

*Center for Economic Development*

*The Skills Gap and Unemployment  
in Wisconsin*

*Separating Fact From Fiction*

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## ABOUT THIS REPORT

The author of this report is Dr. Marc V. Levine, Professor of History, Economic Development, and Urban Studies at the University of Wisconsin-Milwaukee. Rebecca Nole, a project assistant at the UWM Center for Economic Development (UWMCED), provided indispensable research assistance. The author wishes to acknowledge the extraordinarily valuable commentary and insights provided by Professor Emeritus William Holahan of UWM and Professor Michael Rosen of Milwaukee Area Technical College, as well as the helpful comments made by participants in forums at the Greater Milwaukee Foundation and the Milwaukee Area Workforce Funding Alliance Leadership Council, where some of the analysis in this study was first presented. No one but the author, of course, is responsible for the content of this report or any errors in the analysis.

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## EXECUTIVE SUMMARY

There is apparent unanimity among Wisconsin business executives and policymakers that the state faces a “skills gap:” thousands of jobs going unfilled because too few Wisconsin workers possess the skills, education, and training for them. This skills mismatch, it is argued, is the central reason why unemployment remains high, even as job vacancies remain unfilled.

This widely held view, however, is incorrect. This paper examines major academic studies as well as data from the U.S., Wisconsin, and Milwaukee labor markets and finds no evidence to support the skills gap thesis. The key findings:

- **The consensus among top economists** is that the skills gap is a myth. High unemployment is mainly the result of a deficiency in aggregate demand and slow economic growth, not because workers lack the right education or skills. The skills of the labor force did not suddenly erode between 2007 and 2009, when the unemployment rate more than doubled, so it makes no sense to claim that high unemployment in 2009 and through today has been caused by a soaring number of “unqualified” workers. As Stanford University economist Edward Lazear put it: “The structure of a modern economy does not change that quickly.”

This conclusion, rejecting the skills gap/structural unemployment theory, has been confirmed in numerous recent studies, from: a) university economists at Stanford, the University of California-Berkeley, Duke, MIT, and the University of Pennsylvania; and b) researchers at the Brookings institution, the Economic Policy Institute, the Center for Economic and Policy Research, the Federal Reserve Banks of Atlanta, Boston, and Chicago, and the Boston Consulting Group. Two recent Nobel Laureates in economics and two former heads of the President’s Council of Economic Advisers thoroughly reject the skills gap as an explanation for persistently high joblessness.

- Most tellingly, more than three years after the official end of the Great Recession, there remain over three times as many unemployed workers as job openings in the US. Even if every unemployed person were perfectly matched to existing jobs, over 2/3 of all jobless would still be out of work. And this calculation understates the jobs shortage, as it does not include discouraged workers or those involuntarily working part-time.
- **National data** on wages, hours, the “job gap” (the ratio of job seekers to available openings), and the skills requirements of projected job

openings reveal no evidence of a skills mismatch in national labor markets.

- Beyond the anecdotes of local employers, **the Wisconsin and Milwaukee labor markets** show no statistical evidence of a skills shortage:
  - **Wages:** If Wisconsin employers were encountering a shortage of skilled labor, wages would be going up, but in Wisconsin real wages have declined since 2000. By contrast, in states such as North Dakota and Wyoming, where there really is demand for and a shortage of skilled labor, caused by a boom in the energy sector, real wages have jumped by double digits since 2000. Wisconsin wage “growth” also lags the national rate, another sign that there is no labor shortage here.
  - **Hours:** In contrast to states with tight labor markets such as North Dakota, there is no evidence that Wisconsin employers are adding hours to their existing workforce, to compensate for an alleged skilled labor shortage, Average weekly hours worked in Wisconsin are down 4.3 percent compared to 2000.
  - **Occupational Projections:** Although promoters of the skills gap idea claim that the skills requirements of future jobs will vastly outstrip the skills and education of Wisconsin workers, occupational projections for the state reveal that 70 percent of projected openings through 2020 will be in jobs requiring a high school diploma or less.
  - **Underemployment and Workforce Overqualification:** In reality, Wisconsin and Milwaukee suffer from the *opposite* of a skills gap: an economy that generates too few quality jobs and a labor market that is characterized by the underemployment and overqualification of skilled and educated workers. 25 percent of Milwaukee’s retail salespersons hold college degrees (up from 11 percent in 2000); 60 percent of Wisconsin’s parking lot attendants have had some post-secondary education. The “job gap” *has* created a skills mismatch of sorts in the Wisconsin and Milwaukee labor markets, but it is the inverse of the one commonly put forward: it is a mismatch of too many highly educated workers chasing too few “good jobs.”
  - **Rising Human Capital:** Contrary to skills gap rhetoric, educational attainment has increased dramatically in Wisconsin and Milwaukee over the past decades. Nearly 90 percent of Milwaukee’s adult population holds a high school diploma (up from 50 percent in 1970), and 31 percent hold at least a bachelor’s degree (up from 11 percent in 1970). Gains in

educational attainment have occurred for all racial and ethnic groups. All data point to consistently rising human capital formation in Wisconsin and Milwaukee.

- One of the central myths fueling the skills gap meme in Wisconsin has been the contention that the state suffers from a shortage of qualified **welders**. A review of wage and employment trends in all states – including those with genuinely tight labor markets for welders—finds no evidence of such a shortage in Wisconsin or Milwaukee. Real wages for welders here have declined since 2000; in states such as Wyoming, North Dakota, and Alaska, where there is strong demand for a limited supply of skilled welders, real wages have increased by over 20 percent.
- There are more than three times as many unemployed welders as there are projected annual job openings for welders in Wisconsin; and when jobless welders from other urban centers in the Midwest are taken account, the gap is closer to 10-1. Almost all these welders were recently employed, so with such a sizeable number of recently employable welders looking for work, it seems highly unlikely that skills are a problem for whatever hiring problems are being anecdotally reported.
- Notwithstanding allegations of a skills deficit among Wisconsin welders, the educational attainment of welders in the state (and in metro Milwaukee) is markedly higher than the national average. There is no evidence that Wisconsin suffers from a “competitive disadvantage” in the skills of its welding labor force. We examine the case Bucyrus International, whose former CEO Tim Sullivan is the leading promoter of the skills gap idea in Wisconsin. Sullivan claimed he opened a factory in Texas in 2008 because of a supposed inability to find skilled welders in Milwaukee. Yet, the educational attainment level of welders in the Texas county where Bucyrus relocated is *much lower* than their Milwaukee counterparts, suggesting factors other than a putative skills gap at play.
- The study concludes with a brief analysis of: 1) why the “fake” skills gap, as *The New York Times*’ Adam Davidson has called it, holds so much sway over policymakers in Wisconsin; 2) how the skills gap meme deleteriously diverts attention from other, more salient factors explaining joblessness here; and 3) why new workforce development policies, responding to an imaginary skills gap, will do little to improve the jobs situation in Wisconsin and in Milwaukee.



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## Introduction

There is a consensus among Wisconsin’s business executives and politicians: the state, and especially its urban hub of Milwaukee, faces a so-called “skills gap.” “We don’t have a jobs crisis in Milwaukee, we have an education crisis,” asserts Tim Sullivan, the former CEO of Bucyrus International Inc., special adviser to the Governor on workforce development, and author of a widely publicized and lavishly praised report on the skills gap released in 2012.<sup>1</sup> The central premise of Sullivan’s report,<sup>2</sup> and a subsequent one sponsored by a group known as “Competitive Wisconsin” (*Be Bold 2*),<sup>3</sup> is that there are plenty of jobs, at good pay, for the educated and skilled, but allegedly too few Wisconsin workers possess the skills, education, or training required for these jobs. Consequently, the state suffers from a “skills mismatch,” a form of what economists call “structural unemployment”: simultaneously high levels of joblessness *and* unfilled job vacancies. “The jobs are already here,” according to the leaders of Milwaukee’s two largest business organizations. “Daily, calls come from employers looking for a prepared workforce.”<sup>4</sup> Moreover, asserts Sullivan, the skills shortage is so severe in Wisconsin, compared to other states, that it “is hurting economic competitiveness.”<sup>5</sup>

In other words, according to this “skills gap” consensus, the unemployed remain out of work mainly because they are “unqualified.” There’s just one problem, however, with this story: it’s a myth. Although a steady stream of news articles over the past decade and a drumbeat of self-serving anecdotes from business executives have created the public perception that there is, indeed, a skills gap, there is little labor market evidence to support such claims, nationally, in Wisconsin, or in Milwaukee. As Laura D’Andrea Tyson, chair of the president’s Council of Economic Advisers (CEA) under Bill Clinton, notes: “Despite anecdotes about how employers cannot find workers with skills they need, there is little evidence that the unemployment rate remains elevated because of mismatches between the skill requirements of available jobs and

1 Erin Richards, “MMAC pushes plan to close education gap in Milwaukee,” *Milwaukee Journal Sentinel*, 7 November 2011.

2 Tim Sullivan, *The Road Ahead: Restoring Wisconsin’s Workforce Development* (Madison, WI: Department of Administration, August 2012). Accessed at: <http://doa.wi.gov/secy/documents/sullivanreport.pdf>. Hereafter referred to as “Sullivan report.”

3 Competitive Wisconsin, *Be Bold 2: Growing Wisconsin’s Talent Pool* (October 2012). Accessed at: [http://www.competitivewi.com/wp-content/uploads/2012/10/BeBold2\\_Study\\_October2012.pdf](http://www.competitivewi.com/wp-content/uploads/2012/10/BeBold2_Study_October2012.pdf)

4 Julia Taylor and Tim Sheehy, “Milwaukee’s on the job developing a modern workforce,” *Milwaukee Journal Sentinel*, 17 November 2006.

5 *Milwaukee Journal Sentinel*, “Sullivan report outlines promising reform ideas,” 28 August 2012.

the skills of the unemployed.”<sup>6</sup> Similarly, Stanford University’s Edward Lazear, chairman of the CEA under George W. Bush, flatly states: “High unemployment today is *not* a result of the job openings being where the appropriately skilled workers are unavailable...the problem is slow growth” and tepid job creation.<sup>7</sup> In short, as Adam Davidson, economics columnist for *The New York Times* has concluded, “the secret behind this skills gap is that it’s not a skills gap at all;” indeed, it’s “fake skills gap”<sup>8</sup> that ultimately diverts attention from the real causes of high unemployment and from policies that would alleviate joblessness. Heidi Schierholz of the Economic Policy Institute puts it succinctly: “Unemployment is high not because workers lack the right education or skills, but because employers have not seen demand for their goods and services pick up enough...to significantly ramp up hiring. It is not the right workers we are lacking, it is *work*.”<sup>9</sup>

This paper is divided into two main sections. In the first part, we briefly examine the history of the skills gap thesis, and then explore in some detail national labor market evidence as well as the conclusions of a now substantial body of recent research by economists on the subject. In the second section, we examine whether there is any evidence to support a skills gap or structural unemployment explanation for the high levels of joblessness plaguing Wisconsin and Milwaukee today, or whether the situation is more correctly understood as a “jobs shortage.” As part of this analysis, we focus in detail on the peculiar case of the alleged scarcity of skilled welders in Wisconsin, a putative shortage that has long been cited as “exhibit A” of the skills mismatch in the state. In the paper’s conclusion, we briefly examine why the skills gap, despite the lack of supporting evidence, dominates discourse on labor market policy in Wisconsin. We also briefly review a host of key factors, ignored in the skills mismatch reports, but which ultimately are more important than the “fake” skills gap in shaping the Wisconsin and Milwaukee labor markets, and which should be the focus of policy discussion in the future.

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6 Laura D’Andrea Tyson, “Why the Unemployment Rate is So High,” *The New York Times*, 11 January 2013.  
 7 Edward Lazear, “There is No ‘Structural’ Unemployment Problem,” *The Wall Street Journal*, 3 September 2012.  
 8 Adam Davidson, “Skills Don’t Pay the Bills,” *The New York Times*, 20 November 2012.  
 9 Heidi Shierholz, “Workers don’t lack skills, they lack work,” EPI Economic Snapshot: Jobs and Unemployment, 16 January 2013.

## I. The Skills Gap Thesis: National Evidence and Studies

Although the “skills gap” argument is all the rage these days in certain circles, the claim that America faces a devastating jobs-skills mismatch is not new. Remarkably, as Paul Krugman reports, even during the Great Depression, when aggregate demand and the country’s job creation machinery had collapsed, some observers predicted that unemployment would remain high because “this present labor supply of ours is peculiarly unadaptable and untrained. It cannot respond to the opportunities which industry may offer.”<sup>10</sup> Yet somehow, as Krugman points out, when the massive defense buildup just a few years later for World War II provided a quintessentially Keynesian fiscal stimulus sufficient to boost aggregate demand, the “skills gap” vanished and “industry was eager to employ those ‘unadaptable and untrained’ workers.”<sup>11</sup>

The idea that America’s central employment problem is a “skills mismatch,” not a scarcity of jobs, became a staple of the economic policy landscape in the early 1980s. As Gordon Lafer has written, the Reagan administration turned away from the public employment and government “pump priming” policies that had been a key element of federal jobs strategies since the New Deal:

The new administration insisted that there was no problem with deficient demand, that...there were enough jobs in the economy for everyone who needed them. If some people experienced long-term unemployment, it was not because jobs were unavailable, but because they lacked the skills or motivation to make themselves employable. Even during the recession of 1981-82, when national unemployment rates reached their highest level since the Great Depression, administration officials insisted jobs were available for those with the talent and tenacity to work their way up.<sup>12</sup>

In language identical to skills gap reports of today, a Reagan administration Assistant Secretary of Labor insisted that “the jobs are out there, and it is a point of matching the people up with the skills in demand.”<sup>13</sup> President Reagan, as was his wont, even provided the requisite skills gap anecdote: “I looked in the Sunday paper at the help-wanted ads...you count as many as 65 pages... And you say, wait a minute, you know 9.8 percent unemployment, but here are the employers...These newspaper ads convinced us that there are jobs waiting

10 Paul Krugman, *End this Depression Now!* (New York: W.W. Norton, 2010), p. 35.

11 Paul Krugman, “Structure of Excuses,” *The New York Times*, 26 September 2010.

12 Gordon Lafer, *The Job Training Charade* (Ithaca: Cornell University Press, 2002), pp. 20-21.

13 Ibid, pp. 241-242.

and people not trained for those jobs.”<sup>14</sup>

Several high profile reports issued in the late 1980s and the early 1990s also blamed joblessness on worker skill deficits, and ominously forecasted that a skills gap threatened to choke off economic growth and job creation in the future. The widely publicized *Workforce 2000* report, prepared by the Hudson Institute for the Department of Labor in 1987, asserted that future jobs would require a much higher skills level than available workers possessed, a skills mismatch that threatened America’s “international competitiveness.”<sup>15</sup> The report claimed that by 2000 “even the least-skilled jobs will require a command of reading, computing, and thinking that was once necessary only for the professions.”<sup>16</sup> Similarly, the Commission on the Skills of the American Workforce warned in 1990 that failing schools and an inadequately skilled workforce had slowed U.S. productivity growth to a crawl, threatening an imminent future of stagnant productivity, low wages, and high joblessness.<sup>17</sup> “We are faced with a workforce crisis,” said secretary of Labor Elizabeth Dole in 1990. “Our workforce is in a state of unreadiness –unready for the new challenges, unready for the new complexities, unready for the new realities of the 1990s.”<sup>18</sup>

Yet, despite the alleged “unreadiness” of American workers, the 1990s was one of the great decades of economic growth in U.S. history. National employment increased by almost 23 million during the Clinton presidency; incomes grew across all categories; and unemployment in 2000 fell to a 30-year low of 3.8 percent. As for the skills gap stifling productivity and innovation, workplace productivity took off after 1995, registering annual growth rates over the next 15 years more than double the annual growth rate between 1973 and 1995.<sup>19</sup> This increase, as Lawrence Mishel has sardonically noted, “must have been a surprise” to the skills gap Cassandras, as it was accomplished with “the supposedly unqualified lower-skilled workforce...that allegedly put our nation in [economic] danger.”<sup>20</sup>

By any reasonable reckoning, the economic record of the 1990s should have

14 Quoted in Lafer, *The Job Training Charade*, p. 19.

15 William Johnston and Arnold Packer, *Workforce 2000: Work and Workers for the 21st Century* (Indianapolis: Hudson Institute, 1987).

