

THE WALL STREET JOURNAL.

GERMANY OFFERS A PROMISING JOBS MODEL

Germans with vocational apprenticeships earn 92% of the average wage.

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September 8, 2016

Donald Trump and Hillary Clinton both maintain that foreign competition and unfair trade practices hurt the U.S. Yet the problems of many American workers come not from the global market, but from poor training. The success of Germany, which faces competition from developing countries, shows that well-trained workers can thrive amid pressure from abroad.

Only about one-third of American adults 25 and older have completed a bachelor's degree, according to our analysis of the Current Population Survey. Most workers entering the labor force rely on skills that they acquired in high school. Meanwhile, about 75% of Germany's private-economy workforce has taken part in the country's system of vocational training with apprenticeships.

This system prepares millions of Germans for careers as machine operators, medical assistants, bank clerks and countless other occupations. The U.S. has associate-arts degrees awarded by community colleges, but only about 5% of American workers' schooling ends there.

Higher education has a large payoff in the U.S. In 2015, the average annual earnings of a high-school grad working at least 40 weeks a year was \$38,400. Those with a bachelor's degree took in \$78,600.

Contrast this with Germany's vocational-training system for those who do not attend university. Although Germans are about half as likely to go to college, more than 85% of private-economy workers without college degrees have had vocational training and an apprenticeship. In 2014, Germans with apprenticeships earned about two-thirds of what those with at least a bachelor's degree did.

Germans with vocational apprenticeships earn about 92% of the average German wage; American high-school grads earn only 70% of the average American wage. Germans with vocational apprenticeships are considerably better off than their American counterparts. Data show this to be true for nearly 15 years.

Lost manufacturing jobs tend to draw the most attention from free-trade critics. Foreign competition affects these jobs directly, because countries tend to trade manufactured goods and not services. Yet the wage figures in manufacturing are virtually identical to those for the economy as a whole: American high-school grads in manufacturing earn 45% of their college-educated counterparts, while Germans with vocational apprenticeships earn two-thirds of their counterparts. The relatively high wages of Germans implies high productivity among those with vocational training.

Germany's model has its shortcomings. It places students onto separate educational tracks as early as age 10 and sometimes creates rigidity in a technologically changing world. But misclassified students can, and often do, switch academic tracks. Employer associations and

trade unions steadily update the training curricula to keep pace with shifting demand for skills. A recent University of Zurich study found that training changes fluidly with technology to accommodate the market.

While Germans with vocational training do well relative to university graduates, neither group has experienced much wage growth in the 2000s. But this has little to do with trade: Earnings outside manufacturing have fared even worse than those in manufacturing, even though trade affects the latter more.

The different outcomes that American and German workers experience provide an important lesson: Cutting the U.S. off from the global economy isn't an effective way to fight income inequality. Policy makers can enhance the skills of the majority of Americans who do not get college degrees by providing them with knowledge more suitable to working life.

Political candidates may rile up their base with anti-trade speeches, but moving Americans toward practical job-market training could actually make a difference.

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