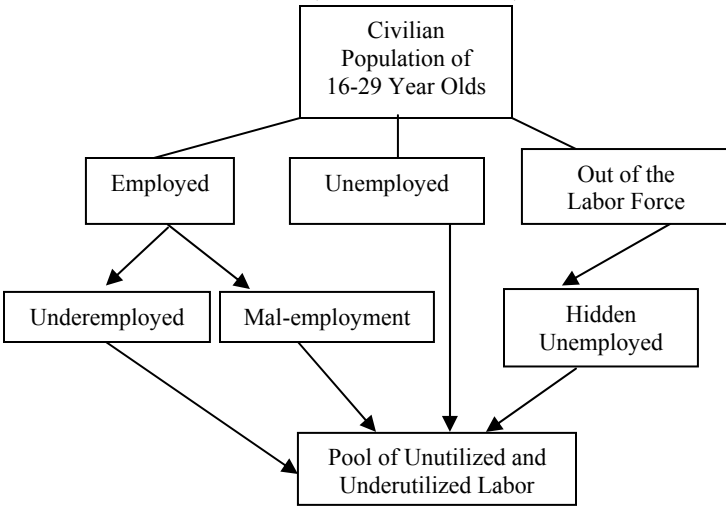
Table 3:
Comparisons of the Actual 2010 and Hypothetical 2010
Employment Levels of 16-29 Year Olds if Their 2000
Employment Rates Had Been Maintained in 2010,
All and by Age Group (in 1000s)

	(A)	(B)	(C)
Gender/ Age Group	Actual 2010	Hypothetical 2010	Increase in Employment (B - A)
All			
16 - 19	4,530	7,689	3,159
20 - 24	12,770	15,208	2,438
25 - 29	15,378	17,165	1,787
16 - 29, total	32,678	40,062	7,384

The Growth in the Pool of Underutilized Young Adults, 2000-2010

The substantial drop in the number of employed teens and young adults over the past decade has been accompanied by a rapidly growing array of labor market problems that have increased faster than those of any other age group in the population over the past three years. In addition to the very sharp jump in the number of *unemployed* individuals, there has been strong growth in *underemployment*⁶ (working part-time but desiring full-time work), *hidden unemployment* (wanting a job but not actively looking), and *mal-employment* among young college graduates (working in a job that does not effectively utilize the education and skills acquired in college).⁷

Chart A:
Measuring the Pool of Unutilized and Underutilized Young Adults (16-29 Year Olds)



Unemployed, Underemployed and Hidden Unemployed

The combined pool of unemployed, underemployed, and hidden unemployed young adults rose from 5.821 million in 2000 to 11.249 million in 2010, a near doubling in their numbers. The combined labor underutilization rate for teens and young adults in 2010 was 27.6 percent nearly twice as high as its value in 2000 and nearly twice that of older adults (30+) in 2010.

Between 2000 and 2010, the annual average number of unemployed 16-29 year olds more than doubled, rising from 2.798 million to 5.798 million, a rise of 3 million (Table 5). Underemployment problems also soared as young adults experienced growing difficulties in finding full-time jobs. The number of underemployed young adults increased 150 percent from 1.250 million in 2000 to 3.112 million in 2010. Rising joblessness also discourages some youth from actively seeking work even though they still want current employment. This so-called labor force reserve or “hidden unemployed” increased by 566,000 or 30 percent over the decade.

Table 4:
The Number of Young Adults 16-29 Experiencing Various Forms of Labor Underutilization Problems in 2000 and 2010 and the Overall Incidence of Labor Underutilization Problems (Annual Averages)

	(A)	(B)	(C)	(D)
Problem Group	2000	2010	Difference (B – A)	Relative Difference (B / A)
Unemployment	2,798,000	5,798,000	3,000,000	2.1*
Underemployment	1,250,000	3,112,000	1,862,000	2.5*
Hidden unemployment	1,773,000	2,339,000	566,000	1.3*
Total Pool of Underutilized Young Adults	5,821,000	11,249,000	5,428,000	1.9*
Adjusted Civilian Labor Force ⁽¹⁾	40,207,000	40,815,000	608,000	
Labor Under.Rate (in %)	14.5%	27.6%	+13.1 Percentage Points	

Note: The adjusted civilian labor force is the sum of the official civilian labor force plus the labor force reserve.

