

# Affording Health Care and Education on the Minimum Wage

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The current value of the federal minimum wage – \$7.25 per hour – is often compared to the cost of living, the average wage in the economy, or the productivity of the average worker. By all of these benchmarks, the current federal minimum is well below its historical levels.<sup>1</sup>

But the current minimum wage looks even worse when compared to two kinds of purchases strongly associated with a middle-class standard of living or the ability to move up to the middle class: health insurance and a college degree.

**Table 1** below shows the results of a simple exercise. We ask how many hours a minimum-wage worker has to work to pay for a year of college education (at various kinds of institutions) or a year of health insurance (for an individual or a family). The table compares the experience facing a minimum-wage worker in 1979 – when the minimum wage was \$2.90 per hour – to that of a minimum-wage worker in 2010 or 2011 – when the minimum wage was \$7.25. (All wages and prices, here and below, are in current dollars – that is the actual dollar value at the time, without any adjustment for inflation. The point is to compare the minimum wage in place in each period with the actual cost of health and education services at the same point in time.)

A minimum-wage worker in 1979, making \$2.90 per hour, had to work 254 hours in a year to pay the \$738 annual cost of tuition at a public four-year college. By 2010, minimum-wage workers at \$7.25 per hour had to spend 923 hours to cover the \$6,695 annual tuition at a public four-year college. (All our calculations ignore taxes and subsidies. More on that later.) (See **Figure 1**.)

In 1979, a four-year private college required 1,112 hours of work at the minimum wage. By 2010, the cost in minimum-wage hours had increased so much that it was no longer possible to pay for a full year of a private four-year college – 3,201 hours – by working full-year, full-time (2080 hours) at the minimum wage.



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Even the minimum-wage hours needed to pay tuition for one year at a two-year college almost tripled between 1979 and 2010, from 156 hours to 403 hours.

Health-insurance premiums have also increased enormously when expressed in terms of the minimum wage. In 1979, one year of individual health insurance coverage cost a minimum-wage worker 130 hours. By 2011, the same coverage cost 749 hours. (See **Figure 2.**)

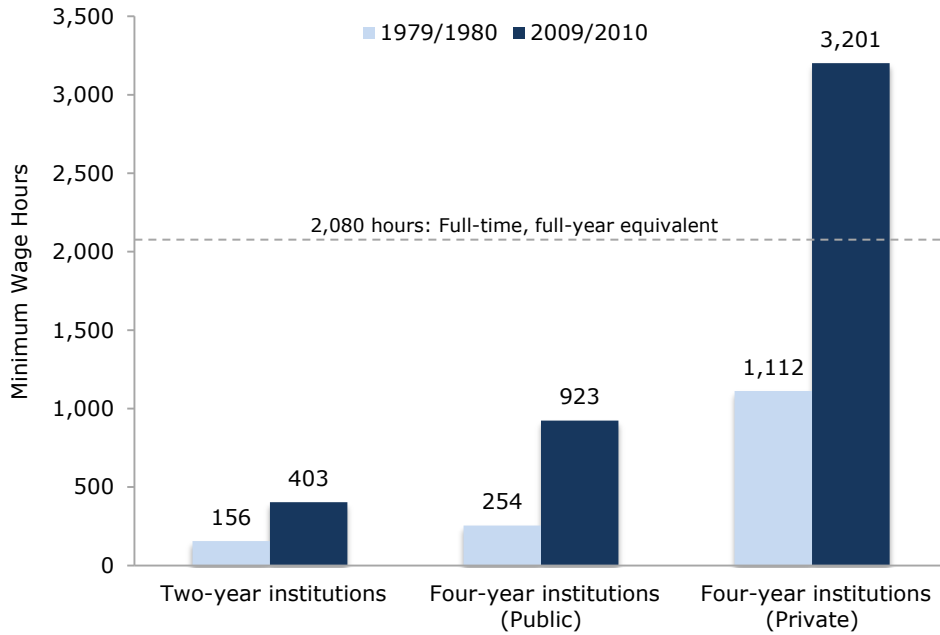
The cost of family coverage increased from 329 hours in 1979 to 2,079 hours in 2011. These figures imply that after paying for family health-insurance coverage, a minimum-wage worker would have just one hour's worth of wages left over to spend on other goods and services after working 40 hours per week for 52 weeks in a year.