16 Ibid, p.116.

17 National Center on Education and the Economy, *America’s Choice: High Skills or Low Wages!* (Rochester: The National Center on Education and the Economy, 1990).

18 Nancy Rivera Brooks, “Labor Secretary Lauds Study of Productivity,” *The Los Angeles Times*, 20 June 1990.

19 Lawrence Mishel and Kar-Fai Gee, “Why Aren’t Workers Benefiting from Labour Productivity Growth in the United States?” *International Productivity Monitor*, 23, (Spring 2012): 39.

20 Lawrence Mishel, “The Overselling of Education,” *The American Prospect*, February 7, 2011. The quotes are spliced together, but in context. Accessed at: <http://prospect.org/article/overselling-education-0>

buried the skills gap trope; clearly, the predictions of the alarmists had been proven spectacularly wrong. But the skills gap thesis is an especially resilient exemplar of what John Quiggin has evocatively labeled “zombie economics”: beliefs about economic policy that have been “killed” by evidence and analysis, but somehow, like “zombie ideas,” keep coming back.<sup>21</sup>

Thus, in 2001, despite inheriting the legacy of low unemployment and high productivity from the 1990s, incoming Labor Secretary Elaine Chao declared that America faced “a current skills gap and a long-term worker shortage,” and said that her “greatest challenge” was to “bridge the gap between these high-skilled positions that need qualified workers and the millions of Americans who need additional training to be able to fill them.”<sup>22</sup> In 2007, The *New* Commission on the Skills of the American Workforce, not even deigning to acknowledge the erroneous economic forecasts of their 1990 report, nevertheless once again lamented the impact of skills deficits on U.S. competitiveness in the global economy and on standards of living here, and placed particular blame on “education and training systems [that] were built for a different era.”<sup>23</sup>

And then came the Great Recession. Remarkably, even as the housing and financial sectors collapsed; even as GDP contracted by 8.9 percent in the 4<sup>th</sup> quarter of 2008 alone, signifying huge declines in consumer spending and business investment (aggregate demand); even as unemployment shot up from 4.4 percent in 2007 to over 10 percent at the trough of the recession; even in the wake of all these obviously cyclical trends, observers continued to invoke the zombie skills gap idea as the primary cause of high unemployment and a threat to future job growth. The president of the Federal Reserve Bank of Minneapolis, for example, in widely cited remarks, claimed: “Firms have jobs, but can’t find appropriate workers. The workers want to work, but can’t find appropriate jobs. There are many possible sources of mismatch –geography, skills, demography—and they are probably all at work.”<sup>24</sup>

On the face of it, attributing high unemployment in the wake of the Great Recession to a skills gap would seem absurd; after all, the vast majority of the currently unemployed are people who were working until quite recently.<sup>25</sup>

21 John Quiggin, *Zombie Economics: How Dead Ideas Still Walk Among Us* (Princeton: Princeton University Press, 2010), p. 5.

22 Lafer, *The Job Training Charade*, p. 22.

23 National Center on Education and the Economy, *Tough Choices or Tough Times* (2007), p.6.

24 Speech of Minneapolis Fed President Narayana Kocherlakota at Marquette, Michigan, 17 August 2010. Accessed at: [http://www.minneapolisfed.org/news\\_events/pres/speech\\_display.cfm?id=4525](http://www.minneapolisfed.org/news_events/pres/speech_display.cfm?id=4525)

25 Lawrence Mishel, Heidi Shierholz, and Kathryn Edwards, “Reasons for Skepticism About Structural Unemployment: Examining the Demand-Side Evidence,” EPI Briefing Paper #279, 22 September 2010,

As Stanford’s Lazear puts it: “The structure of a modern economy does not change that quickly.” The skills of the labor force, he notes, did not differ much between 2007 and 2009, when the unemployment rate more than doubled.<sup>26</sup> So it makes no sense to claim that high unemployment in 2009 and beyond was caused by a soaring number of “unqualified” workers. Indeed, according to Bureau of Labor Statistics (BLS) data, at the trough of the Great Recession, in April 2009, there were almost 7 unemployed workers for every job opening reported in the bureau’s JOLTS survey (“Job Openings and Labor Turnover Survey”), up from 1.65 on the eve of the recession. Thus, even if *every single unemployed worker were ideally trained and skilled and perfectly matched to existing openings*, 6 of every 7 unemployed workers would have remained jobless. Even at the end of 2012, the ratio of job-seekers to job openings was greater than 3-1 (see Figure 1); and this ratio understated the national “job gap” as it included only the officially unemployed among job-seekers, not discouraged workers or people holding part-time jobs because that was all they could land.

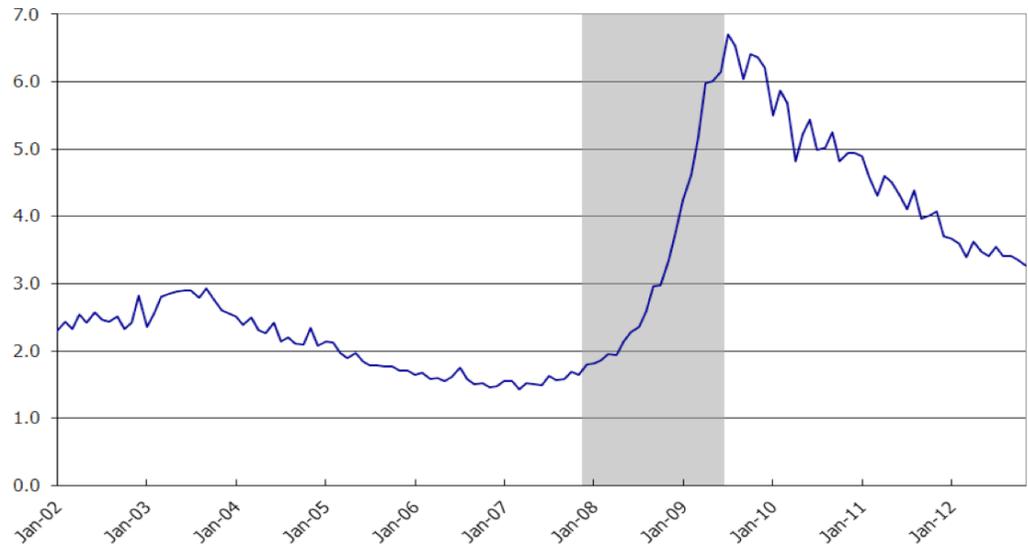
Under these circumstances, then, what evidence have proponents of the skills gap idea produced to support their diagnosis? For the most part, their case relies on a stream of anecdotes from employers who claim they have lots of openings but can’t find qualified workers. In fact, as we shall see, the belief that there is a skills gap in Wisconsin is based almost entirely on such anecdotes, many of them, as it happens, told by Tim Sullivan (author of the skills gap report) over the years, and then dutifully transcribed by credulous local journalists.

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p.5.  
26

Lazear, “There is No ‘Structural’ Unemployment Problem.” op. cit.

**Figure 1**  
**Ratio of Unemployed Persons Per Job Opening**



Source: Bureau of Labor Statistics

Beyond anecdotes, though, promoters of the skills gap conjecture point to surveys seemingly showing large numbers of employers who say they have problems hiring skilled workers, even amidst high unemployment. In 2011, DeLoitte and the Manufacturing Institute released a report, based on an online survey of 1,123 U.S. manufacturing executives, and found that 67 percent reported a moderate or severe shortage of skilled workers, translating in their estimate to 600,000 skilled manufacturing positions currently unfilled.<sup>27</sup> Similarly, a 2012 survey by Manpower found that 49 percent of U.S. employers said they “struggle to fill mission-critical positions.”<sup>28</sup>

However, as Peter Cappelli of the Wharton School at the University of Pennsylvania, one of the nation’s foremost Human Resources experts, has noted, these surveys are unreliable barometers of skills shortages. “Do studies like this show that the United States is among the world leaders in skills gaps or simply in employer whining and easy media acceptance of employer complaints?”<sup>29</sup> These surveys, for example, don’t reveal *why* employers

27 DeLoitte and the Manufacturing Institute, *Boiling Point? The skills gap in U.S. manufacturing* (2011), pp. 1-2. Accessed at: <http://www.themanufacturinginstitute.org/~media/A07730B2A798437D98501E798C2E13AA.ashx>

28 Manpower Group, Annual Talent Survey (June 1, 2012). Accessed at: [http://press.manpower.com/press/2012/may\\_employment\\_situation/](http://press.manpower.com/press/2012/may_employment_situation/)

29 Peter Cappelli, *Why Good People Can’t Get Jobs: The Skills Gap and What Companies Can Do About It?* (Philadelphia: Wharton Digital Press, 2012), Loc. 276.

are having difficulty: is it unrealistic hiring expectations or requirements, unwillingness to pay market-wages, or a genuine shortage of skills in the labor force? As Barbara Kiviat has written: “When firms post job openings at a certain wage and no one comes forward, we call this a skills mismatch. In a different universe, we might call it a pay mismatch.”<sup>30</sup> In addition, Cappelli reviewed the 2011 Manpower talent shortage survey, for example, and found that several of the “hardest-to-fill” jobs, such as sales rep, laborer, and office support, hardly fit the description of high-skill employment. “Overall,” he concludes, “this mix of jobs does not suggest any pattern with respect to skill requirements that would explain the skill shortage complaints.”<sup>31</sup> In fact, digging deeper into these surveys, both Cappelli and Kiviat note that it is not even clear that “technical skills” – what the skills gap proponents claim are lacking—are the main deficiencies noted by respondents for their difficulty in “finding talent.”<sup>32</sup>

Moreover, compounding the limited utility of reports such as Manpower’s or DeLoitte’s, other surveys of business executives reveal that skills shortages are far down on the list of factors inhibiting hiring. For example, in the 2012 survey of “small and independent business owners” by the National Federation of Independent Business (NFIB), only 6 percent of respondents identified “quality of labor” as the “single most important problem” facing them; by contrast, 20 percent identified “poor sales” as their most important problem, a finding that would seem to confirm that lagging aggregate demand in the economy (and concomitantly idle capacity of businesses), not the poor skills of the workforce, is the major factor impeding business growth and hiring in the wake of the Great Recession.<sup>33</sup>

In sum, rather than relying on anecdotes or opinion surveys, a much better way to assess whether there is, indeed, a skills gap is to look at actual labor market evidence. If there is, in fact, a skills gap, then there are several trends we should see in the data. First, as Dean Baker notes, if there is a serious issue of skills-based structural unemployment, then there should be some

30 Barbara Kiviat, “The Big Jobs Myth: American Workers Aren’t Ready for American Jobs,” *The Atlantic* (July 25, 2012). Accessed at: <http://www.theatlantic.com/business/archive/2012/07/the-big-jobs-myth-american-workers-arent-ready-for-american-jobs/260169/>

31 Ibid, Loc. 279.

32 Attendance, timeliness, work ethic, experience, and willingness to work for appropriate pay were cited as frequently as lack of “hard” skills. As Kiviat nicely summarizes: “If the American workforce doesn’t show up on time or think outside the box, that may be a problem – but probably not one solved by more math science, and technical training, the go-to [skills gap] remedies.” Kiviat, op. cit.

33 William C. Dunkelberg and Holly Wade, *NFIB Small Business Economic Trends* (Washington: July 2012), p 18. Only one-third of survey respondents indicated “few or no qualified applicants” for job openings, a much lower percentage than either the Manpower or DeLoitte surveys (p.9). Accessed at: <http://www.nfib.com/Portals/0/PDF/sbet/sbet201207.pdf>



major sector(s) of the economy where the number of job openings outstrips the number of available workers.<sup>34</sup> As Table 1 shows, this has not occurred in any major sector; on the contrary, *in every sector*, the number of unemployed through the end of 2012 vastly exceeded the number of job openings – in manufacturing, for example, by a ratio of over 4-to-1.<sup>35</sup> Put another way, even if every current manufacturing job vacancy were filled tomorrow, *three quarters* of manufacturing workers, most of them skilled enough to have been employed before the recession began, would remain unemployed. That’s not evidence of a skills gap; it’s an indicator of lagging job creation, a “jobs gap.” And again, we must note: inasmuch as the job-seeker number does not include involuntarily part-time or discouraged workers, this ratio actually *understates* the size of the jobs gap.

**Table 1:  
Ratio of Job Seekers (Unemployed) to Job Openings**

SECTOR	JANUARY 2001	JUNE 2009*	NOVEMBER 2012
Total NonFarm	1.12	6.33	3.45
Construction	4.54	25.82	14.53
Manufacturing	1.91	20.10	4.12
Wholesale/Retail Trade	1.15	5.38	2.83
Information	1.05**	9.13	1.87
Finance	0.68	3.64	2.34
Professional/Business	0.87	4.63	2.32

\*The “official” end of the recession according to NBER

\*\*February 2001

Source: Bureau of Labor Statistics

Second, skills-based structural unemployment should manifest itself in rising wages for qualified workers, especially in sectors supposedly having trouble finding workers. This is “Econ 101”: if the demand for something (in this case, allegedly, skilled labor) exceeds supply, price (or, in this case, wages – the price of labor) should go up. But there is little evidence that this is the case. Across the economy as a whole, there has been no increase in real (that is, inflation-adjusted) wages since 2000,<sup>36</sup> and that is equally true for educated/

34 See Dean Baker, “Can You Find the Structural Unemployment?” Center for Economic and Policy Research (2 February 2011). Accessed at: <http://www.cepr.net/index.php/blogs/cepr-blog/can-you-find-the-structural-unemployment>

35 Note that the job-seeker to openings ratio in manufacturing at the trough of the recession was over 20-1; and yet skills gap proselytizers like Tim Sullivan were still claiming there were plenty of vacancies --the problem was finding qualified workers.

36 Lawrence Mishel, Josh Bivens, Elise Gould, and Heidi Shierholz, *The State of Working America*:

skilled workers (those with bachelor's degrees or some college) as well as less educated/skilled workers (high school graduates and high school dropouts).<sup>37</sup> No general sectors of the economy report rates of real compensation growth equal to the rates of the late 1990s.<sup>38</sup> Although there are some occupations showing some real wage growth over the past decade, these isolated pockets do not warrant the conclusion that the economy is experiencing tight labor markets as a consequence of a generalized shortage of skilled workers.<sup>39</sup>

Third, a skills gap should increase average hours worked. If employers cannot fill their allegedly plentiful job vacancies with qualified employees, then we would expect these employers to compensate by squeezing more hours out of their existing, skilled workforce. However, as Figure 2 below shows, average weekly private-sector hours worked in 2012 remain *less* than before the recession began. Average weekly hours in manufacturing remain unchanged since 2000, while average weekly overtime hours in manufacturing have actually *declined* by 12.8 percent since 2000. This is not surprising, as the decline in American manufacturing since 2000 has been, by one analysis, “worse than the Great Depression.”<sup>40</sup> In short, trends in hours worked are inconsistent with the skills gap thesis, and quite congruent with the view that unemployment has surged as aggregate demand plummeted in the wake of the Great Recession.<sup>41</sup>

Finally, as we have seen, a central premise of skills gap argument since the 1980s has been that technical requirements of “21<sup>st</sup> century jobs” are outstripping qualifications of existing workforce, and this gap will widen considerably in the future. We have already examined how this argument cannot explain current high unemployment: as noted earlier, the skills requirements of American industry did not suddenly explode between 2007-09, eliminating the employability of 8.8 million Americans, across all industries,

12th Edition (Ithaca: Cornell University Press, 2012), p. 179.