Age, Gender, Race-Ethnicity Differences in Underutilization

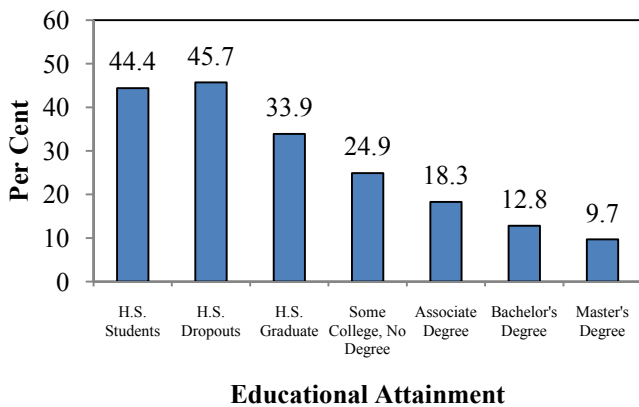
The labor underutilization rates of young adults in 2010 often varied widely across age, gender, race-ethnic, and educational attainment groups. Teenagers faced the highest underutilization rate (43 percent) followed by 20-24 year olds (29 percent), and those 25-29 years old (20 percent). Young males faced a higher labor underutilization rate than women (29 percent vs. 26 percent) reflecting their larger job losses over the decade. These underutilization rates varied far more widely across race-ethnic groups of young adults. Across both gender and major race-ethnic groups, young Black males fared the worst with an underutilization rate of just under 43 percent. Other rates ranged from lows of 21 percent among Asians and 23 percent among White, non-Hispanics to a high of 40 percent among all Black, non-Hispanic youth.

Educational Attainment Differences in Underutilization

Not surprisingly, the highest incidence of labor underutilization problems was among high school

students and high school dropouts. Over 44 percent of the nation's high school students 16 and older faced a labor underutilization problem, with males (47 percent) and Black high school students (60 percent) experiencing the worst problems. The labor underutilization rate of young adults lacking a regular high school diploma/GED in 2010 was nearly five times as high as that of their age peers who held a master's degree or higher academic degree. Labor underutilization rates among young adults fell steadily and steeply across the educational spectrum: from a high of nearly 46 percent among high school dropouts to 34 percent among high school graduates with no completed years of post-secondary schooling, to 25 percent for those with some college but no formal academic degree, to 13 percent for those with a Bachelor's degree and to a low of just under 10 percent for those with a master's degree or more advanced academic degree.

Chart 4:
2010 Labor Underutilization Rates of 16-29 Year Olds
by Educational Attainment (in %)



Mal-Employment Problems

While young adults with some type of college degree (associate's degree or higher) fared considerably better than their less educated peers in avoiding one of the above three labor underutilization problems, they increasingly encountered mal-employment. This is a human resource problem which involves being employed in a job that typically does not use much of one's formal college education. Overall, there were more

than 3.5 million young college graduates (20-29) who were mal-employed in 2010.

The incidence of mal-employment problems increased over the decade and varied widely across young adults by type of academic degree.⁸ Overall, there were more than 3.5 million young college graduates (20-29) who were mal-employed in 2010. Nearly half of all associate degree holders were mal-employed, 33 percent of Bachelor degree holders and only 10 percent of those with a master's degree, Ph.D., or professional degree (doctor, lawyer) (Table 5) were mal-employed.