**TABLE 1**  
**Purchasing Power of the Minimum Wage, Then and Now**  
**(current dollars)**

	1979/1980	2010/2011
<i>(a) In Dollars</i>		
Federal Minimum Wage (per hour)	2.90	7.25
Education (per year)		
Two-year institutions	451	2,923
Four-year institutions (Public)	738	6,695
Four-year institutions (Private)	3,225	23,210
Health Insurance (per year)		
Individual Policy	377	5,429
Family Policy	953	15,073
<i>(b) Hours</i>		
Education (per year)		
Two-year institutions	156	403
Four-year institutions (Public)	254	923
Four-year institutions (Private)	1,112	3,201
Health Insurance (per year)		
Individual Policy	130	749
Family Policy	329	2079

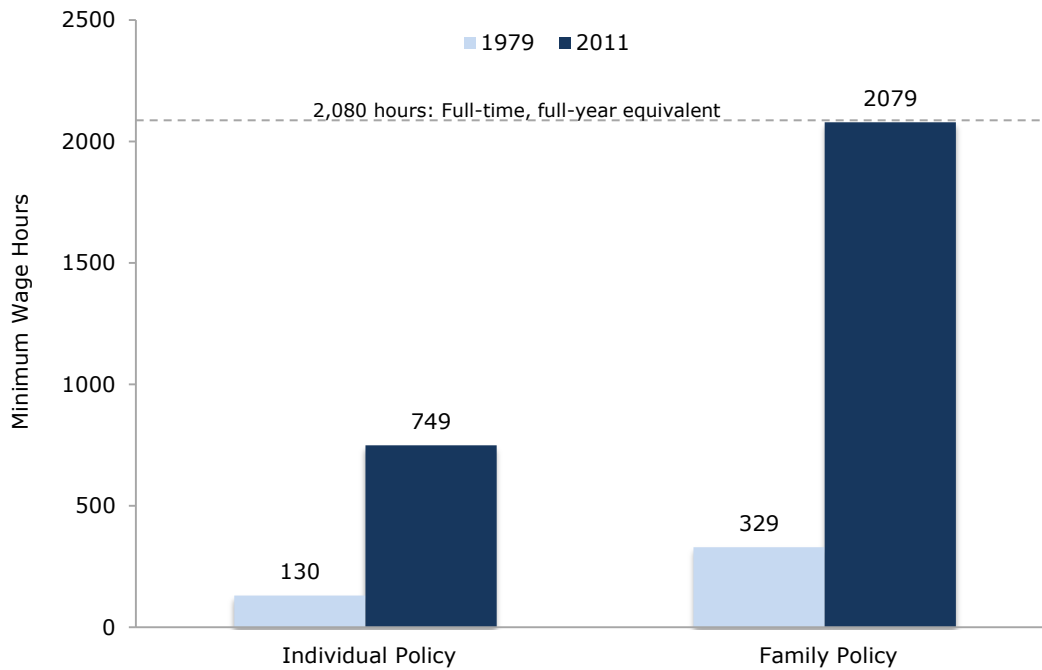
Notes: CEPR analysis of NCES, KFF, and CMMS data (see Data Appendix). Education data are for tuition and fees in 1979-80 and 2009-10 academic years. Health insurance data are total costs for employer-provided coverage and refer to 1979 and 2011; 1979 values estimated using KFF data for 1999 and CMMS estimates of change in employer costs.

**FIGURE 1**  
**Hours of Work at the Minimum Wage Required to Pay Annual Tuition Costs, by Type of Institution, 1979/1980 and 2009/2010**



Source: See Table 1.

**FIGURE 2**  
**Hours of Work at the Minimum Wage Required to Pay Annual Health Insurance Costs, by Type of Insurance Policy, 1979 and 2011**



Source: See Table 1.

Of course, this analysis does not factor in taxes paid (or the effects of the Earned Income Tax Credit, which was introduced in 1975). The actual number of after-tax hours required would be higher than the pre-tax hours used here; though the Earned Income Tax Credit can offset the cost of taxes for some low-wage workers, particularly those in low-income families with children. Nor do the numbers in the table capture important differences over the period in the effective costs of college tuition<sup>2</sup> and health insurance facing minimum-wage workers.

In the case of college tuition, federal grants and loans are more generous today than they were at the end of the 1970s. As a result, the increase in the costs of college tuition, net of federal grants, is lower for the average minimum-wage worker than is suggested by the chart.<sup>3</sup> Nevertheless, the increases in grants have not kept pace with increases in tuition (as well as room and board, books, and other expenses).<sup>4</sup> Meanwhile, the substantial increase in the use of student loans has meant that many minimum-wage workers today would leave college (with or without their degree) with a much higher level of debt than was typical at the end of the 1970s.<sup>5</sup>

The health-insurance costs in the table are based on the premiums for employer-provided health-insurance policies, which are group plans that minimum-wage workers can use only if their employers offer a plan. But, the share of low-wage workers with employer-provided health insurance has fallen from 42.9 percent in 1979 to 25.9 percent in 2010. Only a small share of low-wage workers – about 8.1 percent – purchases their own individual health-insurance policies.<sup>6</sup> Nor do the health-insurance figures here factor in the availability of publicly provided health insurance, such as Medicaid and CHIP (Child Health Insurance Program). Public health-insurance coverage for low-wage workers did increase somewhat, from 8.8 percent of low-wage workers in 1979, to 12.8 percent by 2010.<sup>7</sup>

Some economists emphasize the rapid decline over the last century in the relative price of agricultural products and manufactured goods (such as televisions and air conditioners).<sup>8</sup> These analyses, however, inevitably ignore or downplay the large relative increases in the price of crucial services such as education and healthcare. Minimum-wage workers today may be able to buy DVD players that did not exist in 1979, but at the current level of the minimum wage, they are also far less able to cover college tuition or health-insurance premiums.

