

National Foundation for American Policy

June 10, 2021

Contact: Stuart Anderson, 703-351-5042, press@nfap.com

New Research: U.S. Natives in Computer-Related Occupations Earn Substantially More than Other U.S. Professionals

Substantial Earnings Premium for IT Professionals Consistent With Strong Demand for Workers with Technical Skills

Arlington, Va. – U.S. natives who work in a computer-related occupations or have a college degree in a computer-related major earn substantially more than other professional workers or college graduates with other majors, including other science, technology, engineering, and math (STEM) majors, according to [new research](#) from the National Foundation for American Policy (NFAP), a nonpartisan policy research organization.

An analysis of data from the Current Population Survey, American Community Survey, and National Survey of College Graduates shows a large premium for information technology (IT) professionals or computer and information systems-related (CIS) majors that has remained stable or risen over time.

“Despite oft-voiced concerns that U.S. IT workers and computer-related majors are disadvantaged by having to compete with foreign-born workers, either via offshoring or immigration, the evidence clearly indicates that IT professionals and computer-related majors have relatively high earnings,” concluded the study’s author Madeline Zavodny, a Research Fellow at the National Foundation for American Policy and a Professor of Economics at the University of North Florida (UNF) in Jacksonville. “IT professionals earn more than other professionals across all education groups examined here, and they earn more, on average, than other professionals who have similar demographics characteristics, live in the same state, and work in the same industry. Workers who have a bachelor’s in a computer-related field earn more than their counterparts with a degree in another STEM field or in a non-STEM field. The same is true for recent bachelor’s or master’s degree recipients.” Zavodny is formerly an economist in the research department of the Federal Reserve Bank of Atlanta and Federal Reserve Bank of Dallas.

The substantial earnings premium for IT professionals and computer-related majors is consistent with persistently strong demand for workers with these technical skills. Even during a period of temporary and permanent immigration into the U.S. of skilled foreign-born workers and offshoring of technical jobs outside of the U.S., U.S.-born IT professionals and computer and information systems majors continued to earn, on average, substantially more than other professional workers and other majors.

The study, “The Earnings of IT Professionals Compared To Other Professionals,” can be found at <https://nfap.com/>.

An analysis of the data shows:

- Median earnings of IT professionals were 40 percent higher than median earnings of other professionals, according to data on U.S.-born workers from the Current Population Survey for the period 2002 to 2020. There is a sizable earnings premium for all education groups

examined here, including workers who have at least a bachelor's degree. The premium would be even larger if computer and information systems managers were classified with IT professionals instead of other professionals.

- IT professionals earn significantly more than other professionals even when controlling for differences in observable demographic characteristics, state of residence, and broad industry. The earnings gap between IT professionals and other professionals as a whole remained fairly stable over the period 2002 to 2020 but rose among college graduates who work full-time, year-round in salaried jobs.
- Median earnings of college graduates with a computer-related major are 35 percent higher than other STEM majors and fully 83 percent higher than non-STEM majors, according to data on U.S.-born college graduates from the American Community Survey for the period 2009 to 2019. The earning gap narrows but remains statistically significant when controlling for differences in observable demographic characteristics, state of residence, and broad industry.
- The earnings gap between college graduates with a major in computer and information systems or another computer-related field and other STEM majors has increased over time. The gap between CIS majors and non-STEM majors has remained stable over time at very high levels.
- Median earnings of recent bachelor's degree recipients with a computer-related major are about 15 to 40 percent higher than other STEM majors, depending on the year, according to an analysis of data on recent U.S.-born bachelor's and master's degree recipients from the National Survey of College Graduates in 2010, 2013, 2015, and 2017. The gap is substantially larger in 2017 than in the other years. Recent bachelor's degree recipients with computer-related majors continue to earn significantly more than other STEM majors when controlling for differences in observable demographic characteristics and region of residence.
- Median earnings of recent master's degree recipients with a computer-related major are about 10 to 40 percent higher than other STEM majors, depending on the year. Like with bachelor's degree recipients, the gap is larger in 2017 than in the other years and remains sizable when controlling for differences in observable demographic characteristics and region of residence.

The stable-to-increasing earnings premium among U.S.-born IT professionals and computer-related majors during a period that critics characterize as high levels of immigration is consistent with a large literature that concludes that highly educated immigrants have not harmed U.S.-born workers. Indeed, studies show that highly educated U.S. natives may even see their earnings increase as a result of highly skilled immigration since it can boost firms' productivity, spur additional innovation, prompt more U.S. natives to move into communications-intensive jobs that are their comparative advantage, and slow offshoring by U.S. firms, among other benefits.

About the National Foundation for American Policy

Established in 2003, the National Foundation for American Policy (NFAP) is a 501(c)(3) non-profit, non-partisan public policy research organization based in Arlington, Virginia focusing on trade, immigration and related issues. The Advisory Board members include Columbia University economist Jagdish Bhagwati, Ohio University economist Richard Vedder, Cornell Law School professor Stephen W. Yale-Loehr and former INS Commissioner James W. Ziglar. Over the past 24 months, NFAP's research has been written about in the *Wall Street Journal*, the *New York Times*, the *Washington Post* and other major media outlets. The organization's reports can be found at www.nfap.com. Twitter: [@NFAPResearch](https://twitter.com/NFAPResearch)

2111 Wilson Blvd., Suite 700, Arlington, VA 22201
phone: (703) 351-5042 fax: (703) 351-9292 www.nfap.com