Testimony of Tim Krueger, Research Assistant - Policy Matters Ohio
House Study Committee on Workforce Development
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Chairman Derickson, members of the committee, my name is Tim Krueger; I am a Research Assistant with Policy Matters Ohio. I am joined today by my colleague, Policy Liaison, Hannah Halbert. Policy Matters Ohio is a nonprofit, nonpartisan organization conducting research on issues facing working families in Ohio, and therefore much of our research focuses on improving Ohio’s economy for all of its residents, including workers at all skill levels. We thank you for giving us the opportunity to testify today.

For the past 15 months I have worked with researchers at Case Western Reserve and Stanford to study the current health, and the future needs, of America’s automotive supply chain. America’s automotive supply chain is a network of about 8,000 independent firms that produce 70% of the parts that go into cars sold in America. A third of the supply chain is located in Ohio, Indiana, and Michigan. Our research on supply chains has been part of a broader initiative in which the Federal Department of Labor funded research teams in Ohio, Michigan, and Indiana to study workforce needs and economic competitiveness throughout the American auto industry. (This work has produced a number of reports that can be found at www.drivingworkforcechange.org, and this research will inform federal decisions on workforce development policy.)

Working under the direction of Susan Helper, a professor of economics at Case Western who has studied the automotive industry for over two decades, our supply chain team has worked particularly hard to understand how automotive suppliers of all sizes were affected by the recent recession, how different types of firms compete and remain profitable in this new era, and what these firms’ future strategies involve. We took a big-picture approach to our research, asking questions about HR practices and workforce skills, product development, production techniques, profitability, customer relations, and other areas. We collected data through interviews, plant tours, trade association meetings, and 5 extensive surveys. All told we spent 14 months collecting in-depth data from over 800 firms, making ours the most comprehensive study of automotive supply chains in over a decade. This testimony is based on our study’s findings, with particular focus on issues relevant to this committee’s area of interest.

Larger Perspective

First, I think it’s important to point out that workforce skills are a critical part of the manufacturing industry, but focusing on workforce skills alone will not solve Ohio’s economic challenges. As of August 2011 (most recent figure), 536,000 Ohioans were unemployed and seeking work. There are about 81,400 job postings on the Ohio Means Jobs website. This means that if all jobs on Ohio Means Jobs were filled today, it would solve only 15% of our state’s unemployment, providing a job for 10 out of 66 unemployed workers. Thus, while skills shortages may exist in some areas, by no stretch of the imagination are they a main cause of unemployment in Ohio (or elsewhere in the nation, for that matter).
Moreover, history and economics tell us that when workforce skills are in short supply, wages for employed workers rise in accordance with basic supply and demand principles. Yet, as the graph below (based on BLS data, originally from Matthew Slaughter of Dartmouth’s Tuck School of Business, reprinted in the Wallstreet Journal on Sept 19th) shows, average wages decreased during the past decade for all education levels aside from the 3% of the workforce with advanced graduate degrees, indicating that on an economy-wide scale, America is not experiencing a visible labor shortages (granted, this does not mean specific regions or industries are not experiencing labor shortages). As John Schmitt of the Center for Economic and Policy Research explains in a Sept 21st article, these wage trends are “almost the exact opposite of what we’d expect if there were a shortage of skilled workers.”¹ Schmitt points out that in the late 90’s, when we had 4 years of low unemployment and, as a result, companies actually did experience skills shortages, wages at all skill levels increased in accordance with the market forces acting on wages during that time period.

![A Matter of Degrees](image)

**Survey Data**

Second, I’d like to share our data on the responsibilities of automotive workers at different skill levels. These responsibilities evolve over time, as technology and manufacturing techniques change. Currently, “unskilled and semi-skilled” workers at 71% of firms surveyed are required to use a computer as part of their regular work. This would not have been the case ten years ago. Integrating computers into the everyday manufacturing process points to an important point: new technology does not inevitably produce benefits such as higher productivity, but rather, firms that invest in the necessary training are able to take advantage of a new technology’s potential. Ongoing transformations like the computerization of manufacturing underscore the fact that the most competitive companies need regular, long-term access to training programs in one form or another.