37 Ibid, p. 217; U.S. Bureau of the Census, CPS Historical Time Series Tables: Educational Attainment. Table 3: Mean Earnings of Workers 18 Years and Over, by Educational Attainment, Race, Hispanic Origin, and Sex: 1975-2011. Accessed at: <http://www.census.gov/hhes/socdemo/education/data/cps/historical/index.html>

38 Baker, “Can You Find Structural Unemployment?” op. cit.

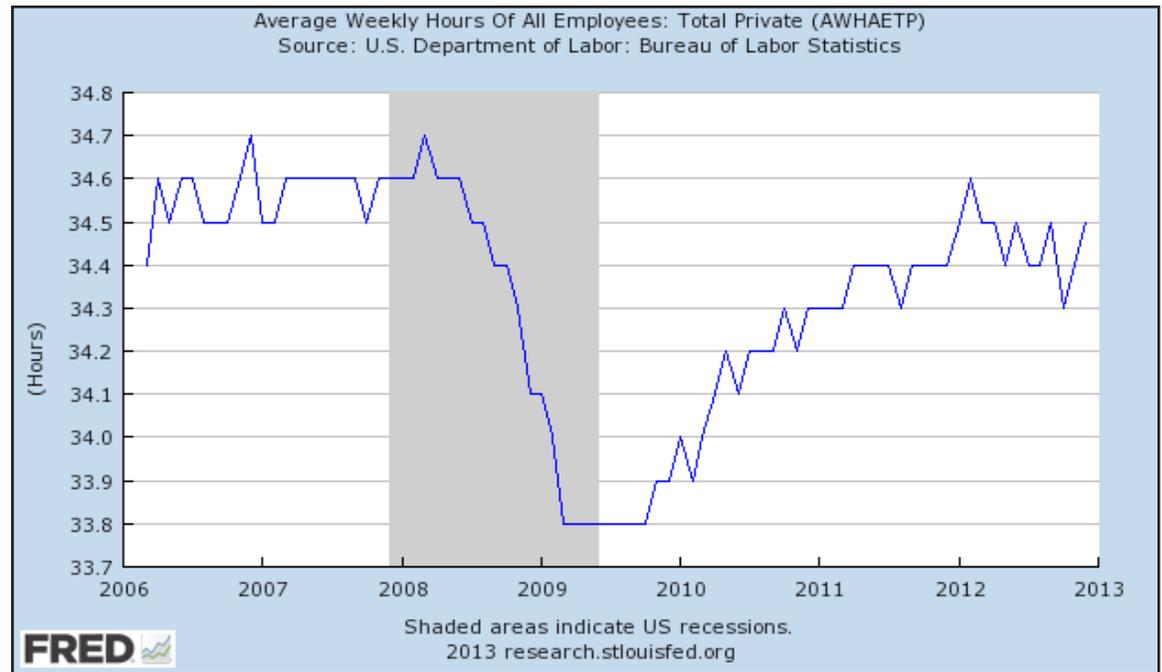
39 Dean Baker, “The Problem with Structural Unemployment in the U.S.,” Center for Economic and Policy Research Issue Brief, Washington, D.C., October 2012, p.4. Accessed at: <http://www.cepr.net/index.php/publications/reports/the-problem-with-structural-unemployment-in-the-us>

40 Robert D. Atkinson, et al, *Worse than the Great Depression: What Experts Are Missing About American Manufacturing Decline* (Washington, D.C.: ITIF, March 2012).

41 U.S. Bureau of the Census, *Statistical Abstract of the United States: 2012* (Washington, D.C.: GPO, 2012), p. 639; and Bureau of Labor Statistics, Table B-7. Average weekly hours and overtime of production and nonsupervisory employees. Accessed at: [www.bls.gov/ness.release/empsit.t23.htm](http://www.bls.gov/ness.release/empsit.t23.htm); and Steven Kroll, “The decline in work hours during the 2007-09 recession,” *Monthly Labor Review* (April 2011): 53-59. Accessed at: <http://www.bls.gov/opub/mlr/2011/04/art10full.pdf>

occupations, and skill levels.<sup>42</sup> But what about future jobs? Contrary to the dire forecasts of the skills gap Cassandras, there is little evidence of an imminent massive up-skilling of jobs; in fact, quite the opposite.

**Figure 2:**



According to the most recent projections by the BLS, 62.6 percent of new jobs and 69.2 percent of job openings due to growth and replacement needs between 2010-2020 are expected to be in jobs requiring a high school degree or less.<sup>43</sup> Of the 30 occupations projected to produce the most employment growth between 2010-2020, a high school diploma or less is sufficient to enter 23 of them; by contrast, a bachelor’s degree or higher is required in only four.<sup>44</sup> These include jobs such as retail salespersons, home health aides, office clerks, food preparation and serving workers, cashiers, janitors, and laborers – hardly the high-skill occupations of the skills gap mythology.<sup>45</sup> When all is said and done, the BLS forecasts a miniscule decline in the “high school degree or less”

<sup>42</sup> Christopher J. Goodman and Steven M. Mance, “Employment loss and the 2007-009 recession: an overview,” *Monthly Labor Review* (April 2011): 3-12. Accessed at: <http://www.bls.gov/opub/mlr/2011/04/art1full.pdf>

<sup>43</sup> C. Brett Lockard and Michael Wolf, “Occupational employment projections to 2020,” *Monthly Labor Review* (January 2012): 103.

<sup>44</sup> *Ibid.*: 99.

<sup>45</sup> *Ibid.* See also Richard Rothstein, “Shortage of Skills? A High-Tech Myth,” *The New York Times*, 27 October 1999.

share of all jobs, from 69.3 to 68.5 percent between 2010-2020. This is hardly the stuff of a rampant skills crisis.<sup>46</sup>

As MIT economist David Autor has documented, the U.S. labor market has been polarizing for three decades now, with a hollowing out of so-called “middle-skill” jobs and employment growth at the two ends of the skills spectrum. But since 1999, Autor’s research shows, low-skill (and, unfortunately, low-wage) jobs have dominated employment growth.<sup>47</sup> Indeed, we face, in some ways, the *opposite* of a skills shortage: a “crisis of bad jobs”<sup>48</sup> and a growing number of workers who are *overeducated* or *over-skilled* for the jobs they hold – in a word, *underemployed*. Duke University’s Stephen Vaisey, analyzing education and employment trends between 1972-2002, found that the educational attainment of U.S. workers increased much more rapidly during that period than the educational requirements of jobs and that “a substantial – and growing—number of American workers are overqualified for their jobs.”<sup>49</sup> Vaisey estimates that “overqualification” may have increased from 30 percent to almost 55 percent of the full-time working population.<sup>50</sup>

More recently, Richard Vedder and associates found that 48 percent of U.S. college graduates in 2010 were underemployed, holding jobs that the BLS suggests require less than a bachelor’s degree. In certain low-skill occupations, such as retail salespersons, waiters and waitresses, amusement and recreation attendants, and bartenders, between 15-25 percent of all employees held B.A. degrees or more.<sup>51</sup> The college-educated share of employment in these occupations, in which the skills required have not changed over the years, has grown significantly since 1970, a revealing indicator that our central labor market challenge is not a skills deficit but a shortage of “good jobs.” In 1970, fewer than 5 percent of retail salespersons held a college degree; by 2010, the share had jumped to 25 percent. Only 1 percent of taxi drivers in 1970

46 Many of these jobs, of course, are part time and do not pay family-supporting wages, but that’s an issue requiring changes in labor market rules (i.e. higher minimum wage, easier unionization) rather than focusing on a false skills gap.

47 David Autor, “The Polarization of Job Opportunities in the U.S. Labor Market,” (Washington, D.C.: Center for American Progress, April 2010), p. 3.

48 John Schmitt and Janelle Jones, “Bad Jobs on the Rise,” Center for Economic and Policy Research (September 2012). Accessed at: <http://www.cepr.net/index.php/publications/reports/bad-jobs-on-the-rise>.

49 Stephen Vaisey, “Education and Its Discontents: Overqualification in America, 1972-2002,” *Social Forces*, 85:2 (December 2006): 844, 855.

50 *Ibid*: 843.

51 Richard Vedder, Christopher Denhart, and Jonathan Robe, “Why are Recent College Graduates Underemployed? University Enrollments and Labor-Market Realities,” Center for College Affordability and Productivity, January 2013, pp. 12, 16. Accessed at: <http://centerforcollegeaffordability.org/uploads/Underemployed%20Report%202.pdf>

were college graduates, but by 2010 more than 15 percent were.<sup>52</sup> As Vedder, Denhart, and Robe argue: “The proportion of college graduates has grown faster than the demand for high-skilled jobs. Employers previously would not dream of explicitly or implicitly requiring a college degree for a bartender’s job, but they now have the luxury of imposing that requirement. The vast increase in the supply of college graduates has created a demand for them *that has nothing to do with the technical proficiencies for the job* acquired in college.” (Emphasis added).<sup>53</sup> In short, simply because an *oversupply* of educated workers permits employers to demand greater “skills” credentials, does not, in fact, mean that the skills requirements of work are explosively growing – let alone, that there is a shortage of skilled workers to fill these positions. As Catherine Rampell has recently reported, the share of advertised jobs requiring a bachelor’s degree in several occupations soared between 2007-2012, but many of these jobs –such as lab technicians or purchasing agents, for example— “require fewer technical skills, so it’s not clear why a college-level education would suddenly become more important – except maybe as a sorting device for narrowing down the deluge of resumé’s to the most qualified (or overqualified) applicants.”<sup>54</sup> Suffice it to say, “credential inflation” by employers who can afford to be picky in a slack labor market is hardly evidence that the economy faces a skills gap or skills crisis.



There is, in short, little labor market evidence – when we examine job openings, wages, hours, employment projections, or worker credentials— of a skills gap or structural unemployment. These findings are not unique. Paradoxically, even as politicians and business leaders incessantly opine that workers’ skill deficiencies are the root cause of unemployment, even as newspapers run anecdotal story after story on the subject, the recent research of top economists has consistently debunked the idea that a skills gap is

<sup>52</sup> Ibid, p. 24.

<sup>53</sup> Ibid, p.8. A recent Rutgers University study of the job placements of college students graduating during the Great Recession confirms the underemployment finding of the Vedder, Denhart, Robe study. Only 4 in 10 survey respondents, college graduates between 2006-2011, “reported that their job required a college degree.” See Charley Stone, Carl Van Horn, and Cliff Zukin, “Chasing the American Dream: Recent College Graduates and the Great Recession,” Rutgers University, John J. Heldrich Center for Workforce Development, May 2012, p. 23. Accessed at: [http://www.heldrich.rutgers.edu/sites/default/files/content/Chasing\\_American\\_Dream\\_Report.pdf](http://www.heldrich.rutgers.edu/sites/default/files/content/Chasing_American_Dream_Report.pdf)

<sup>54</sup> Catherine Rampell, “Degree Inflation? Jobs That Newly Require B.A.’s,” The New York Times, 4 December 2012. Accessed at: <http://economix.blogs.nytimes.com/2012/12/04/degree-inflation-jobs-that-newly-require-b-a-s/>

causing structural unemployment. Let us briefly review the conclusions of these major studies:

**The Brookings Institution:** A regression analysis by Jonathan Rothwell, using the “Help Wanted Online” (HWOL) database of the Conference Board, found that in the nation’s 100 largest metropolitan areas, an “education gap” (the difference between the educational requirements of job vacancies versus the educational attainment of the average working-age person) explains a trivial share in the rise in unemployment between 2006-2012; the overwhelmingly more important explanatory variables were “industry demand” and “housing prices” – in short, the classic “aggregate demand” deficiency of cyclical (as opposed to structural) unemployment.<sup>55</sup> Growth in industry demand and housing prices has brought down unemployment, and there is no evidence that metro areas taking longer to fill vacant jobs have higher unemployment rates.<sup>56</sup> Thus, Rothwell concludes: “Our analysis finds no evidence to support the popular idea that the recovery is slowed because employers can’t find workers with the necessary skills to fill job vacancies. In the 100 largest metro areas, roughly one-third of all jobs take more than one month to fill, but this ratio has not increased since 2006, is uncorrelated with unemployment rates, and was roughly the same in the 1960s, according to a 1966 study. Moreover, the ratio of job openings to new hires has been no different post-Great Recession than during the housing boom years. There just are not enough openings.”<sup>57</sup>

**The Federal Reserve Banks of Atlanta, Boston, and Chicago:** Economists at various branches of the Fed have looked at whether structural employment, based on a mismatch of available jobs and the skills of the unemployed, is a serious problem. Ghayad and Dickens, of the Boston Fed, examine whether there has been a shift in the “Beveridge Curve,” a measure of the empirical relationship between unemployment and job vacancies. Specifically, they examine whether, as a consequence of skills mismatches, unemployment remains high even as the number of job vacancies is increasing, which would imply a skills gap-induced shift in the historical “vacancy-employment

55 Jonathan Rothwell, “Education, Job openings, and Unemployment in Metropolitan America,” (Washington, D.C.: The Brookings Institution, August 2012), p. 17. Accessed at: <http://www.brookings.edu/~media/Research/Files/Papers/2012/8/29%20education%20gap%20rothwell/29%20education%20gap%20rothwell.pdf>

56 Ibid, pp. 17-18.

57 Jonathan Rothwell, “Minding the Metro Education Gap,” *Brookings: The Avenue Blog*, 29 August 2012. Accessed at: <http://www.brookings.edu/blogs/the-avenue/posts/2012/08/29-jobs-education-rothwell>

relationship” plotted on the Beveridge Curve. Their conclusion: no evidence that a shift in the Beveridge curve is being driven by a skills mismatch, since: a) the relationship between short-term unemployment and vacancies is unchanged; and b) for long-term unemployment, the vacancy-unemployment relationship was shifted in all industries, regardless of skill requirements.<sup>58</sup> Similarly, economists at the Chicago Fed found “little support for the skills mismatch hypothesis,” as “workers of *all skill levels* are all well below their peak employment levels prior to the recession.”<sup>59</sup> Finally, in a brief analysis based on a survey of businesses in their district, researchers at the Atlanta Fed found that while they received the usual survey responses about “hiring problems,” the overwhelming majority of respondents also said that they had *not* experienced hiring difficulty over the past 12 months and a majority indicated this was *not* constraining growth. “We’ll keep looking,” they conclude, “but so far the facts just don’t support skill gaps as the major source of our current labor market woes.”<sup>60</sup>

**Boston Consulting Group:** The BCG looked specifically at claims that the U.S. faces “a manufacturing skills crunch,” a deficit impeding the revival of the manufacturing sector. BCG examined wage data and job vacancy rates in the nation’s largest manufacturing metropolises, noting that “if demand exceeds supply, employers are likely to have to raise wages significantly to attract hard to find workers” – an “accepted indicator of skills shortages.” Their conclusion: These “shortages are very local rather than national. Only five of the nation’s 50 largest manufacturing centers – Baton Rouge, Charlotte, Miami, San Antonio, and Wichita—appear to have significant or severe gaps in workers such as welders, machinists, and industrial-machinery mechanics.”<sup>61</sup> As we shall explore later in this paper, this is precisely the conclusion we draw in our analysis of the myth of a welder shortage in Wisconsin.