Table 5:
The Number and Incidence of Mal-Employment Problems Among Employed Young College Graduates (20-29) by Type of Academic Degree, 2010

Type of Academic Degree	(A) Number of Employed Graduates	(B) Mal-Employed College Graduates	(C) Incidence of Mal-Employment (in %)
Associate ⁽¹⁾	2,659,000	1,282,000	48.2%
Bachelor ⁽²⁾	6,396,000	2,111,000	33.0%
Master's or Higher Degree	1,369,000	143,700	10.5%
All	10,424,000	3,536,700	33.9%

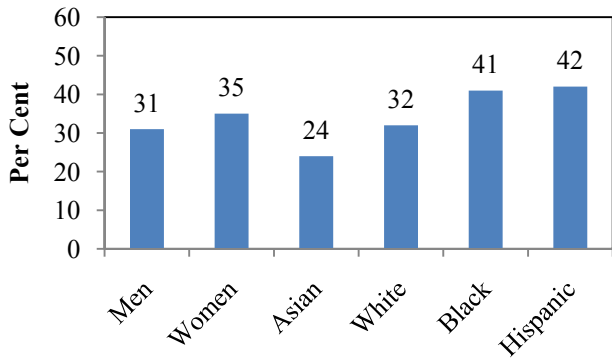
Note:

⁽¹⁾ A college labor market job for an associate degree holder is being employed in an occupation that falls into ONET Job Zone 3, 4, or 5

⁽²⁾ A college labor market job for a Bachelor's degree or higher degree holder is one that meets the CLMS definition of a CLM job.

Chart 5:

The Incidence of Mal-Employment Problems Among Employed Bachelor Degree Holders 20-29 Years Old by Gender and Race-Ethnic Group, 2010



Concerns over rising mal-employment rates among young college graduates are clearly justified from an economic perspective. At each degree level, the mean weekly earnings of employed college graduates who held “college labor market jobs” were substantially above those of their mal-employed peers. Differences in weekly earnings between these two groups ranged from \$180 for those with associate degrees to \$293 for Bachelor degree recipients and \$459 for master’s degree or higher degree holders. In relative terms, weekly earnings differences varied from 38 percent for associate degree holders to 77 percent for those with a master’s degree or higher degree. The mean weekly earnings of 20-29 year old high school graduates were no different from those of mal-employed Associate degree holders and less than \$60 below those of mal-employed bachelor and master’s degree holders. Such results considerably reduce the economic value of a college education. These earnings gaps between mal-employed college graduates and high school graduates are much too small to justify the economic resource costs (social and private) of investing in a college education. These mal-employed individuals also directly compete with high school graduates for the same set of jobs, reducing their weekly earnings and their employment opportunities.

Table 6:

The Mean Weekly Earnings of Employed 20-29 Year Old College Graduates by Their Mal-Employment Status and by Type of Degree, 2010

	(A)	(B)	(C)	(D)
Academic Degree	Employed in CLM Job	Mal-Employed	Difference (A – B)	Relative Difference (A-B) / B
Associate	\$653	\$473	\$180	38%
Bachelor	881	588	293	50%
Master’s or Higher	1,056	597	459	77%

Source: Monthly CPS household surveys, public use files, tabulations by authors.

Why We Should Care and What Public Policy Actions Are Needed

These deteriorating employment and earnings prospects of teens and young adults over the past decade and growing unemployment, underemployment, hidden unemployment, and mal-employment problems should be viewed with great concern by both public policymakers and the general public. From both a quantitative and qualitative standpoint, these deep declines have a number of adverse economic and social consequences for teens and young adults and society as a whole.