This data, as well as our field interviews, also reveals a high level of variation among firms that manufacture similar products. Even firms that compete against one another have different ideas about what workforce skills they need, and as a result, each firm demands slightly different skills of their own workers. As the figure above indicates, about half of the firms surveyed require their low-skill workers to “use quality assurance data to recommend improvements,” and the other half don’t. Yet wide variation of firm practices produces a wide variation of profitability. When we correlate responses such as this to sales and profitability, we consistently find that firms expecting more skills from production workers are more profitable [a more detailed description on HR practices, skills and profitability is available in our detailed report: http://drivingworkforcechange.org/reports/supplychain.pdf].

Our study also asked employers to list the workforce skills they will have trouble finding in the future. For production (low- and medium-skill) workers, employers are most likely to anticipate shortages in problem-solving skills, followed by analytical skill, communication skills, and knowledge of specific software. For high-skill workers, employers are most likely to anticipate shortages in knowledge of specific software, followed by communication skills, problem-solving skills, and understanding of company goals. For engineers, employers
are most likely to anticipate shortages in knowledge of specific software, followed by communication skills, understanding of company goals, and knowledge of specific equipment. Across all skill levels, employers tend to be less worried about manual dexterity, literacy/numeracy, and ability to work in teams.

One central fact this data underscores is the importance of both firm-specific skills and general skills. Clearly, a firm should not need to invest in general skills such as basic math, communication skills, and capacity for critical analysis. Yet high competence in these skills can allow workers to transition between traditional production roles more seamlessly, anticipating problems instead of reacting to them. As one firm we interviewed described, production workers have to think more like engineers, and engineers have to think more like managers now. In turn, versatile workers enable firms to ramp up production of new products quickly, lower inventory costs, and reach new markets by manufacturing more products. Workforce training programs are most effective if they build on a strong foundation of public education. Operating state-of-the art equipment and problem solving both depend on strong literacy and math skills.

**Skills Shortages**

As for the matter of skills shortages, our study found that employers are more likely to report skills shortages in some regions, such as the newer manufacturing regions of Northern-central Michigan, Central Ohio, and the Cincinnati area. Employers are less likely to report skills shortages around Detroit and Northeast Ohio. But the story is more complex than this. A number of different factors can cause employers to perceive skills shortages; each of these has different policy implications.

Scenario One: A firm’s Human Resources staff has less time to look for the right candidates. Almost all firms have made cuts to their HR departments in recent years, and HR staff now have less time and resources to properly seek potential candidates for a job. In other words, skill may exist, but a firm may have a harder time finding it. The partial computerization of the job application process may also contribute to this issue: since emailing a resume is quicker and less costly than dropping one off in person, HR departments have become overwhelmed with many times more resumes per job opening in the past 1-2 decades. As a result, HR staff often do computerized searches for key words, meaning that someone with near-equivalent skills (or someone who would have the skills with a modest amount of training) will not get past the initial screening phase.

Implication: The state of Ohio should partner with federal Manufacturing Extension Programs to provide consulting to firms’ HR departments.

Scenario Two: The firm may not be paying competitive wages. In fact, when we sort our skills data to control for wages, we find that “managers at low-wage firms report that they have trouble finding workers with the skills they need, whereas firms paying average or higher wages for similar workers report no such shortage.”

Implication: Firms that want skilled labor will need to pay competitive wages.