58 Rand Ghayad and William Dickens, “What Can We Learn by Disaggregating the Unemployment-Vacancy Relationship,” Federal Reserve Bank of Boston, Public Policy Briefs, No. 12-3 (October 2012). Accessed at: <http://www.bostonfed.org/economic/ppb/2012/ppb123.pdf>

59 R. Jason Faberman and Bhashkar Mazumder, “Is there a skills mismatch in the labor market?” *Chicago Fed Letter*, Number 300, July 2012. Accessed at: [http://www.chicagofed.org/digital\\_assets/publications/chicago\\_fed\\_letter/2012/cfljuly2012\\_300.pdf](http://www.chicagofed.org/digital_assets/publications/chicago_fed_letter/2012/cfljuly2012_300.pdf)

60 David Altig and John Robertson, “The skills gap: still trying to separate myth from fact,” Federal Reserve Bank of Atlanta Macroblog, 7 June 2012. Accessed at: <http://macroblog.typepad.com/macroblog/2012/06/the-skills-gap-still-trying-to-separate-myth-from-fact.html>

61 Harold L. Sirkin, Michael Zinser, and Justin Rose, “Why a Skills Gap is Unlikely to Constrain a U.S. Manufacturing Resurgence,” *BCG Perspectives*, 7 November 2012. Accessed at: [https://www.bcgperspectives.com/content/commentary/globalization\\_management\\_two\\_speed\\_economy\\_skills\\_gap\\_unlikely\\_constrain\\_manufacturing\\_resurgence/](https://www.bcgperspectives.com/content/commentary/globalization_management_two_speed_economy_skills_gap_unlikely_constrain_manufacturing_resurgence/)

**The Roosevelt Institute:** Arjun Jayadev and Mike Konczal produced a clever analysis of the skills gap, by focusing on the “underemployed” in the labor market: individuals seeking full-time employment, but working part-time because those were the only jobs available. As Jayadev and Konczal document, the underemployment rate increased dramatically in the wake of the Great Recession, more than doubling in some sectors by 2010 in comparison to the 2000-2007 average. By definition, these are employees who have the skills needed for their jobs, so if firms were truly unable to find qualified workers, the underemployment rate should, in fact, be declining, as firms add hours to their skilled, but underemployed, workers. “These employees have the skills to work the job, but there isn’t enough demand for full-time employment,” note Jayadev and Konczal.<sup>62</sup> Capacity underutilization due to the lack of aggregate demand, not a skills mismatch, best explains persistent underemployment. “The ratio of underemployed has skyrocketed across all sectors and across all occupations, numbers that call for more action to increase aggregate demand rather than focus on skills and structural changes.”<sup>63</sup>

**Center for Economic and Policy Research:** The CEPR has issued a number of research papers dealing with structural unemployment, the quality of jobs, and the skills gap. In a 2012 paper, CEPR co-director Dean Baker examined, between 2006-2012, three sectors –health care, architecture and engineering, and software publishing—“that are seeing rising employment or where we might expect that skills command a premium.”<sup>64</sup> In none of these sectors is there evidence of a shortage of qualified workers, either in rising real wages or average weekly hours. Nor does Baker’s sectoral analysis of job openings data reveal trends consistent with skills shortages. His conclusion: “While many in national policy debates have been anxious to put forward the skills mismatch argument, it is difficult to find evidence that supports this position. The evidence is overwhelmingly consistent with the simple view that the collapse of the housing bubble has led to a large shortfall in demand. In this context, measures that focus on improving skills will have little effect on

<sup>62</sup> Unless one wants to make the bizarre argument that firms have plenty of vacancies, but are unwilling to extend the hours of underemployed workers because they only have the skills to work 10, or 20, or 30 hours of a job, but not full time. See Arjun Jayadev and Mike Konczal, “The Stagnating Labor Market,” The Roosevelt Institute, 19 September 2010, p. 7. Accessed at: [http://www.nextnewdeal.net/wp-content/uploads/2010/09/stagnant\\_labor\\_market.pdf](http://www.nextnewdeal.net/wp-content/uploads/2010/09/stagnant_labor_market.pdf)

<sup>63</sup> Ibid, p 1.

<sup>64</sup> Dean Baker, “The Problem with Structural Unemployment,” op. cit., p. 4.

overall employment.”<sup>65</sup>

In another 2012 CEPR paper noted earlier, John Schmitt and Janelle Jones document the growth in the share of “bad jobs” in the U.S. economy since the late 1970s. As they note, the surge of low-wage, low-benefit jobs is inconsistent with a skills gap hypothesis. “Between 1979 and 2010, the share of workers with bad jobs, by our definition, increased for workers *at every education level*...[which is] hard to reconcile with the view that a higher reward for education and related skills is driving poor labor-market outcomes.”<sup>66</sup>

**Economic Policy Institute:** Economists at the EPI have been important contributors to the analysis of the skills gap argument for twenty years. Two projects should be highlighted. In 2005, Michael Handel analyzed the pre-Great Recession data on the skills gap, and concluded: 1) There was little evidence of an acceleration of skills requirements in jobs; and 2) The economic growth of the 1990s constituted a ringing affirmation of the role of macroeconomic policy in job growth and a refutation of the claims that school quality and skills shortfalls were a barrier to job creation.<sup>67</sup> Moreover, Handel also identified an intriguing contradiction in the skills gap arguments of business executives: If skills are supposedly an increasingly important consideration for businesses, including manufacturing, why are companies like auto manufacturers and others choosing to locate plants in places like rural South Carolina, Tennessee, and Alabama – “states with among the lowest test scores and levels of educational investment” (to say nothing of places like Mexico, not especially known for their workforce development policies)?<sup>68</sup> CEOs apparently like to focus attention on a fake skills gap rather than the role of management strategy in job creation, a subject to which we’ll return in discussing the skills gap issue in Wisconsin.

Between 2010-12, Lawrence Mishel and associates released several papers critically analyzing the skills gap and structural unemployment arguments.<sup>69</sup> Similar to arguments already noted, Mishel et al conclude: “Data by industry, occupation, and education all show a broad based drop in demand for workers

<sup>65</sup> Ibid, p. 6.

<sup>66</sup> Schmitt and Jones, “Bad Jobs on the Rise,” p. 17.

<sup>67</sup> Michael Handel, *Worker Skills and Job Requirements: Is There a Mismatch?* (Washington, D.C.: The Economic Policy Institute, 2005).

<sup>68</sup> Ibid, p. 55.

<sup>69</sup> See, in particular, Lawrence Mishel, “Education is Not the Cure for High Unemployment or for Income Inequality,” EPI Briefing Paper #286, 10 January 2011; and Mishel et al, *The State of Working America: 2012*, pp. 363-367.

compared with before the recession started. This shows that the unemployment crisis in the aftermath of the Great Recession is primarily cyclical (caused by a drop in aggregate demand), not structural (in other words, it is not caused by employers having difficulty finding the workers they need).<sup>70</sup>

**Academic Economists:** Recent papers by several university-based economists have also found no evidence to support a skills gap analysis of the labor market. As noted earlier, Edward Lazear of Stanford University reviewed unemployment trends and vacancy data, by educational level, age, industry, and occupation and concluded: “The unemployment rate is higher now, not because skills available are less in line with skills desired than they were in the past, but because unemployment rates are higher generally across all industries and occupations.”<sup>71</sup> Jesse Rothstein of the University of California-Berkeley examined wage trends and vacancy data, and concluded “there is no sign in the data that employers with jobs to fill are having trouble filling them, except perhaps in a few isolated and small submarkets such as resource extraction” -- an identical finding to the BCG report noted above.<sup>72</sup> Peter A. Diamond of MIT, perhaps the country’s most distinguished labor economist and recent Nobel Laureate in Economics, noted in his Nobel prize lecture, that “when the labor market is tight and firms have trouble finding workers, they reach out to places they have not looked before and extend training in order to find workers who can fill their needs,” but there is little evidence that is happening and thus it is “hard to make a case for structural mismatch being a problem today.”<sup>73</sup>

Finally, Peter Cappelli of the University of Pennsylvania has analyzed the skills gap in an e-book on the subject (as well as several widely discussed columns in *The Wall Street Journal*), and his conclusion is that there is little evidence that a skills mismatch is to blame for high unemployment. Cappelli reviews the key weaknesses in the skills gap idea such as the surplus of job-seekers compared to job vacancies, as well as the quaint reality that “unwillingness to pay the market-wage is not the same thing as having a skills gap.” But he also focuses on an issue rarely examined in the skills gap anecdotes: employer behavior. Cappelli notes the decline of the amount of training offered by employers over the past 30 years, a curious strategy if,

70 Mishel et al, *State of Working America: 2012*, pp. 366-67

71 Edward P. Lazear and James R. Spletzer, “The United States Labor Market: Status Quo or A New Normal,” 22 July 2012, p. 24. Accessed at: <http://www.kansascityfed.org/publicat/sympos/2012/el-js.pdf>

72 Jesse Rothstein, “The Labor Market Four Years Into the Crisis: Assessing Structural Explanations,” March 2012, p. 28. Accessed at: [http://ceg.berkeley.edu/research\\_28\\_1662147840.pdf](http://ceg.berkeley.edu/research_28_1662147840.pdf)

73 Peter A. Diamond, “Unemployment, Vacancies, Wages,” Nobel Prize Lecture, 8 December 2010, p. 336. Accessed at: [http://www.nobelprize.org/nobel\\_prizes/economics/laureates/2010/diamond-lecture.pdf](http://www.nobelprize.org/nobel_prizes/economics/laureates/2010/diamond-lecture.pdf)

indeed, employers face a skills gap. In addition, he questions whether the skills gap trope is merely an indication that HR departments and procedures are not functioning effectively, whether employer’s expectations are unrealistic or their search processes flawed, or if their hiring problems involve other factors, such as unpleasant working conditions, unwillingness to provide adequate training or reluctance to pay market-clearing wages.”<sup>74</sup>



To summarize: National data on wages, hours, job vacancies, and employment projections provide no evidence that a skills gap has caused high unemployment in the U.S. as a whole — either before or after the Great Recession. This finding is consistent with the conclusions of a daunting array of research and analysis on the subject. As we have seen, these include: Studies by: a) Scholars from such top universities as Duke, Berkeley, Penn, Stanford, MIT, and UW-Madison; b) Economists from the Brookings Institution, the Roosevelt Institute, the Center for Economic and Policy Research, and the Economic Policy Institute; c) Economists at the Federal Reserve Banks of Atlanta, Boston, and Chicago; and d) Consultant-economists such as the Boston Consulting Group. In addition, articles and commentary by: a) Two recent Nobel Laureates in Economics (Krugman and Diamond); and b) Two former heads of the President’s Council of Economic Advisers (Tyson and Lazear), thoroughly reject the skills gap or structural unemployment as explanations for our underperforming labor market.

The extensiveness of the economics research debunking the skills gap idea is imposing. Yet —and this is extraordinary— none of this research was taken into account, let alone “refuted,” in either of the influential Wisconsin skills gap documents: the universally praised and self-described “comprehensive” Sullivan report, or, for that matter, the *Be Bold 2* report.<sup>75</sup> Apparently, for the peddlers of the skills gap idea, the existence of a skills mismatch is self-evidently true; there is no need to deal with confuting evidence or the vast number of expert studies that have thoroughly demolished the idea. As we shall see, however,

<sup>74</sup> Cappelli, *Why Good People Can’t Get Jobs*, op. cit, loc 255. See also, Cappelli, “Why Companies Aren’t Getting the Employees They Need,” *The Wall Street Journal*, 24 October 2011; and Cappelli, “Why Companies Aren’t Getting the employees They Need: The Author Follows Up,” *The Wall Street Journal*, 26 October 2011.

<sup>75</sup> This research lacuna is particularly ironic, as Sullivan told reporters that his research group “left no stone unturned.” “We looked at everything,” he told *The Business Journal of Milwaukee*. Well, apparently not everything, -- like major academic research on the subject. See Jeff Engel, “Sullivan: Skills gap report research left no stone unturned,” *The Business Journal of Milwaukee*, 21 September 2012.

in the following section of this paper, the empirical evidence is as abundant in Wisconsin as it is nationally: the skills gap is, in fact, a fake skills gap. Wisconsin's (and Milwaukee's) labor market problems lay elsewhere.

## II. The Skills Gap in Wisconsin: Labor Market Evidence

Once again, the best way to assess whether a skills gap is causing structural unemployment in Wisconsin is to look at labor market indicators: job vacancies, wages, hours, occupational projections, and the educational attainment of the workforce.

**Job seekers vs. Job vacancies: A jobs shortage, not a skills gap:** As we examined earlier, the JOLTS “job openings” data, gathered by the BLS, reveal how much the unemployment crisis nationally is essentially a matter of a “job gap”: there simply aren't enough of jobs for all those looking for work. However, the JOLTS data are only reported at the national level, so state-level “job gaps” must be measured using other, somewhat more flawed, sources. There are, however, two indicators that suggest the degree to which Wisconsin, and its largest urban labor market in Milwaukee, suffer from, above all a shortage of jobs. First, the Conference Board produces a monthly job vacancy report, “Help Wanted Online” (HWOL), which, as the title suggests, measures the number of advertised online jobs across the country. Although not as comprehensive as the JOLTS survey, and limited solely to vacancies posted online, the HWOL report, as it happens, tracks relatively closely the JOLTS numbers at the national level. And, for our purposes, the HWOL data are especially useful since they are reported at the state and metro area levels.<sup>76</sup>

The most recent HWOL (December 2012) data show slightly fewer than two unemployed workers for every online job ad in Wisconsin. As has been the case nationally, this job-seeker to job-vacancies ratio has been coming down steadily as the labor market has improved since the end of the recession (it was well over three to one at the end of 2009), but remains far from a ratio that would suggest a labor shortage, and remains higher than before the recession. By contrast, in North Dakota, a state that is indisputably facing a tight labor market as a result of its oil boom, the unemployed-to-job advertisement ratio in December 2012 was 0.67 (compared to Wisconsin's 1.86). And let's remember: the official unemployment rate *understates* the number of working-age adults

<sup>76</sup> See the Conference Board, Help Wanted OnLine (HWOL). Accessed at: <http://www.conference-board.org/data/helpwantedOnline.cfm>



out of work – it doesn’t include either discouraged workers, who have stopped actively looking for work and are not included in the labor force statistics, or those who are involuntarily working part time because full-time employment is not available. If those individuals are included in a more expanded concept of joblessness, which the BLS does nationally with its “U-6” unemployment rate,<sup>77</sup> then the “available workers to job vacancy” ratio in Wisconsin is probably closer to 2.5 But whichever measure of joblessness we use, the HWOL data suggest that in Wisconsin, as in the nation as a whole, there is nothing like an adequate number of job openings (demand) for the number of people out of work in the state (supply). Joblessness is high in Wisconsin because there aren’t enough jobs; just a few short years ago, in a state supposedly suffering from a skills gap, the vast majority of the currently jobless here were gainfully employed.<sup>78</sup> It was the Great Recession that caused unemployment to surge, not an imaginary skill gap.

Tables 2 and 3 present another angle on the “job gap” here. For the past decade, the UWM Employment and Training Institute has conducted an occasional survey<sup>79</sup> of job vacancies in metro Milwaukee; thus, for certain years, we can compare the number of job-seekers (narrowly construed as the officially unemployed, or more broadly measured to include working-age adults “marginally attached” to the labor market) to the number of job openings in the region. These data make clear that the premise underpinning the skills gap idea, that “the jobs are already here” and that all we need is a more skilled workforce, is fallacious.

**Table 2:  
Milwaukee’s Job Shortage: Minimum Estimates**

YEAR	UNEMPLOYED	FULL-TIME OPENINGS	JOB GAP	RATIO UNEMPLOYED/VACANCY
2000	35,591	24,242	-11,349	1.3
2006	48,826	12,381	-36,445	3.9
2009	75,571	6,003	-69,568	12.6

Sources: BLS; U.S. Bureau of Census; UWM Employment and Training Institute

<sup>77</sup> “U-3” in the official unemployment rate reported by BLS. “U-6” is their broader measure, which includes discouraged workers and those working part-time for “economic reasons” but desire full-time employment. Typically, the U-6 measure is 60-70% higher than the official unemployment rate, so applying that ratio conservatively to the Conference Board’s (worker supply/job vacancy ratio results in the figure above.

<sup>78</sup> Wisconsin’s unemployment rate doubled in less than 18 months, from 4.6 percent on the eve of the Great Recession, to 9.4 percent in April 2009. Did all those newly unemployed workers suddenly lose their skills?