## Data Appendix

Federal minimum wage: Department of Labor, Wage and Hour Division, “History of Federal Minimum Wage Rates Under the Fair Labor Standards Act, 1938-2009,” <http://www.dol.gov/whd/minwage/chart.htm>.

College Tuition Costs: Department of Education, National Center for Education Statistics (NCES), *Digest of Education Statistics 2010*, Table 345, “Average undergraduate tuition and fees and room and board rates charged for full-time students in degree-granting institutions, by type and control of institution: 1964-65 through 2009-10,” [http://nces.ed.gov/programs/digest/d10/tables/dt10\\_345.asp](http://nces.ed.gov/programs/digest/d10/tables/dt10_345.asp).

Health Insurance Costs: Data for 2011 from Kaiser Family Foundation (KFF), *Employer Health Benefits 2011 Annual Survey*, <http://ehbs.kff.org/pdf/2011/8225.pdf>, Exhibit 2.11, p. 30. Data for 1979 calculated using 1999 data from KFF, *Employer Health Benefits 1999 Annual Survey*, <http://www.kff.org/insurance/upload/The-1999-Employer-Health-Benefits-Annual-Survey.pdf>, adjusted for changes in per enrollee expenditures in private health insurance premiums from Centers for Medicare and Medicaid Studies (CMMS), Table 16, <http://www.cms.gov/NationalHealthExpendData/downloads/tables.pdf>.

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1 For a recent comparison of the 2012 federal minimum wage to various benchmarks, see Schmitt, John. 2012. “The Minimum Wage is Too Damn Low.” Washington, DC: Center for Economic and Policy Research. <http://www.cepr.net/documents/publications/min-wage1-2012-03.pdf>

2 See, for example, Lynch, Mamie, Jennifer Engle, and José L. Cruz. “Priced Out: How the Wrong Financial-Aid Policies Hurt Low-Income Students,” <http://www.edtrust.org/sites/edtrust.org/files/PricedOutFINAL.pdf>.

3 U.S. Department of Education, Office of Postsecondary Education, 2009-2010 Federal Pell Grant Program End-of-Year Report, Table 1: Federal Pell Grant Program: Summary Statistics for Cross-Year Reference. <http://www2.ed.gov/finaid/prof/resources/data/pell-2009-10/pell-eoy-09-10.pdf>

4 See, for example, Krugman, Paul. 2012. “Building a Caste Society.” *Conscious of a Liberal*. <http://krugman.blogs.nytimes.com/2012/03/12/building-a-caste-society/>; and Edsall, Thomas B. “The Reproduction of Privilege.” *Campaign Stops*. <http://campaignstops.blogs.nytimes.com/2012/03/12/the-reproduction-of-privilege/>.

5 Recent reports have documented the problems posed by high and rising levels of student debt. See Lynch, Engle, and Cruz (cited above) and Brown, Meta, Andrew Haughwout, Donghoon Lee, Maricar Mabutias, and Wilbert van der Klaauw. 2012. “Grading Student Loans.” Federal Reserve Bank of New York. <http://libertystreeteconomics.newyorkfed.org/2012/03/grading-student-loans.html>.

6 Schmitt, John. 2012. “Health-insurance Coverage for Low-wage Workers, 1979-2010 and Beyond.” Washington, DC: Center for Economic and Policy Research. <http://www.cepr.net/documents/publications/health-low-wage-2012-02.pdf>

7 Ibid.

8 See, for example, Rector, Robert and Rachel Sheffield. 2011. “Air Conditioning, Cable TV, and an Xbox: What Is Poverty in the United States Today?” Washington, DC: The Heritage Foundation, [http://thf\\_media.s3.amazonaws.com/2011/pdf/bg2575.pdf](http://thf_media.s3.amazonaws.com/2011/pdf/bg2575.pdf); and Cox, W. Michael and Richard Alm. 1998. “Time Well Spent: The Declining Real Cost of Living in America,” 1997 Annual Report. Federal Reserve Bank of Dallas, pp. 2-24 <http://www.dallasfed.org/fed/annual/index.cfm>.