Scenario Three: The workers at a firm do lack certain skills, and addressing this would require training, but the management does not know about the training, does not realize the benefits of the training, or may lack the incentives to invest in the necessary training. Investment in human capital is sometimes a lower priority than it

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should be, as some of the benefits of workforce training are difficult to quantify or don’t fit into the typical cost-benefit rubric many managers use to inform decisions. Also, many benefits of training investment accrue to the worker, not just the manager, so these benefits also evade the calculations. This is a major area in which we think the state can play an important role: helping firms realize what type of workforce investments would make them more competitive, and helping them coordinate those investments with complimentary ones (equipment, technology, software).

Implication: State should partner with Manufacturing Extension Programs and existing training programs to help firms identify what their investment priorities should be, and how to effectively carry out coordinated investments in different areas of the firm.

Scenario Four: There actually is a skills gap in the geographic region in which the firm is located/looking for employees. The geographic factor may be a growing issue as some employers move to rural areas with the expectation of cutting costs, but eventually have to come to terms with the implications for skills availability. A geographic skills shortage may seem more pronounced if employees in other regions are unable or unwilling to relocate to the firm’s location. There is much speculation about whether the depressed housing market is limiting people’s ability to sell their homes and relocate in response to new job options.

Implication: Rural out-migration is costly over time, as it requires more infrastructure and transportation energy. The state should not subsidize this trend with tax breaks or training vouchers, but should instead focus on helping existing manufacturers retain jobs and skills at current facilities.

Ohio’s Workforce Strategy

Finally, I think it’s important to point out that as the state of Ohio, we have a number of different options for addressing the challenges of creating skill, maintaining our pool of skilled labor, and matching the right workers with the right employers. Some of these options are in our best interests and others are not. Let’s consider the strategies visible in some Southeastern states like South Carolina and Alabama. Firms we talked to with facilities in those two states described how the state governments have gone to great length to absorb many of the HR functions that used to take place within a firm. One manager told us that when they opened up their Alabama facilities, state employees solicited applications, screened thousands of resumes, and conducted initial job interviews at no cost to the company. For a period of time, the state of South Carolina partnered with a network of community colleges to re-train textile or shipyard workers to work as low-skill manufacturing workers (training programs have slowed in recent years). But they didn’t attempt to train their own skilled workers and tradespeople - they learned that when they needed skilled labor, it was cheaper to recruit it from the Midwest.

One obvious question is how these states can afford to undertake HR expenses while bringing in minimal tax revenue, and even offering tax breaks. The answer is that they’re not really spending money on adding skills to their workers or adding value to their production. These states are also failing at their other functions as a state, such as maintaining infrastructure and public education systems. According to the 2011 Quality Counts report - the most highly regarded annual U.S. education report - South Carolina’s K-12 achievement ranks 45th in the nation, and Alabama’s ranks 44th (Ohio’s is 20th).³

If Ohio goes down this road of merely subsidizing firms’ ability to profit from low-cost, low-skill, low-value-added production, while failing to invest in the skills and infrastructure that will make us and our companies more competitive in the long term, we will simply be exposing ourselves to more direct competition from low-cost regions such as East Asia. Instead, we should invest in our regional skills pool and help our manufacturing firms engage in more distinctive, high-value-added forms of production, in order that they can be more profitable. Instead of spending hundreds of millions of dollars per year on tax breaks - a type of spending that adds no value to our workers or firms - we should spend that money helping firms find ways to add value and become more competitive. Part of this will involve workforce development, and part will be helping firms plan investments in technology, equipment, and software, which should be coordinated with skills investments in order to yield the greatest gains.

In short, Ohio should not make the mistake of attempting to replicate the behavior of Southeastern states. Having no options but to compete on the basis of low cost is not a desirable position to be in, and would represent a tragic loss of competitive advantage. When our research team asked Ohio firms why they initially chose to locate in Ohio, and why they continued to choose Ohio, almost all said it was because of the region’s unparallelled pool of skilled labor. No firms reported that they were here because of tax breaks, cheap energy, or other oft-cited red herrings. Workforce skills have always been our region’s competitive advantage, and our future ability to attract and retain businesses will be most closely related to our ability to maintain a skilled workforce.