<sup>79</sup> See University of Wisconsin-Milwaukee Employment and Training Institute, “Job Vacancy Surveys.” Accessed at: <http://www4.uwm.edu/eti/pages/surveys/jos.htm>



**Table 3:  
Milwaukee’s Job Shortage: Broader Estimates**

YEAR	UNEMPLOYED + “MARGIN-ALLY ATTACHED”	FULL-TIME OPENINGS	JOB GAP	RATIO JOBLESS/VACANCY
2000	50,612	24,242	-26,370	2.1
2006	64,141	12,381	-51,760	5.2
2009	92,751	6,003	-86,748	15.4

Sources: BLS; U.S. Bureau of Census; UWM Employment and Training Institute

The most recent ETI vacancy data are from 2009, the official end of the recession, so the job gap has no doubt since closed. Nevertheless, these data make clear how peripheral a putative skills gap is as an explanation for Milwaukee’s employment woes. Take 2006, for example – before the Great Recession began. Even if every single jobless Milwaukeean were impeccably skilled and all openings were immediately filled, the job gap then would have meant that 3 out of every 4 unemployed would have remained without a job. By the broader measure of joblessness, 4 out of every 5 jobless would have remained without work, no matter their skills.

**Wages and Hours:** As noted earlier, if there is a shortage of skilled labor in Wisconsin, there should be some evidence of it in wage trends. This is basic economics: if a good or a commodity (iPads, gasoline, or workers) is in high demand or short supply, the price goes up (or, in the case of workers, their wage – the price of labor). Imagine how seriously someone would be taken who claimed: we’re suffering a severe shortage of gasoline in Wisconsin, and you know how you can tell? The price of gasoline is going down!

Yet, that is precisely the argument that promoters of the skills gap idea in Wisconsin are peddling. As Table 4 below shows, in states with a chronic labor shortage over the past decade, such as North Dakota and Wyoming, real median hourly wages for all workers have jumped by 11.4 percent and 16.4 percent, respectively; in Wisconsin, real wages fell by -1.1 percent. The same story applies for production occupations. In North Dakota (+8.1 percent) and Wyoming (+25.4 percent), real wages for production workers have increased dramatically over the past decade, reflecting the shortage of skilled workers in those states’ booming energy sectors; by contrast, real wages in production



occupations in Wisconsin’s contracting manufacturing sector fell by 4.6 percent over the past decade.<sup>80</sup>

**Table 4:  
Real Wage Growth in Selected States: 2001-2011**

STATE	% REAL WAGE CHANGE, ALL WORKERS	% REAL WAGE CHANGE, PRODUCTION JOBS
Wisconsin	-1.1	-4.6
Wyoming	+16.4	+25.4
North Dakota	+11.8	+8.1
Texas	+0.7	+0.8
United States	+0.3	-1.7

Source: BLS, Occupational Employment Statistics

If Wisconsin were experiencing labor shortages, we would expect to find wages here to be not only rising, but increasing more rapidly than wages nationally. This also is not the case, as Table 4 shows: for all workers as well as production occupations, Wisconsin’s real wage “growth” lags the national median. Moreover, this Wisconsin wage lag is apparent across the board: real wage growth in Wisconsin trails the national rate in 17 of the 21 major nonfarm occupational groups (major SOCs).<sup>81</sup> Looking at a more granular level – the 101 smaller categories within production occupations, for example—real wage growth in Wisconsin between 2001-2011 trails the national median in over 60 percent of the job classifications. Even in the “skill clusters” in which the *Be Bold 2* report alleges that a skills shortage either currently exists or will occur in Wisconsin – a questionable analysis in any event given confuting job projection data we’ll examine shortly—wage data give little support to the skills gap trope. *Be Bold 2* even acknowledges that in their ostensible “skill clusters,” median wages in Wisconsin lag far behind national medians.<sup>82</sup> In several occupations that are part of the “skill clusters” where *Be Bold 2* warns of a shortage, such as mechanical engineering and water technology,<sup>83</sup> real wages have been stagnant or actually declined in Wisconsin over the past decade.

To be sure, there are occupations in Wisconsin in which real wages have grown during the first decade of the 2000s, many of them concentrated in the

80 These data are calculated from the Bureau of Labor Statistics, “Occupational Employment Statistics.” Accessed at: [http://www.bls.gov/oes/current/oes\\_nat.htm](http://www.bls.gov/oes/current/oes_nat.htm)  
 81 SOC is “Standard Occupational Classification” used by the BLS to categorize jobs.  
 82 The one exception is “metal manufacturing.” See *Be Bold 2*, p. 68.  
 83 Measured by wages in core occupations of hydrologists and civil engineers

health care sector. This is a sector, of course, in which there are acknowledged labor shortages nationally, and in which real wages are rising across the country. But the exception proves the rule: there is a tight labor market for health care practitioners and technicians (the unemployment rate is under 2 percent in the sector), and real wages are rising as employers attempt to attract workers. In most other sectors, particularly in manufacturing (where skills gap promoters claim there is a labor shortage), unemployment remains high and real wages are stagnant or declining – hardly indicators of a tight labor market in which employers are frantically seeking to attract workers.

In short, there is no indication from wage trend data of a generalized skilled labor shortage in Wisconsin. To again quote Peter Cappelli: Unwillingness to pay market-wages for labor “is not the same thing as a labor shortage, let alone a skills shortage.”

Similarly, data on the “average weekly hours” of Wisconsin workers give no indication that employers here are piling on the overtime and squeezing more work hours out of their current workforce, to compensate for a skilled labor shortage. Although the average weekly hours of production employees, for example, have been climbing in the state since the end of the recession, at the end of 2012 they were still below where they were in 2006, and 4.3 percent lower than “average weekly hours” at the end of 2000. By contrast, in booming North Dakota, facing an undeniably tight labor market, the average employee was working *more* hours at the end of 2012 than before the Great Recession, and average weekly hours have increased in North Dakota by 4.5 percent since 2000.<sup>84</sup>

**Occupational Projections:** Given the bombardment of anecdotes in the media regarding skills shortages, as well as spurious job projections such as those in *Be Bold 2*, the casual observer might be excused for thinking that virtually all of the jobs projected to open up in Wisconsin over the coming years will require high skills and considerably more education and training, especially in STEM<sup>85</sup> fields, than possessed by Wisconsin workers. As Tim

<sup>84</sup> Calculated from Bureau of Labor Statistics, “State and Area Hours and Earnings.” Current data accessed at: <http://www.bls.gov/sae/eetables/taled4.pdf>. Historical data accessed from the federal Reserve Bank of St. Louis: <http://fraser.stlouisfed.org/publication/?pid=60>

<sup>85</sup> STEM, for the uninitiated, is an acronym for “Science, Technology, Engineering, and Mathematics.” There is a widespread belief, a cousin of the larger skills gap idea, that the U.S., including Wisconsin, is suffering from a shortage of STEM-trained workers, especially engineers. Research has shown, however, that the “STEM shortage” is also a myth. For a short summary, see Beryl Lieff Benderly, “What Scientist shortage?” *Columbia Journalism Review*, Reports, January/February 2012. Accessed at: [http://www.cjr.org/reports/what\\_scientist\\_shortage.php?page=all](http://www.cjr.org/reports/what_scientist_shortage.php?page=all). The most comprehensive debunking of the STEM myth, analyzing test scores, college enrollment patterns, and labor market trends, is B. Lindsay Lowell and Hal

Sheehy, head of the MMAC glibly puts it: “No longer does a good alarm clock and a strong back guarantee you a job into the future.”<sup>86</sup>

But the state’s own occupational projections, like the BLS national projections discussed earlier, thoroughly refute doomsday scenarios that the skills requirements of future jobs will vastly outstrip the skills and education of Wisconsin workers. Of the 25 jobs projected by the Wisconsin Department of Workforce Development (through “WORKnet”) to provide the largest number of job openings in the state between 2010-2020, *22 of them require a high school degree or less and almost all require short-term, on-the-job training.*<sup>87</sup> All told, of the estimated 103,400 total annual openings projected to occur through 2020 –through job growth and worker replacements —over 70 percent require a high school diploma or less, and 64 percent require short-to-moderate term on the job training, by way of education and training requirements. This trend does not appear to be a harbinger of a widening skills gap: the jobs of the future do not appear to be beyond the current educational attainment of the Wisconsin workforce.

Table 5 lists the 15 jobs projected to provide the most total openings in Wisconsin through 2020. Jobs as a cashier, for example, will provide an estimated 3,400 openings annually; retail salesperson openings are projected to total 3,065 annually. Contrast those to the small number of projected annual openings in some of jobs proclaimed by the Sullivan report and *Be Bold 2* to be at the epicenter of the “skills gap”: biomedical engineers (13 openings annually); civil engineers (158 annual openings); mechanical engineers (248 annual openings); and hydrologists (13 openings annually). (We’ll discuss in detail the skills gap myth of Tim Sullivan’s welders shortly). Clearly, in Wisconsin as is the case nationally, low-skill jobs are projected to dominate employment growth in the near-term; the labor market challenge is to improve the quality and pay of these jobs. But, as is the case nationally, the proliferation of “bad jobs” undercuts the notion that a “skills gap” is at the root of our employment difficulties.

In fact, Wisconsin suffers from the *opposite* of a skills gap. The true challenge here is of an economy that generates too few jobs, and a labor

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Salzman, “Into the Eye of the Storm: Assessing the Evidence on Science and engineering Education, Quality, and Workforce Demand,” The Urban Institute, October 2007. Accessed at: [http://www.urban.org/UploadedPDF/411562\\_salzman\\_Science.pdf](http://www.urban.org/UploadedPDF/411562_salzman_Science.pdf)

86 Quoted in Site Selection, “Mandates and Manpower,” January 2007. Accessed at: <http://www.siteselection.com/issues/2007/jan/american/pg04.htm>

87 WORKnet job projections accessed at: <http://worknet.wisconsin.gov/worknet/downloads.aspx?menuselection=da&pgm=occprj>



market that is characterized by the *underemployment* and *over-qualification* of skilled and educated workers. The “jobs gap” has created a skills mismatch, all right, but it’s the inverse of the one commonly put forward: it is a mismatch of too many highly educated workers chasing too few “good jobs” in the Wisconsin and Milwaukee labor markets.

**Table 5:  
15 Occupations With the Largest Projected Job Growth  
Wisconsin: 2010-2020**

OCCUPATION	NUMBER OF OPENINGS	EDUCATION/SKILL REQUIRED
Cashiers	34,010	<High school degree
Food Preparation/Serving	32,500	<High school degree
Retail Salespersons	30,650	<High school degree
Waiters and Waitresses	30,220	<High school degree
Registered Nurses	24,230	Associate Degree
Customer Service Reps	21,940	High school degree
Office Clerks	21,710	High school degree
Laborers	20,690	<High school degree
Truck Drivers	18,530	High School degree
Bartenders	14,950	<High school degree
Personal Aides	13,940	<High school degree
Janitors	13,380	<High school degree
Sales Representatives	11,280	High school degree
Nursing Aides	11,190	Post-secondary work
Teachers	9,730	Bachelor’s Degree

Source: Wisconsin WORKnet

Tables 6-8 and Figure 3 below reveal the stunning extent to which educated and skilled workers in Wisconsin and in Milwaukee are underemployed: holding jobs whose skill requirements, as identified by BLS, are below their educational attainment. In metro Milwaukee, a scarcity of jobs has resulted in a labor market in which college graduates constitute 25 percent of the region’s retail salespersons and 21.6 percent of the region’s bartenders (both jobs requiring less than a *high school* degree). At the state level, over 60 percent of parking lot attendants have had some post-secondary education, as have half of Wisconsin’s waiters and waitresses – both occupations, again, requiring “less than high school” credentials.

In Milwaukee, notwithstanding the constant refrain over the past decade

that a “skills gap” is widening, the stark reality is that labor market trends are moving in the opposite direction. *Underemployment* and *over-qualification* have been rising as educated workers in the region have increasing difficulty finding jobs commensurate with their skills or credentials. As Table 8 and Figure 3 show, the percentage of bartenders with bachelor’s degrees more than doubled over the past decade in Milwaukee County; the percentage of college-educated cashiers and stock clerks nearly doubled; and the percentage of over-credentialed retail salespersons increased by 50 percent. By 2010, an astounding 77.6 percent of Milwaukee bartenders had attended college, earned an associate’s degree, or held a college diploma; 64.0 of all retail salespersons were similarly over-qualified and underemployed.

**Table 6:**  
**Skills Gap or Crisis of Underemployment? Wisconsin**  
 (educational attainment of persons in jobs requiring  
 less than a high school diploma, 2010)

JOB	% WITH SOME COLLEGE OR ASSOCIATE DEGREE	% WITH BA OR MORE	TOTAL % POST-SECONDARY ED
Parking Lot Attendants	56.1	4.1	60.2
Retail Salespersons	40.8	19.3	60.1
Bartenders	43.9	12.7	56.6
Waiters and Waitresses	41.9	7.0	48.9
Counter and Retail Clerks	37.2	10.5	47.7
Stock Clerks	33.1	6.9	40.0
Cashiers	33.1	6.1	39.2
Ushers, Lobby Attendants and Ticket Takers	23.0	14.3	37.3

Source: U.S. Bureau of the Census, EEO Tabulations, 2006-2010

**Table 7:**

**Skills Gap or Crisis of Underemployment? Milwaukee**  
 (educational attainment of persons in jobs requiring  
 less than a high school diploma, 2010)

<b>JOB</b>	<b>% WITH SOME COLLEGE OR ASSOCIATE DEGREE</b>	<b>% WITH BA OR MORE</b>	<b>TOTAL % POST- SECONDARY ED</b>
Bartenders	46.9	21.6	68.5
Retail Salespersons	37.9	25.0	62.9
Waiters and Waitresses	45.7	9.9	55.6
Parking Lot Attendants	50.0	1.6	51.6
Counter and Retail Clerks	30.6	14.8	45.4
Cashiers	33.6	7.5	41.1
Stock Clerks	31.4	9.1	40.5
Ushers, Lobby Attendants and Ticket Takers	25.0	6.3	31.3

Source: U.S. Bureau of the Census, EEO Tabulations, 2006-10

**Table 8:**

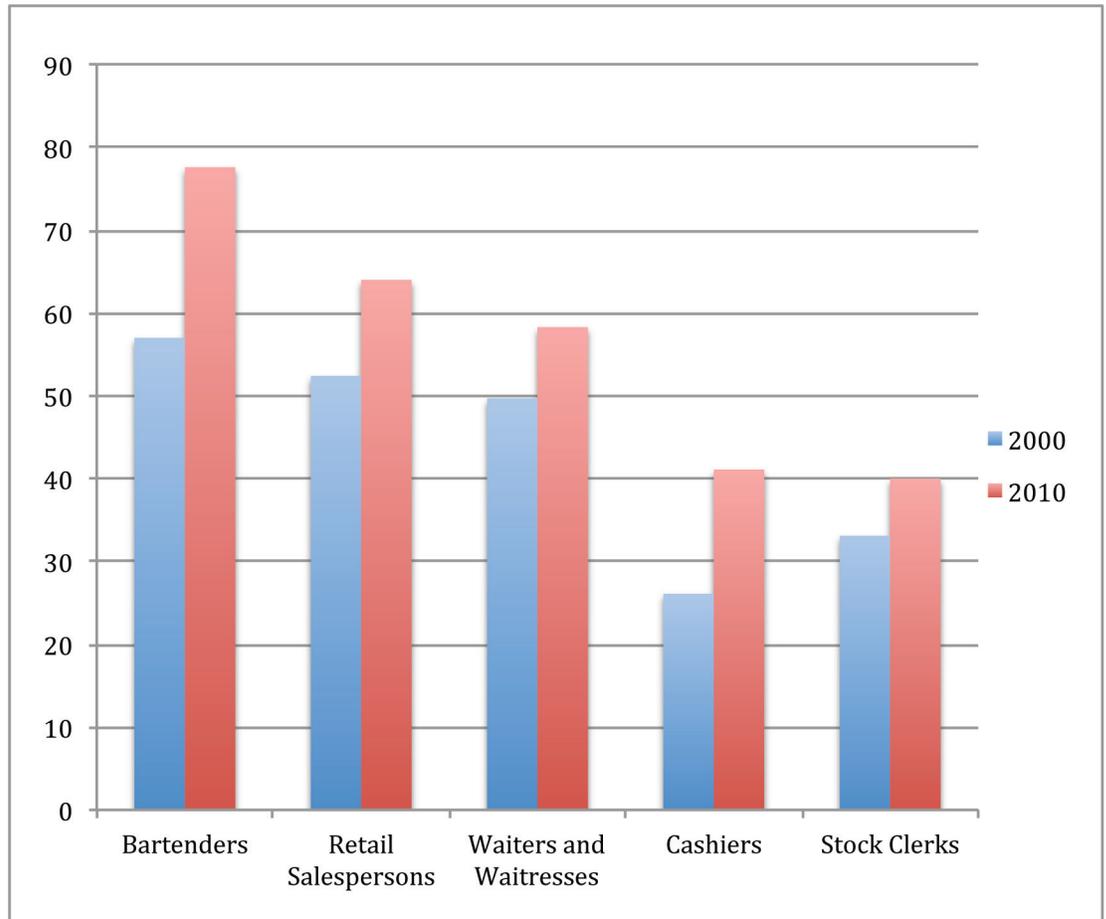
**Growing Underemployment in Milwaukee County: 2000-2010**

**College Graduates in Low-Skill Occupations**  
 (percent of jobholders in low-skill occupations holding  
 B.A. degrees or graduate/professional degrees)

<b>JOB</b>	<b>2000</b>	<b>2010</b>
Bartenders	11.9	25.7
Retail Salespersons	16.7	24.3
Waiters and Waitresses	8.6	10.0
Cashiers	4.5	7.5
Stock Clerks	5.1	9.4

Source: U.S. Bureau of the Census, EEO Tabulations, 2000, and 2006-2010

**Figure 3:**  
**Growing Underemployment in Milwaukee County: 2000-2010**  
**% of Jobholders with Post-Secondary Education in Selected Occupations**



Source: U.S. Bureau of the Census, EEO Tabulations, 2000, and 2006-10

The incongruity between the skills gap rhetoric and the realities of the Milwaukee (and Wisconsin) labor markets could not be any sharper. The Sullivan report, business organizations (MMAC and GMC), and local media all incessantly lament a supposed “talent shortage” in the form of too few college graduates in Milwaukee. But these complaints are impossible to square with the increasing numbers of underemployed workers in the region: college graduates taking jobs requiring well less than their level of educational attainment. In effect, skills gap promoters want us to believe this illogical argument: There are plenty of available jobs for well-educated workers going unfilled in Wisconsin and Milwaukee, as employers supposedly can’t find “talent;” yet, despite the availability of all these jobs for skilled workers, a growing number of the highly-educated are choosing to work in low-skill, low-pay jobs.

