Workforce Development and Our Changing Economy: The Economic Effects of Technological Innovation, Automation, and the Future of Work

Technology-enabled innovation is a double-edged sword in our modern economy. While it can help spur economic growth, improve workplace safety, and enhance American competition on a global scale, it also can lead to unforeseen economic, industrial, and occupational reorganization. The deployment of new technologies is constantly evolving and often concentrated in specific occupations and industries, disparately impacting workers of different geographies, races, genders, and ages. Similarly, the model of higher education – traditionally thought of as reserved for those between the ages 18 and 24 – is also continuously evolving and can help address these impacts. Life-long learning through multiple paths and varied forms of education can help workers remain competitive in a changing economy and command higher wages to support themselves, their families, and their communities. Learning styles of students vary and so do the types of education to meet the needs and that of their career path. Educational partnerships with employers ensure today’s workers are prepared for tomorrow’s in-demand jobs.

On November 3, 2021, the Select Committee on Economic Disparity and Fairness in Growth, led by Chairman Jim Himes (CT-04), held a hearing, “Our Changing Economy: The Economic Effects of Technological Innovation, Automation, and the Future of Work,” to examine how technological advancement and automation have contributed to economic disparity, as well as ways in which they can be used to alleviate it going forward. On April 11, 2022, the Select Committee – hosted by Ranking Member Rep. Bryan Steil – held a field hearing, “Pathways to Opportunity: Lessons from Kenosha,” at the University of Wisconsin-Parkside to better understand education paths that allow workers to enter, re-enter, and remain in the workforce, enabling workers, employers and higher education institutions to work together for greater success than can be achieved individually.

Potential Policy Proposals

Experts offered the following recommendations for consideration:

**Partner with workers and the private sector to invest in jobs of the future**

- Encourage corporations to provide information to institutions of higher education to prepare students for in-demand jobs and equip them with the knowledge to secure jobs and internships.
- Reduce economic distortions encouraging excessive automation by strengthening research and development in technologies that complement human productivity and increase labor demand.
• Deploy federal investments in infrastructure and green technologies to support the creation and acceleration of gateway and other high-paying occupations for low- and middle-wage workers and those without college degrees.

• Support broadband in rural and underserved communities to spur innovation over a broader geographic range.

• Provide a robust foundation for the lifelong learning necessary to navigate the rapidly changing world of work by investing in programs that develop critical non-cognitive skills, such as those developed by the Federation for Advanced Manufacturing Education and Economic Mobility Pathways, which equip worker with skills for jobs less susceptible to automation.

• Emphasize development of noncognitive skills through a variety of approaches to equip workers with the skills necessary for jobs less susceptible to automation.

• Invest in higher education—particularly historically Black colleges and universities (HBCUs) and minority-serving institutions (MSIs)—to increase educational attainment and retention, graduation, and placement rates; strengthen connections between educators and employers; and lower automation displacement risk.

**Update Training and Workforce Development to support lifelong learning**

• Create a flexible new training system for the digital economy that allows people to learn while working or while managing other commitments, enables workers to gain in-demand skills quickly, and affords all workers the opportunity to get trained and retrained across their lifetimes.

• Invest in a wide array of job training models and registered apprenticeships that have the potential to train workers for jobs that are projected to be the most in-demand in the future.

• Decentralize the United States’ workforce development systems to spur innovation and allow agencies to closely tailor programs to local and regional markets and economies.

• Incentivize businesses to invest in incumbent and entry worker and labor training management programs alongside technology adaptation; and incentivize unions to enter labor-management partnerships to better help workers meet the needs of employers.

• Create a transparent worker portfolio, such as an employer-provided skills portfolio or government database, so that those who receive training on the job can market their skills to new employers.

• Improve social perceptions about career and technical education

• Encourage more vertical and horizontal partnerships among educational institutions and employers for the life-long success of students and workers.

• Connect more people of color to registered apprenticeships and pre-apprenticeships while providing the supports necessary to see them through these journeys.

• Identify safety net programs where it is possible to apply work requirement principles to increase workforce participation and raise income among low-income Americans.

• Invest in early learning to lay the foundation for all future learning and in family formation to not break the linkages of intergenerational learning between parents and children.
Balance the playing field between labor and capital

- Balance the differential taxation between capital and labor income, in part by broadening the tax base for capital; consider new ways to reduce some payroll taxes on labor for workers whose jobs are at the greatest risk of automation; and provide tax incentives for employers who invest in adult training and have equitable employment practices.
- Close tax evasion loopholes and apply a corporate income tax to previously exempt businesses, such as S-corporations; and increase corporate income tax rates to levels comparable with other advanced economies.
- Take actions to prevent market consolidation and spur competition.

Hearing Panelists

The following experts in Kenosha and Washington provided possible policy recommendations:

**Washington, DC Hearing:**
- Prof. Daron Acemoglu, Massachusetts Institute of Technology Professor, Department of Economics
- Dr. Kristen Broady, Fellow in the Brookings Metropolitan Program, The Brookings Institution
- Dr. Shawn Dubravac, CEO and President, Aviro Institute
- Ms. Zoë Baird, CEO and President, Markle Foundation
- Mr. Brent Orrell, Senior Fellow, American Enterprise Institute

**Kenosha, WI Hearing:**
- Dr. Debbie Ford, Chancellor, University of Wisconsin-Parkside
- Ms. Lindsay Blumer, President & CEO, WRTP | BIG STEP
- Mr. Diego Ruiz, VP of Global Gov’t Relations, SC Johnson
- Dr. Brian Albrecht, President, Gateway Technical College
- Ms. Sherry Carrion, Gateway Technical College Graduate