Benefits of Employment to Teens and Young Adults

Consider first the benefits of employment for teens and young adults that are lost when employment prospects are scarce:

- Employment during the teen years and early 20s is characterized by a high degree of path dependency for men, women, Blacks, Hispanics, Whites, low income and middle income youth.⁹ More work this year substantially increases the likelihood of work next year.
- More work during the high school years increases the ability of young graduates to smoothly transition into the paid work force and achieve higher hourly wages, especially for those

not immediately enrolling in college full-time after graduation.¹⁰

- Cumulative work experience in the teen years and early 20s is a desirable form of human capital investment that has favorable impacts on the annual and hourly earnings of adults as they move into their mid 20s.¹¹
- Young adults who bring more work experience to the job in their early to mid 20s are more likely to receive formal training and apprenticeship training from their employers.¹²
- Full-time rather than part-time work among young women in their 20s has far more favorable impacts on their future hourly wages than part-time work.¹³
- Being both out of work and out-of-school in the late teens and early 20s substantially increases the chances of a young adult being jobless, poor, unmarried, and economically dependent in their mid 20s.¹⁴

There also are a host of adverse social consequences that accompany these high levels of joblessness, especially year-round joblessness, including a higher tendency for males to drop out of high school before graduation,¹⁵ increased risks of teen pregnancy among women living in areas with low employment opportunities,¹⁶ and greater involvement in risky and delinquent behavior which increases the likelihood of being arrested and convicted.¹⁷

The cumulative loss of work experience, on-the-job training, and formal training will reduce aggregate labor supply and productivity in the future and lower the potential level of output in the U.S. economy. Lower annual earnings of young workers will reduce both their and their employers' contributions to payroll taxes (Social Security retirement, Medicare, unemployment insurance), to federal and state income taxes, and state sales taxes. Lower tax payments and increased reliance on cash and in-kind transfers will contribute to rising budget deficits of the national and state governments.

What Steps Can Policymakers Take?

There is a wide array of public policy actions that have been proposed to address labor market problems among teens and young workers over the past decade and in recent years. They include policies to:

- Promote more frequent employment and an expansion of the occupational/industry job opportunities made available to all high school youth interested in paid employment, both during the regular school year and the summer.¹⁸ These would include paid internships, work-based learning opportunities, cooperative education programs, pre-apprenticeship opportunities, and subsidized summer jobs and tryout employment positions. Special consideration would be given to youth from low income families and in high poverty/unemployment areas.
- Substantially strengthen the transition from high school to the world of work, especially for those young graduates not enrolling full-time in college immediately after graduation from high school. Programs, such as Jobs for America's Graduates and Massachusetts Connecting Activities, to assist high school seniors in preparing for the labor market through employability skills training, paid internships, and intensive job development and follow-up support services are needed. Develop new career pathways for young adults who will not attend four year college and universities,¹⁹ including new youth apprenticeships, expanded pre-apprenticeships, post-secondary training in technical institutes and community colleges, and sectoral training programs.
- Expand cooperative education and paid internships for college students and strengthened career counseling and more intensive job development activities for four year and two year college graduates to help move more graduates directly into college labor market jobs and avoid the growing mal-employment problems that reduce their weekly and annual earnings.

- Allow low wage earners from age 18 upward to be eligible for the existing federal Earned Income Tax Credit (EITC). Persons 18-23 who become eligible for the credit could choose to place it in a savings account matched dollar for dollar by the federal government to be used only to finance post-secondary education and training. Such tax credits would support “earning and learning” opportunities, providing greater incentives to work and to engage in complementary education and training activities.²⁰

Note on Data Sources

The findings on young adult labor market experiences appearing in this report are based on data collected as part of the monthly Current Population Surveys from January 2000 through December 2010. Our analysis of these public use CPS data were supplemented in a few cases with estimates produced by the U.S. Bureau of Labor Statistics on its web site www.BLS.gov.

¹ See: Andrew Sum, “Ringing Out the Lost Economic Decade of 2000-2010,” The Huffington Post, January 7, 2011.

² Andrew Sum and Joseph McLaughlin, “The Massive Shedding of Jobs in America,” Challenge, November/December 2010, pp. 62-76.

³ See: U.S. Bureau of Labor Statistics, “Employment, Hours and Earnings, Current Employment Statistics Program,” www.bls.gov.