In short, the problem isn't a malfunctioning "talent pipeline;" the problem is a sputtering job creation machine, in both the quantity and quality of jobs created.

**Educational Attainment and the Skills Gap in Wisconsin and Milwaukee:**

Listening to the skills gap rhetoric, one would think that Wisconsin and Milwaukee are places with declining "human capital," where the labor force is becoming increasingly less educated, creating a "talent shortage" for employers. As an especially vociferous local corporate executive, Badger Meter's Richard Meeusen sarcastically put it: "In a city like Milwaukee, one of the major products we produce are high school dropouts."<sup>88</sup>

As Tables 9-10 and Figures 4-6 illustrate, the perception of "declining talent" in Milwaukee (and Wisconsin) is empirically false. The proportion of high school and college graduates among metro Milwaukee's working age population has risen steadily since 1970; in 2010, nearly 9 in 10 adult Milwaukeeans had a high school diploma, while nearly one in three possessed at least a college degree. Both percentages are above the U.S. national average.<sup>89</sup> All major racial and ethnic groups in metro Milwaukee have experienced substantial and continuous increases in educational attainment; for example, the percentage of working age black Milwaukeeans holding a high school diploma has more than doubled since 1970, and the share with bachelor's degrees has tripled.

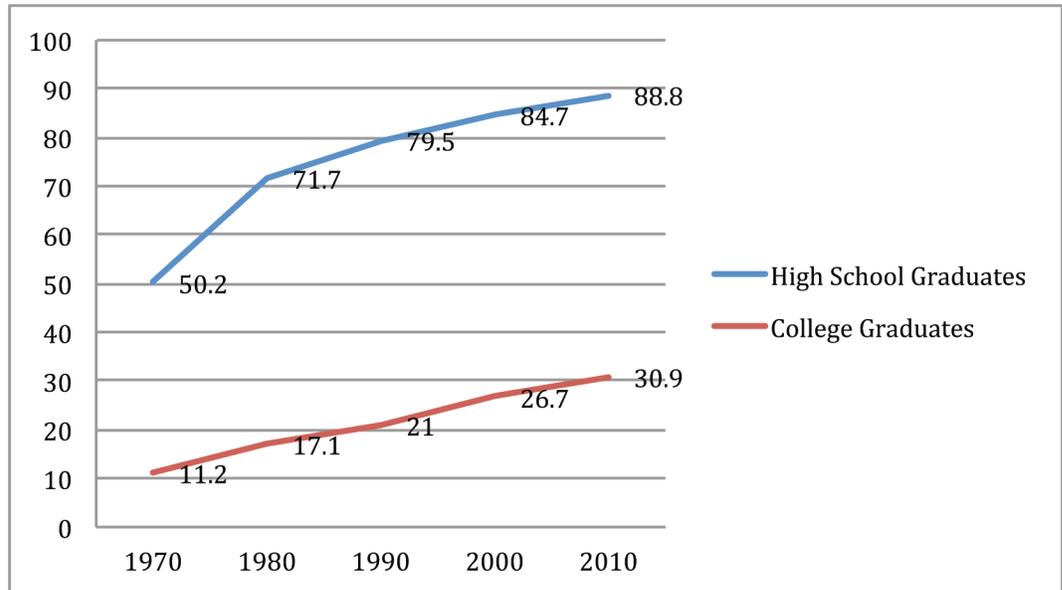
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88 Rich Rovito, "Badger Meter's Meeusen pulls no punches, as usual," *The Milwaukee Business Journal*, 27 February 2012. Meeusen, it should be noted, has been an enthusiastic exponent of offshoring employment and has offered one of the more novel explanations for shipping jobs from Milwaukee to Mexico. As one newspaper report recounted: "Badger Meter Inc. is a committed Wisconsin business, but it's expanding elsewhere. Why build new facilities in Mexico rather than near its Brown Deer headquarters? 'It is easier to hire people,' said Richard Meeusen, chairman, president, and chief executive officer. 'It has been getting harder to hire skilled people' in Wisconsin." (Avrum D. Lank, "Skilled workers scarce: Shortage pushes growth out of state, business executives say," *The Milwaukee Journal Sentinel*, 8 June 2006). What a truly unique (and preposterous) explanation: moving jobs to Mexico in search of "skilled labor."

89 For Wisconsin as a whole, the high school graduate percentage in 2010 stood at 89.4, while 25.8 percent of Wisconsin adults held a bachelor's degree. Both percentages are double their level of 1970, and have increased metronomically over the past forty years.

**Figure 4:**

**Educational Attainment in Milwaukee, 1970-2010**  
 (% of population, 25 years or old, with high school and college degrees)



Source: U.S. Bureau of the Census; Census of Population (1970-2000); American Community Survey (2006-10).

**Table 9:**

**Educational Attainment By Race in Metro Milwaukee: 1970-2010**  
**Percentage of Adults (25+) With High School Diplomas**

GROUP	1970	1980	1990	2000	2010
Black	34.0	53.4	60.7	68.3	78.7
White	58.4	74.0	82.5	88.9	93.3
Hispanic	40.2	44.9	51.7	52.4	60.4
Total Pop	50.2	71.7	79.5	84.7	88.8

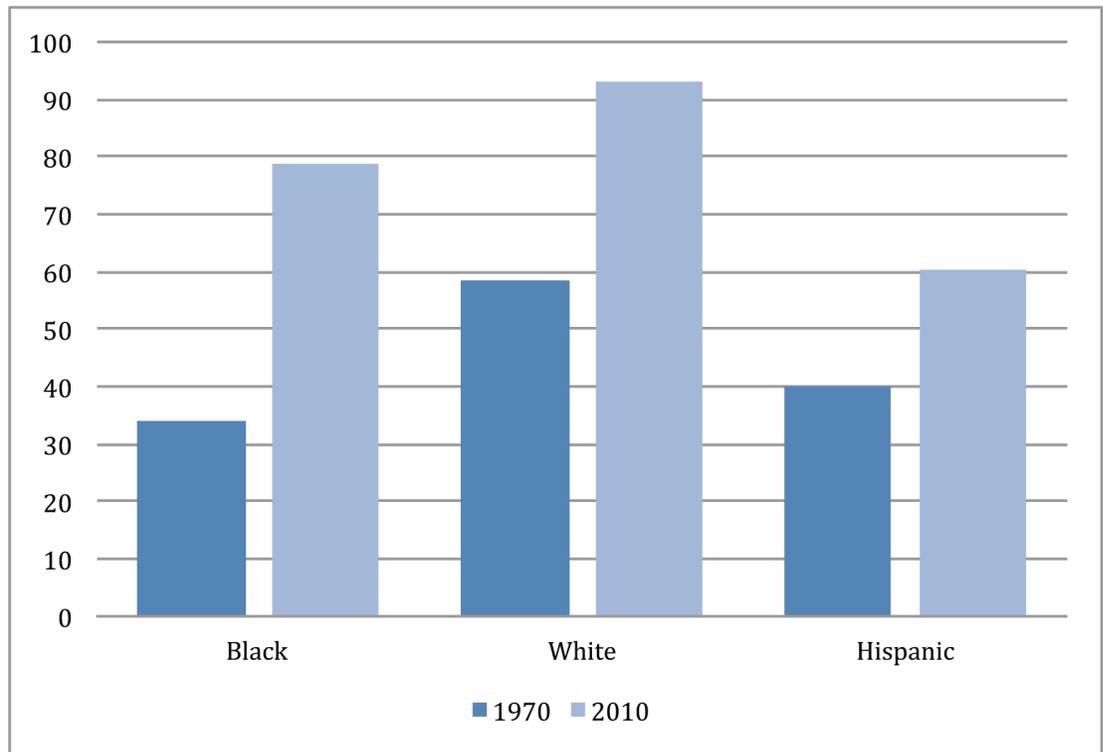
Source: U.S. Bureau of the Census; Census of Population (1970-2000); American Community Survey (2006-10)

**Table 10:  
Educational Attainment By Race in Metro Milwaukee: 1970-2010  
Percentage of Adults (25+) With Bachelor's Degrees**

GROUP	1970	1980	1990	2000	2010
Black	3.8	7.2	7.6	10.3	12.5
White	11.6	18.1	23.0	30.1	35.5
Hispanic	7.7	9.1	8.5	10.7	10.8
Total Pop	11.2	17.1	21.0	26.7	30.9

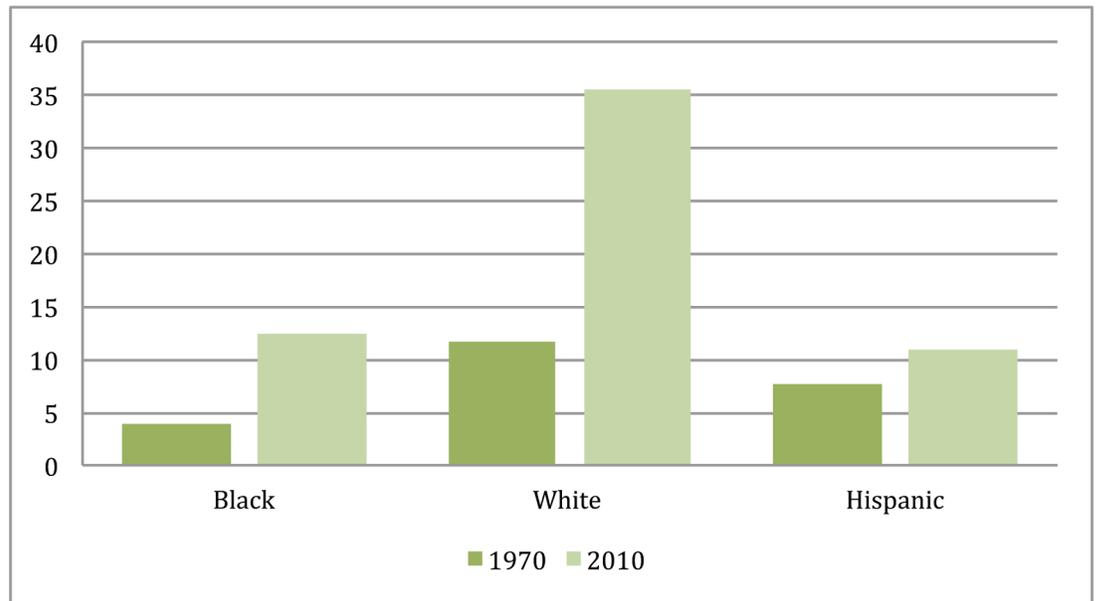
Source: U.S. Bureau of the Census; Census of Population (1970-2000);  
American Community Survey (2006-10).

**Figure 5:  
Growth in High School Graduates By Race  
in Metro Milwaukee: 1970-2010  
Percentage of Adults (25 years+) With High School Diploma**



Source: Same as Table 10

**Figure 6:  
Growth in College Graduates By Race in Metro Milwaukee: 1970-2010  
Percentage of Adults (25 years+) With Bachelor's Degree**



Source: Same as Table 10

In short, educational attainment data provide no evidence of a skills shortage, either in Wisconsin or Milwaukee. Quite the contrary: all the data point to consistently rising human capital formation in Wisconsin and, as we documented earlier, a workforce increasingly *overqualified* for the jobs available in the state's stagnant labor market.

In addition, claims that Wisconsin is at a “competitive disadvantage” in economic development because of skills deficiencies –and that this is supposedly a key factor in explaining the state's poor employment growth over the past decade-- are also without foundation. The educational attainment of the state's workforce is around the national average, and Wisconsin ranks among the top half of states in educational attainment – a slightly higher rank today than in the 1970s and 1980s. According to the National Center on Educational Statistics, in 2010 Wisconsin posted the second highest public high school graduation rate in the country (91.1 percent), and the 10<sup>th</sup> lowest dropout rate (2.2 percent).<sup>90</sup> In 2012, the American Physical Society conducted

<sup>90</sup> U.S. Department of Education, “Public School Graduates and Dropouts from the Common Core of Data: School Year 2009-10.” Pp. 11,13. Accessed at: <http://nces.ed.gov/pubs2013/2013309.pdf>

a “state-by-state science and engineering readiness index,” and found Wisconsin ranked 4<sup>th</sup> highest in the nation in AP calculus scores; 8<sup>th</sup> highest in the Science NAEP test, and 25<sup>th</sup> highest in the Math NAEP.<sup>91</sup> And although the skills gap alarmists consistently castigate the job training and placement institutions in Wisconsin, both the U.S. Chamber of Commerce and the U.S. Labor of Labor rank the efficacy of Wisconsin’s workforce development and training programs in the top half of all states.<sup>92</sup>

In sum, there is little labor market evidence that Wisconsin faces a skills gap. Nor is there any evidence that Wisconsin is at a “competitive disadvantage” compared to other states in human capital formation and the nurturing of a skilled workforce. Consequently, as we will examine later, policies purporting to rectify the fake skills gap in Wisconsin will have little impact on the state’s real labor market problem: the stagnant growth of family-supporting jobs.