⁴ See: Andrew Sum, The Nation’s Great Age Twist in Employment Rates Over the 2000-2010 Decade: The Missing 14 Million U.S. Workers Under Age 55, Center for Labor Market Studies, Northeastern University, 2011.

⁵ See: Andrew Sum, Ishwar Khatiwada, and Sheila Palma, “The Great Recession of 2007-2009 and the Blue Collar Depression,” Challenge, July-August 2010, pp. 6-24.

⁶ For evidence on the size and growth of the nation’s underemployed population in recent years, See: Andrew Sum and Ishwar Khatiwada, “The Nation’s Underemployed in The Great Recession of 2007-2009,” Monthly Labor Review, November 2010, pp. 3-15.

⁷ For a review of growing mal-employment problems among young college graduates, See: Andrew Sum and Ishwar Khatiwada, The Labor Market Experiences of America’s College Graduates: Rising Mal-Employment Among Younger Bachelor Degree Holders, Paper Prepared for the Educational Testing Service, Princeton, 2010.

⁸ Andrew Sum, Ishwar Khatiwada, Joseph McLaughlin, The Labor Market Experiences of America’s College Graduates: op.cit.

⁹ Andrew Sum, Robert Taggart, and Ishwar Khatiwada, Path Dependency in Teen Employment in the U.S.: Implications for Youth Workforce Development Policy, Paper Prepared for the U.S. Conference of Mayors Workforce Development Seminar, Washington, D.C., 2007.

¹⁰ See: (i) Andrew Sum, Neeta Fogg, Garth Mangum, et. al., Confronting the Youth Demographic Challenge, Sar Levitan Center for Social Policy Studies, Johns Hopkins University, Baltimore, 2000; (ii) Joseph McLaughlin and Andrew Sum, The Transition from High School to College and the Labor Market Among the Nation’s Recent High School Graduates, Jobs for America’s Graduates, Alexandria, Virginia, 2009.

¹¹ Jia Zhao, The Training Experiences of Young Adults in the U.S., 2001-2005, Master’s Thesis, Department of Economics, Northeastern University, Boston, Massachusetts, 2008.

¹² Jia Zhao, Ibid.

¹³ Marta Tienda, V. Joseph Hotz, et. al., “Employment and Wage Prospects of Black, White, and Hispanic Women,” in Human Resource Economics and Public Policy: Essays in Honor of Vernon M. Briggs, (Editor Charles J. Whalen), W.E. Upjohn Institute for Employment Research, Kalamazoo, 2010, pp. 129-160.

¹⁴ See: Douglas J. Besharov (Editor), America’s Disconnected Youth: Toward A Preventive Strategy, American Enterprise Institute for Public Policy Research, Washington, D.C., 1999.

¹⁵ Marta Tienda and Avner Ahituv, “Ethnic Differences in School Departure,” in Of Heart and Mind: Social Policy Essays in Honor of Sar A. Levitan, (Editors: Garth Mangum and Stephen Mangum), W.E. Upjohn Institute for Employment Research, Kalamazoo, 1996, pp. 93-110.

¹⁶ Jeff Gruber, Risky Behavior: An Economic Analysis, MIT Press, Cambridge, 2003.

¹⁷ Bruce Western, Punishment and Inequality in America, Russell Sage Foundation, New York, 2006.

¹⁸ See: (i) Robert Lerman, “Improving Links Between High Schools and Careers,” in America’s Disconnected Youth: Toward A Preventive Strategy, American Enterprise Institute for Public Policy Research, Washington, D.C., 1999, pp. 185-212; (ii) Andrew Sum, Leaving Young Workers Behind, National League of Cities, Institute for Youth, Education, and Families, 2003.

¹⁹ For examples of such strategies,

See: (i) Harvard Graduate School of Education, Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century, Harvard University, Cambridge, 2011; (ii) Robert Lerman, Training Tomorrow’s Workforce, The Urban Institute, Washington, D.C., December 2009.