### **The Skills Gap Myth in Microcosm: The Peculiar Case of Wisconsin’s “Missing” Welders**

One of the curiosities of skills gap mythmaking in Wisconsin has been the degree to which an alleged labor shortage in one occupation --welders-- has played an outsized role in validating the widespread belief that the state and the Milwaukee region suffer from a skills gap. Since 2000, employment for welders has dropped by 25 percent in Wisconsin (and by 45 percent in metro Milwaukee), and the unemployment rate for welders soared to double digits by 2010.<sup>93</sup> Despite these grim statistics, which would seem to any trained economist to suggest a *surplus* of welders not a shortage, several business leaders, led by Tim Sullivan, then-CEO of Bucyrus International Inc., began a persistent, vocal campaign, claiming that there were plenty of welding jobs available in Wisconsin but that companies simply could not find qualified welders. This story became a staple in the local media, with repeated articles

91 Susan White and Paul Cottle, “A State-by-State Science and Engineering Readiness Index (SERI): Grading States on Their K-12 Preparation of Future Scientists and Engineers,” American Physical Society, 2012. Accessed at: <http://www.aps.org/units/fed/newsletters/summer2011/white-cottle.cfm>

92 U.S. Chamber of Commerce, “Enterprising States,” (June 2012), p. 83. Accessed at: [http://forum.uschamber.com/sites/default/files/Enterprising-States-2012-web\\_0.pdf](http://forum.uschamber.com/sites/default/files/Enterprising-States-2012-web_0.pdf);

U.S. Department of Labor, “WIA State Annual Reports and Summaries.” Accessed at: <http://www.doleta.gov/performance/results/#wastann>. In 2010, for example, the employment rates for all adults and dislocated workers participating in Workforce Investment Act programs in Wisconsin ranked in the top five in the country.

93 Employment data is from the BLS Occupational Employment Statistics series. BLS unemployment rates by occupation are conveniently accessed at the Wall Street Journal data site: <http://online.wsj.com/article/SB10001424127887323936804578229873392511426.html>

and editorials in *The Milwaukee Journal Sentinel* and *Business Journal* about companies such as Bucyrus,<sup>94</sup> Bechtel,<sup>95</sup> Tramont,<sup>96</sup> and GenMet supposedly unable to find qualified welders. Editorialists warned that this skills shortage was “affecting productivity” and weakening the regional economy.<sup>97</sup>

These assertions about “missing welders,” fueled by the credulous media coverage, became the key “evidence” underpinning the widespread belief among policymakers that Wisconsin, indeed, faces a skills gap. But, aside from anecdotes about the hiring difficulties of certain companies, is there labor market evidence of a shortage of welders in Wisconsin and Milwaukee?

First, let’s examine wage trends – the key indicator of labor shortages or surpluses. If there were a genuine shortage of skilled welders in Wisconsin and Milwaukee, wages should be climbing as employers try to attract welders from other states and cities, as well as lure workers away from other occupations in the region. That’s how supply and demand works in labor markets.

As Table 11 reveals, wage growth has been anything but robust for welders in Wisconsin over the past decade – even as CEOs such as Sullivan or Eric Isbister of GenMet complained of an inability to find qualified workers for their open positions. In both Wisconsin and Milwaukee, real wages for welders have declined since 2000 – in Milwaukee, by a whopping 9.1 percent-- and wage “growth” for welders here lags behind national trends. These trends hardly suggest a local market in which employers, suffering from a labor shortage, are trying to use attractive wages to lure qualified welders from other states or occupations.

**Table 11:**  
**Wage Trends for Welders: 2000-2011**  
**Wisconsin, Milwaukee, and the United States**  
(% change in real hourly wages)

OCCUPATION	WISCONSIN	MILWAUKEE	UNITED STATES
Welders, Cutters, Solderers, and Brazers	-0.4	-9.1	+0.7
Welding, Soldering, and Brazing Machine Setters, Operators, Tenders	-2.2	-6.3	-2.2

Source: BLS, Occupational Employment Statistics, 2000-2011

94 John Schmid, “Finding skilled workers a struggle for Bucyrus,” *The Milwaukee Journal Sentinel*, 11 June 2011.

95 David Haynes, “Work Force Development,” *The Milwaukee Journal Sentinel*, 5 December 2006.

96 Joel Dresang, “Fewer workers, more challenges,” *The Milwaukee Journal Sentinel*, 3 September 2006.

97 David Haynes, “Labor Shortage: Matching Skills with Jobs,” *The Milwaukee Journal Sentinel*, 12 June 2006.

What does a shortage of welders look like in wage and employment data? As Tables 12-13 and Figure 3 show, there are states --such as North Dakota, Wyoming, and Alaska— where a chronic shortage of welders, driven by the boom in the energy industry and related infrastructure investments, has led to a surge in employment and real wage growth for welders since 2000.<sup>98</sup> By contrast, in states such as Michigan, Ohio, and Wisconsin – where the collapse of the auto industry and general retrenchment in manufacturing has undermined the labor market for welders—the number of welding jobs has contracted sharply and real wages have fallen. None of this makes sense as a “skills gap” story – unless one posits that the skills of 25-55 percent of the welders in states like Michigan, Ohio, and Wisconsin evaporated virtually overnight in the 2000s, forcing massive cutbacks in employment in these states. Such an argument is absurd on its face. The comparative state data show a classic labor market impact of shifts in aggregate demand: In states like Wisconsin and Michigan, suffering from demand-deficiency, the market for welders has slackened since 2000; in states such as North Dakota and Wyoming, with a boom in aggregate demand, the number of welding jobs has risen, there is a tight labor market and genuine labor shortage, and real pay for welders has surged.<sup>99</sup>

**Table 12:  
Tight Labor Markets For Welders: 2000-2011**

STATE	% EMP CHANGE	% CHANGE REAL MEDIAN WAGE
Wyoming	+76.5	+21.5
North Dakota	+59.4	+14.0
Alaska	+26.3	+24.5
Louisiana	+7.0	+6.1
Texas	+4.9	+3.1

Source: BLS, Occupational Employment Statistics, 2000-2011

<sup>98</sup> See, for example, Russell Gold, “North Dakota Enjoys Oil Boom – But Girds for Slowdown,” *The Wall Street Journal*, 23 December 2012.

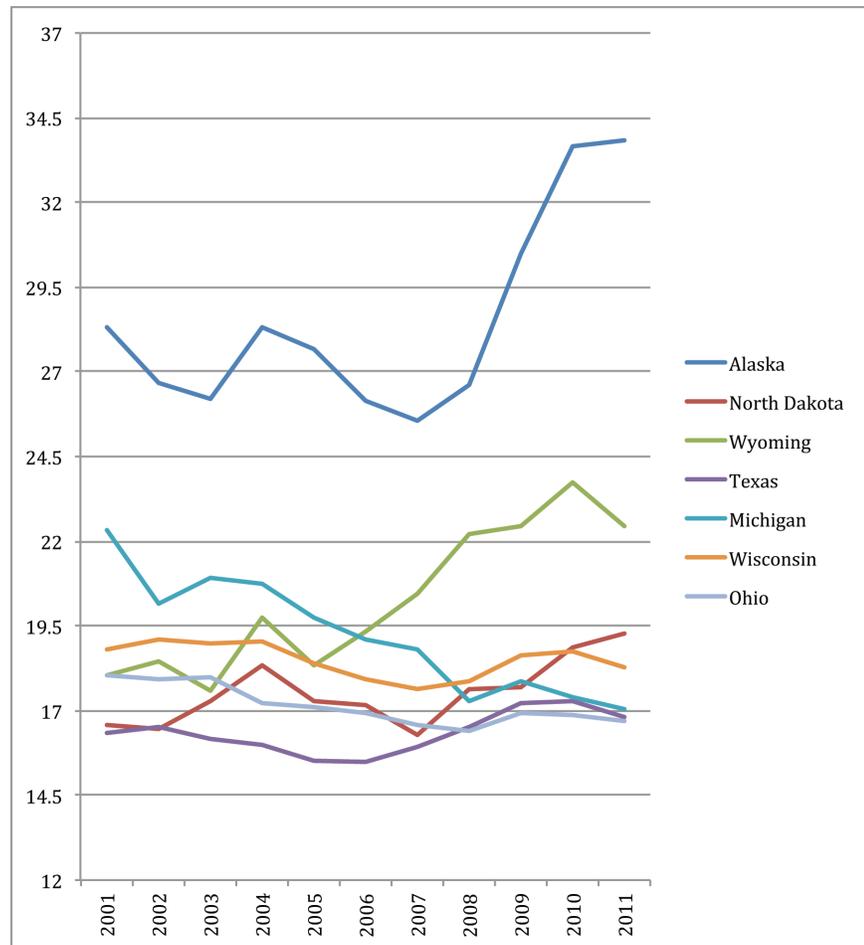
<sup>99</sup> Unsurprisingly, the 2010 unemployment rate for welders in North Dakota (3.6%) and Wyoming (4.9%) was much lower than in Wisconsin (9.1%), Ohio (13.1%), and Michigan (18.0%).

**Table 13:**  
**Slack Labor Markets For Welders: 2000-2011**

STATE	% EMP CHANGE	% CHANGE REAL MEDIAN WAGE
Michigan	-56.2	-13.3
Ohio	-42.0	-12.7
Georgia	-37.9	-6.2
Indiana	-31.0	-6.4
Wisconsin	-24.7	-0.4

Source: BLS, Occupational Employment Statistics, 2000-2011

**Figure 7:**  
**Real Wage Growth for Welders in Selected States: 2000-2011**  
(real hourly wages for welders, solderers, cutters, and brazers)



Source: BLS, Occupational Employment Statistics, 2001-2011

The degree to which these differences in state labor market outcomes for welders is an “aggregate demand” story as opposed to “skills gap” story can be seen clearly in Table 14, which arrays the educational attainment levels of welders in selected states. If skills deficits were an issue differentiating states where welding jobs are growing (such as North Dakota or Texas) and states where they are declining (such as Wisconsin or Michigan), we would expect to see differences in educational attainment levels favoring the high-growth states. No such differences are discernible. Nearly the same percentage of welders in all the states (with the startling exception of Texas) holds at least a high school diploma. In some tight markets, such as North Dakota and Wyoming, a somewhat higher percentage of welders possess post-secondary training and degrees than in more slack markets;<sup>100</sup> but other high growth markets (such as Alaska and Texas) exhibit no such trend. Moreover, contrary to rhetoric about Wisconsin facing a “competitive disadvantage” in workforce skills, the educational attainment of welders in Wisconsin is markedly higher than national averages: 35.9 percent of Wisconsin welders have post-secondary education and college degrees, compared to the national average of 27.3 percent. By contrast, only 12.5 percent of welders in Wisconsin do not hold a high school diploma, compared to 22.7 percent in the country as a whole.

**Table 14:**

**Educational Attainment of Welders in Selected States: 2010**

ED ATTAIN	US	ALASKA	ND	TEXAS	WYO	MICH	OHIO	WISC
Not HS Grad	22.7	12.2	7.7	38.5	13.8	12.5	13.1	12.5
HS Grad	49.9	62.0	42.4	40.2	43.5	52.1	64.3	51.6
Some Coll/Asso	25.2	24.9	44.9	19.3	40.1	32.0	20.7	34.3
B.A. Degree+	2.1	1.4	5.0	2.0	2.3	3.4	1.9	1.6

Source: U.S. Bureau of the Census, EEO Tabulations, 2006-10

The educational differences between Texas and Wisconsin, observable in Table 14, are particularly intriguing, given the decision by Tim Sullivan, then-CEO of Milwaukee-based Bucyrus International, to open a factory of welders in Kilgore, Texas in 2008. The supposed reason for the move was Sullivan’s chronic complaint that he couldn’t find “qualified, factory-grade” welders in

<sup>100</sup> Of course, the trends in North Dakota and Wyoming could also signify that individuals with post-secondary education, either unemployed elsewhere or working in occupations paying less than the rising wages in booming energy-related fields, are migrating to those states. That’s how national labor markets work out shortages and skills mismatches. It is a telling indicator of the absence of a skills shortage in Wisconsin that such migration is not occurring here.

Milwaukee and that local leaders were making no “meaningful progress” on the skills mismatch. Tim Sheehy, head of the MMAC added, in response to the Bucyrus news: “We shouldn’t fool ourselves that if companies cannot find labor in Milwaukee, that they won’t look somewhere else. The message for Milwaukee is to fix the workforce or die.”<sup>101</sup>

It is difficult, however, to reconcile rhetoric blaming a skills gap in Milwaukee for the Bucyrus decision with the data in Table 14 revealing that the percentage of welders in Texas without a high school diploma is *triple* the Wisconsin rate.<sup>102</sup> In addition, if we examine more granular data, we see that the percentage of welders *without* a high school diploma in Kilgore, Texas, the site of the new Bucyrus plant, is almost *double* the percentage of welders without a high school degree in Milwaukee County (see Table 15). In short, Tim Sullivan opened a plant in Texas, purportedly because of a “skills gap” in Milwaukee, *in a place with a much less educated welding workforce* than Milwaukee’s. There’s a skill disparity separating Kilgore and Milwaukee, all right, but it is decidedly in favor of Milwaukee. Perhaps, to paraphrase Adam Davidson of *The New York Times*, the secret behind the Milwaukee skills gap “is that it’s not a skills gap at all.”

If Bucyrus’ move to Texas was not connected to the high educational attainment levels there, what was the attraction? Two factors may have been more serious inducements. First, Sullivan received corporate welfare from the Kilgore Economic Development Corporation to build a new factory, and state subsidies for workforce preparation and training.<sup>103</sup> But second, and perhaps most importantly, welders in Kilgore earn a lot less than their Milwaukee counterparts. We don’t know what wages are paid in the Bucyrus (now Caterpillar) plant in Kilgore, but as Table 16 shows, while 65 percent of welders in Milwaukee County earn more than \$35,000 a year, only 47 percent of Kilgore welders earn that much. Conversely, whereas 31 percent of Kilgore welders earn less than \$25,000 annually, just 22 percent of Milwaukee welders are in that category.

101 Schmid, “Finding skilled workers a struggle for Bucyrus,” op. cit.

102 For the workforce as a whole – not just welders—education attainment in Texas is also much below Wisconsin’s. For adults 25 and older, the percentage with a high school diploma is 89.4% in Wisconsin (and 88.8% in Milwaukee) compared to 80% in Texas; for those between 18-24 years, the high school graduate percentage is 86.8% in Wisconsin (and 84.6% in Milwaukee) compared to 79.5% in Texas.

103 Larry Gross, “Blaming MATC is off the mark,” *The Milwaukee Journal Sentinel*, 16 June 2011.

**Table 15:  
The Educational Attainment of Welders:  
Kilgore and Milwaukee, 2010**

EDUCATIONAL ATTAINMENT	KILGORE*	MILWAUKEE**
Not a High School Graduate	30.2%	16.6%
High School Graduate or Equivalent	39.2%	47.3%
Some College/Associate/Bachelor's Degree+	30.6%	35.9%

\*Gregg and Rusk Counties    \*\*Milwaukee County  
Source: U.S. Bureau of the Census, 2006-2010 American Community Survey

**Table 16:  
The Earnings Distribution of Welders:  
Kilgore and Milwaukee, 2010**

EARNINGS DISTRIBUTION	KILGORE*	MILWAUKEE**
Under \$15,000	10.7%	7.7%
\$15,000-\$24,999	21.7%	13.9%
\$25,000-\$34,999	20.8%	13.6%
\$35,000-\$49,999	23.4%	35.2%
\$50,000 and above	23.4%	29.5%

\*Gregg and Rusk Counties    \*\*Milwaukee County  
Source: U.S. Bureau of the Census, 2006-2010 American Community Survey

In short, it appears that while Sullivan publicly blamed the skills deficiencies of Milwaukee workers for his need to open a new factory in Texas (in counties where welders possessed a *lower level of educational attainment* than welders in Milwaukee), the real reasons for his move were closer to the standard logic of capital flight: the search for corporate welfare and cheap labor. Around the time Bucyrus was opening its Kilgore plant, there were 635 unemployed welders in metro Milwaukee, and 1,935 unemployed welders in Wisconsin.<sup>104</sup> Two-thirds of these jobless welders had been out of work for less than one year, meaning they had recently been deemed sufficiently “skilled” to be employed. An additional 3,570 welders in Detroit, Chicago, and Minneapolis were also unemployed, the majority of them laid-off within the year as well. It strains credulity to believe that so few of these jobless welders were qualified that had Sullivan been diligently searching and offering competitive wages he could not have found most of the welders he needed. These welders were

104 U.S. Bureau of the Census, 2006-2010 American Community Survey. EEO Tabulation.

out of work, not because their skills suddenly disappeared, but because aggregate demand dropped, especially with the onset of the Great Recession. Moreover, employment for welders throughout the Midwest had also been dropping throughout the decade as offshoring and capital flight decimated the manufacturing base in places like Milwaukee, Chicago, and Detroit.

The case of the “missing welders” reveals in microcosm the flawed premises and false assertions of the larger skills gap idea. Analysis of data on wages, employment, and educational attainment for welders –as well as comparisons to states exhibiting tighter labor markets for welders such as North Dakota and Wyoming—should make us more than a little skeptical of the skills gap complaints of local business leaders. The problem isn’t a shortage of skilled welders in Wisconsin or neighboring labor markets; it’s a shortage of welding *jobs*. Today there are roughly 3.5 times as many unemployed welders in Wisconsin (1,935) as there are projected annual openings for welders, cutters, solderers, and brazers (including machine setters, operators, and tenders).<sup>105</sup> A job gap like that guarantees that unemployment will remain high, whatever the skills level of the workforce. Moreover, as the case of Bucyrus’ move to Texas suggests, when CEO’s use the phrase “skills gap,” they often don’t mean “skill” or “educational attainment” in the way we normally understand the terms – after all, citing “skills deficits,” Sullivan opened a factory in a Texas county with a demonstrably lower stock of human capital than Milwaukee. For example, in Davidson’s important exposé on the “fake” skills gap, he interviewed Eric Isbister, CEO of GenMet in Mequon, and found that when Isbister used the term “skills gap,” he meant difficulty finding workers without “union-type experience,” willing to accept starting pay of \$10 an hour.<sup>106</sup> That’s not a skills mismatch or even a labor shortage problem in any meaningful sense; that’s an effort to secure cheap and docile labor. In the last analysis, the skills gap trope is a misguided effort to blame schools, training institutions, and workers for the larger failures of macroeconomic policy and management strategy to create enough jobs for all who want to work – an issue we will explore briefly in the concluding section of this paper.

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<sup>105</sup> Annual openings projected by WorkNET of DWD. The ratio of unemployed welders to Wisconsin openings would be over 10-1 if we included unemployed welders from neighboring states who, presumably, could migrate to Wisconsin for available jobs, if such jobs truly exist here and pay competitive wages. In states like North Dakota and Wyoming, with a genuine shortage of welders, that is precisely what is happening.

<sup>106</sup> Davidson, “Skills Don’t Pay the Bills,” op. cit.

### III. Conclusion: Beyond the Skills Gap

The labor market evidence presented in this paper leaves little doubt: the skills gap in Wisconsin is a myth. When we look beyond the stream of anecdotes from business executives or repetition of the “skills gap” meme in the media and by politicians, it is clear that “there is no evidence whatsoever to back these claims.”<sup>107</sup> As Paul Krugman notes: “We aren’t suffering from a shortage of needed skills; we’re suffering for a lack of policy resolve...[S]tructural unemployment isn’t a real problem, it’s an excuse” not to pursue “government action on a sufficient scale to jump-start the economy.”<sup>108</sup>

Given the lack of credible evidence, why is the belief that a skills gap is to blame for our employment crisis so widely accepted, in Wisconsin and across the country? There are several reasons. First, as EPI’s Lawrence Mishel points out, the skills gap story “is very comfortable reasoning for the very comfortable class. It identifies ‘failing schools’ and ‘dumb workers’ for the economic calamity actually caused by a deregulated financial sector following a massive redistribution of wealth and income.”<sup>109</sup> Put another way, there’s a strong ideological component behind the skills gap trope: it diverts attention (and policies) from the deep inequalities and market fundamentalism that created the unemployment crisis, and focuses on a fake skills gap that had nothing to do with the surge in joblessness since 2007. No need to focus on such inconvenient questions as: 1) Why corporate profits are at record levels while unemployment remains high and wages stagnant; 2) Why U.S. manufacturers invested less in domestic capacity than competitors over the past decade and how U.S. manufacturing in the 2000s “suffered its worst performance in American history;”<sup>110</sup> or 3) How offshoring and other management strategies have devastated the employment base of cities such as Milwaukee, and how Wisconsin employment is especially at risk from trade with China and Mexico.<sup>111</sup> Instead, leaders just repeat the mantra: it’s the skills gap. No matter the macroeconomic conditions (4.4 percent unemployment in 2007; 10 percent unemployment in 2009), no matter other, more important contributors to high

107 Krugman, “The Structure of Excuses,” op. cit.

108 Ibid. The quotations are spliced together but in context.

109 Mishel, “The Overselling of Education,” op. cit.

110 Atkinson, “Worse Than The Great Depression,” op. cit.

111 Robert Scott, “Heading South: US-Mexico trade and job displacement after NAFTA,” Economic Policy Institute Briefing Paper, 3 May 2011; and David H. Autor, David Dorn, and Gordon H. Hanson, “The China Syndrome: Local Labor Market Effects of Import Competition in the United States,” forthcoming, *American Economic Review*. Accessed at: <http://economics.mit.edu/files/6613>.

unemployment: the skills gap is the problem, and workforce development is the solution.

Second, as the skills gap meme is repeated over and over, a “herd mentality” and “ideational contagion” among policymakers seems to have emerged. Princeton psychologist and Nobel Laureate in economics Daniel Kahneman has written brilliantly about various cognitive biases that lead to bad decisions, one of which he labels WYSIATI – “What You See Is All There Is.”<sup>112</sup> WYSIATI describes how we too often jump to conclusions based on weak or incomplete evidence, and often confuse correlation with causation and anecdotes with statistical regularities. The endless repetition of skills mismatch stories over the past decade is a classic example of WYSIATI, and it has created a policy environment in which all decision-makers treat the supposed existence of a skills gap as if it were an uncontested fact, regardless of statistical evidence and a vast body of research to the contrary. If employers say they can’t find skilled workers, it *must* be true and reveal a problem for the entire Wisconsin economy, because WYSIATI. In turn, as the WYSIATI-based belief has hardened, nurtured by the lobbying of business organizations and uncritical media coverage, a herd mentality of sorts has developed in which policymakers fall over one another to demonstrate who is “better” on the skills gap issue, as if that were the central problem facing the Wisconsin economy.

Finally, the media have played a critical role in fueling this herd mentality and widespread acceptance of the skills gap meme. In a series of articles in the *Columbia Journalism Review*, Ryan Chittum noted the role nationally of “uncritical reporting” in spreading the “can’t find workers” meme, noting that “critical questions” are often missing from skills gap pieces.<sup>113</sup> Peter Cappelli notes: “Journalists involved rarely dig beyond the press releases....Reporters take an employer’s word for it that no one who applied could do a given job. We don’t know if the employer’s expectations were unrealistic, if they failed to look very hard for candidates, or if there was some other simple explanation for their problem such as their offering too-low wages.”<sup>114</sup> For the media, as Barbara Kiviat notes, the skills gap story is an easy one to tell, much easier than explaining macroeconomic factors or the intricacies of international trade or

112 Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus, and Giroux, 2011), p. 85-88.

113 See Ryan Chittum, “Manufactured quotes,” *CJR, Economic Crisis-The Audit*, 10 July 2012; and Chittum, “CNNMoney can’t find workers, either,” *CJR, Economic Crisis-The Audit*, 13 August 2012; and Chittum, “A critical eye on the ‘skills gap,’” *CJR, Economic Crisis-The Audit*, 14 August 2012.

114 Cappelli, *Why Good People Can’t Get Jobs*, loc 255.

exchange rates. “Believing that workers don’t know how to do jobs right is easy to grasp and, on its surface, easy to remedy: everyone gets more education and training.”<sup>115</sup>

As is the case nationally, the media in Milwaukee have been instrumental in propagating the skills gap meme. Over the past decade, dozens of articles and editorials have appeared in *The Milwaukee Journal Sentinel* and the *Business Journal of Milwaukee*, every one taking at face value the claims of skills gap promoters. None included any research on wages, hours, or job openings/vacancy ratios that might have shed some light on the veracity of the skill gap claims; and none cited or gave any indication of having consulted the abundant academic research refuting the existence of skill-based structural unemployment.<sup>116</sup>

Thus, an unfortunate brew of corporate self-interest and ideology, a herd mentality in public discourse, and a credulous media has resulted in nearly universal belief in Wisconsin that the state suffers from what the data show to be a “fake” skills gap. The policy implications are enormous. The Walker administration, for example, has proposed a \$100 million revamping of “workforce development” in Wisconsin, based largely on the analysis and recommendations of the Sullivan report and *Be Bold 2*. Given the insignificance of the imaginary skills gap to the jobs crisis facing the state, this promises to be yet another example of what economics writer Louis Uchitelle has called a “supply-side” myth of job creation, which assumes that “there is good work, at good pay, for the educated and skilled. The unemployed need only to get themselves educated and skilled and the work will materialize. Education and training create jobs, according to this way of thinking.”<sup>117</sup>

The Walker plan, as well as the Sullivan report and other skills-gap based policy approaches, repeats this supply-side fallacy. It assumes both: a) “the jobs are already here,” so better training will successfully match the unemployed to jobs; and b) that workforce development will entice employers to “create” more jobs, because of an expanded pool of ready workers. Both assumptions are demonstrably false. As this paper has documented, the jobs are *not* already

115 Kiviat, “The Big Jobs Myth,” op. cit.

116 In fact, in one editorial, *The Milwaukee Journal Sentinel* cited, as support for yet another expression of their approbation of Tim Sullivan’s skill gap claims, the August 2012 Brookings study that explicitly concluded that a skills gap was not to blame for high unemployment in U.S. metro areas. See MJS editorial, “Education gaps threaten job growth in metro areas,” *The Milwaukee Journal Sentinel*, 1 September 2012.

117 Louis Uchitelle, *The Disposable American: Layoffs and their Consequences* (New York: Alfred Knopf, 2006), p. 64.

here, the employment problem here is not a “skills matching” issue but a deficiency in the aggregate *demand* for goods and labor.<sup>118</sup> This local jobs shortage is not only a consequence of the Great Recession, but longer-term issues such as offshoring and trade. Autor, Dorn, and Hanson estimate that 55 percent of the employment decline in U.S. manufacturing between 2000-2007 was caused by rising exposure to Chinese imports; Milwaukee, according to their analysis, ranked 8<sup>th</sup> among the nation’s 40 largest metro areas in exposure of the local labor market to Chinese import shocks.<sup>119</sup> Thus, conservatively calculated, the combination of the Great Recession and exposure to Chinese imports has cost Wisconsin around 90,000 manufacturing jobs since 2000 (around 15 percent of the state’s industrial base) and has stripped around 40,000 goods-producing jobs from metro Milwaukee (about 20 percent of the region’s manufacturing base). These losses are even more pronounced if we add the job displacement to Mexico caused by post-NAFTA shifts, estimated to have shaved nearly 15,000 jobs from Wisconsin’s manufacturing base through 2010.<sup>120</sup>

In other words, a skills gap didn’t create the decline in Milwaukee manufacturing employment –the Great Recession, trade, and offshoring did– and better workforce development will not revive it. Unfortunately, neither the Sullivan report, nor *Be Bold 2*, nor the Walker plan has much to say about these major components of Wisconsin and Milwaukee’s employment crisis, let alone offer any meaningful policy responses to them. Implementing new state of the art labor market information (LMI) software, for example, one of the “big ideas” of the Sullivan report and the Walker plan, is probably a fine idea, but to think it will have any impact on the jobs shortage in Wisconsin is a fantasy.

Secondly, the notion that workforce development will “create” jobs is equally problematic. As Gordon Lafer puts it, this is the “job training charade.” “Whatever the problem, it seems, job training is the answer. The only trouble

118 Tables 2 and 3 above estimate the jobs shortage in Milwaukee, and given the stagnant employment growth in Wisconsin since 2000, and the decline in the Milwaukee region, it’s quite remarkable to think that anyone would be taken seriously writing, “the jobs are already here.”

119 Autor, Dorn, and Hanson, “The China Syndrome,” op. cit.

120 My estimates, based on Autor, Dorn, and Hanson’s analysis of Chinese import impacts and a calculation of job losses following the Great Recession; employment numbers calculated from BLS, “State and Area Employment, Hours, and Earnings.” Access at: <http://data.bls.gov/pdq/querytool.jsp?survey=sm>. In another study, Robert E. Scott estimates that the trade deficit with China has displaced almost 57,000 jobs in Wisconsin since 2001, a slightly higher but comparable figure to my estimate from the Autor et al study. Milwaukee, Racine, and Kenosha were the areas of the state particularly hard-hit by such job losses. See Scott, “Growing U.S. Trade Deficit With China Cost 2.8 Million Jobs Between 2001-2010,” EPI Briefing Paper #323, 20 September 2011. Accessed at: <http://www.epi.org/publication/growing-trade-deficit-china-cost-2-8-million/>

is, it doesn't work."<sup>121</sup> A recent study on worker retraining efforts in Janesville, for example, in the wake of the GM plant closing, found little difference in employment and earnings outcomes for workers who participated in training programs as opposed to those who didn't, and little difference between those who studied in "promising fields" at the local technical college, as opposed to those who studied something else.<sup>122</sup> This finding is consistent with research on training and jobs for 40 years.<sup>123</sup> If there aren't enough jobs generated by macroeconomic policy, management strategy, or market forces, training programs aren't going to create them. As Peter Goodman reports, the efficacy of workforce development has long been questionable, but it is especially problematic in a labor market where "even highly skilled people with job experience of two decades languish among the unemployed. Whole industries are being scaled down by automation, the shifting of work overseas, and the recession."<sup>124</sup> Anthony Carnevale of Georgetown, whose research is often cited by skills gap proponents, put it this way: "Training doesn't create jobs. Jobs create training. And people get that backwards all the time. In the real world, down at the ground level, if there's no demand for magic, there's no demand for magicians."<sup>125</sup>

In the last analysis, Wisconsin and Milwaukee face monumental economic challenges. As researchers at the Center on Wisconsin Strategy at UW-Madison have calculated, the state faces a 243,000 "jobs deficit": a combination of jobs lost since the Great Recession along with those needed to keep up with new entrants into the labor force.<sup>126</sup> Thousands of highly educated, highly skilled workers are underemployed, holding jobs for which they are overqualified and overeducated because of the paucity of employment opportunities. Since 2011, Wisconsin ranks 42<sup>nd</sup> among the nation's 50 states in job creation.<sup>127</sup> Metro Milwaukee faces a huge gap between the number of job seekers and the number of available jobs, while the city, year after year, posts among

121 Gordon Lafer, "Training won't create jobs for the jobless," *Los Angeles Times*, 28 January 2004

122 Amy Goldstein, "Rare Agreement: Obama, Romney, Ryan All Endorse Retraining for Jobless – But Are They Right?" *ProPublica*, 10 October 2012. Accessed at: <http://www.propublica.org/article/rare-agreement-obama-romney-ryan-endorse-retraining-for-jobless-but-are-the>

123 Lafer, *The Job Training Charade*. See also Peter S. Goodman, "After Training, Still Scrambling for Employment," *The New York Times*, 18 July 2010. "Even before the recession created the bleakest job market in more than a quarter-century, job training was already producing disappointing results."

124 Goodman, "After Training, Still Scrambling for Employment," op. cit.

125 Goldstein, op. cit.

126 See Center on Wisconsin Strategy, "Wisconsin Job Watch." Accessed at: [http://www.cows.org/wisconsin-job-watch\\_1](http://www.cows.org/wisconsin-job-watch_1)

127 Mike Ivey, "Did Scott Walker's budget cuts hurt economy? Some economists think so," *The Cap Times*, 6 February, 2013.



the highest rates of black male joblessness and concentrated poverty in the country.<sup>128</sup>

Given those realities, the obsession with an imaginary skills gap and the policy focus on training and workforce development is, at best, a sideshow and, at worst, a distraction from the real labor market challenges facing the city, the region, and the state.

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128 Marc V. Levine, *Race and Male Employment in the Wake of the Great Recession: Black Male Employment Rates in Milwaukee and the Nation's Largest Metro Areas: 2010* (UWM Center for Economic Development Working Paper), January 2012.



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