

## RESEARCH BRIEF

# The Allocation of Talent and US Economic Growth

Based on BFI Working Paper 2019-93, "[The Allocation of Talent and US Economic Growth](#)," by Chang-Tai Hsieh, the Phyllis and Irwin Winkelried Professor of Economics and PCL Faculty Scholar, UChicago's Booth School of Business; Erik Hurst, Frank P. and Marianne R. Diassi Distinguished Service Professor of Economics and John E. Jeuck Faculty Fellow, UChicago's Booth School of Business; Charles I. Jones, Professor of Economics, Stanford University; and Peter J. Klenow, Professor of Economic Policy, Stanford University

### KEY TAKEAWAYS

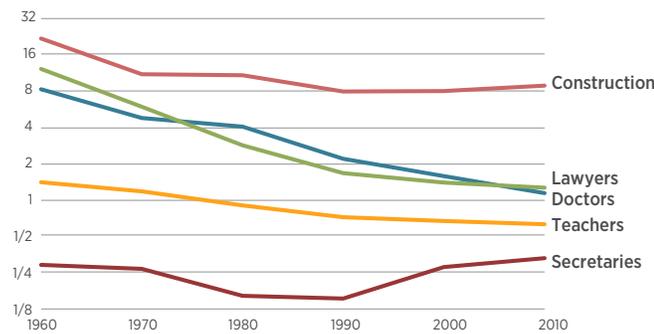
- ✓ In 1960, white men accounted for 94 percent of all doctors and lawyers in the United States; in 2010 it was about 60 percent
- ✓ Fifty years ago, barriers in the labor marketplace, education, and from social norms, restricted choices for women and black men
- ✓ Over time, those barriers fell and women and black men were better able to choose careers that maximized their potential
- ✓ The impact of this more productive assortment of talent was an increase of about 40 percent in US GDP per person between 1960 and 2010

Imagine falling sick in a world where half or more of all the good doctors were intentionally kept out of the profession. How confident would you be in the care you received? Or imagine that you needed a lawyer to get you out of a tight legal jam, yet roughly half of the brightest legal minds were intentionally unavailable?

That was the United States in 1960, when 94 percent of all doctors and lawyers were white men. If you begin with the assumption that talent is equally disbursed among gender and race, and then you repress people based on those factors, you are necessarily preventing talented people from reaching their potential.

**Figure 1** • Occupational Barriers for White Women

*White women's participation as doctors and lawyers, for example, has improved over time.*



Note: Based on Census data and author calculations. See working paper for more details.

This was unquestionably bad for those individuals who were blocked from certain careers, but it was also bad for society, or the economy, as a whole. If talented people were prevented from contributing at their comparative advantage, then the benefits of that labor were lost to the economy. Or, viewed from the converse, the many mediocre workers who otherwise kept their jobs were necessarily delivering less-than-optimal returns to the economy.

Sandra Day O'Connor became the first woman to serve on the US Supreme Court in 1981. Roughly 30 years earlier, though, her skills were not valued so highly. She graduated third in her class from Stanford in 1952, and was offered a job as a legal secretary. Her classmate, William Rehnquist, later a Supreme Court Chief Justice, was asked to clerk on the Supreme Court.

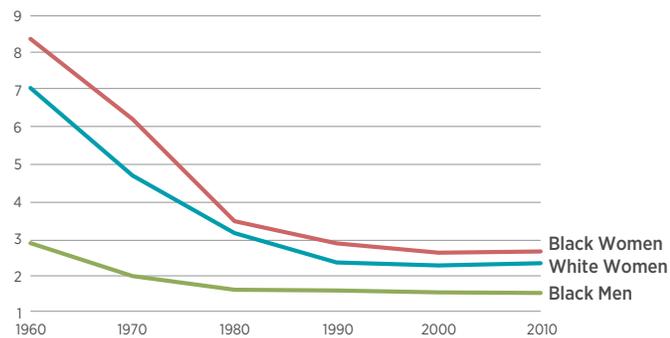
It is one thing to observe the dramatic changes in labor market share over the years (for example, in 2010 the share of white men who were doctors and lawyers fell to 60 percent), and another to measure their effects. Prior to this work, researchers had not formally measured the impact of reduced labor market discrimination on the performance of the aggregate economy. However, in “The Allocation of Talent and US Economic Growth,” Chang-Tai Hsieh and Erik Hurst of UChicago’s Booth School of Business, and Charles L. Jones and Peter J. Klenow of Stanford, offer the first approximation of these effects, and estimate that up to 40 percent of aggregate market output per person between 1960 and 2010 is explained by the more productive allocation of talent.

### Timing is everything

A woman born in the 1940s who came into the labor market in the 1960s might have had the propensity to become a lawyer or a doctor—and may have become a great one. However, discrimination in the workplace and barriers to education likely induced her to take a different career path, as a teacher or a nurse, for example. A woman born in the 2000s, on the other hand, while still facing some discrimination, might more easily choose to attend law or medical school and experience a thriving career. Over time, the US economy has benefited as women have become both better educated and better able to pursue their individual comparative advantage. These same effects hold for black men who were previously restricted in their educational and career opportunities, though the largest aggregate effects for the economy come from the impact on gender as there are simply more total women than black men. (To be a black woman in America over this period was to face the biggest hurdles.)

## Figure 2 • Occupational Frictions

Factors keeping black women, white women, and black men from participating in certain occupations have declined over time.



Note: Figure shows earnings-weighted mean of composite occupational frictions for each group. See working paper for more details.

To determine these effects, the authors employ a model where people are born with a range of talents and career preferences, and each person chooses a profession that best fits her skills and preferences. To simulate a world where women, for example, are steered away from their optimal choice, the authors introduce three countervailing forces:

- Discrimination in the labor market. In effect, labor market discrimination acts as a tax on a person's earnings, which varies dependent on the occupation. The authors offer the example of Sandra Day O'Connor, who became the first woman to serve on the US Supreme Court in 1981. Roughly 30 years earlier, though, her skills were not valued so highly. She graduated third in her class from Stanford in 1952, and was offered a job as a legal secretary. Her classmate, William H. Rehnquist, later a Supreme Court Chief Justice, was asked to clerk on the Supreme Court.<sup>1</sup>

<sup>1</sup><https://www.britannica.com/biography/William-Rehnquist>

- Barriers to developing education and skills. Education is often expensive, especially for certain professions, and families were inclined to invest in their sons' education as they could reasonably expect a return on their investment. If women were effectively barred from certain universities and professions, parents were inclined to invest accordingly in their daughters' educations.
- Social norms. The authors' model also included preferences that certain groups may have for occupations. For example, social norms may have precluded women and black people from certain occupations, or may have directed women to a life of housework and family-rearing.

These three forces changed between 1960 and 2010, and their restrictions on women and black people's occupational opportunities lessened. By incorporating these changes into their model and holding the dispersion of talent across gender and race equal over that time, the authors find that these discriminatory shifts account for up to 40 percent of growth in US market GDP per person.

Which of these three declining obstacles had the most profound impact on US economic growth? The authors calculate that declining barriers to education and skill development explains 36 percent of growth in US GDP per person from 1960 to 2010, while the drop in labor market discrimination accounts for 8 percent. Social norms had minimal impact.

## Conclusion

For many years, women and black men have faced barriers to education and occupational choice in the United States, and while discrimination has not been eliminated, those barriers have been reduced enough to allow more women and black men to pursue careers that maximize their returns on education and labor. These falling barriers have not only benefited individuals but also the whole economy, accounting for about 40 percent of aggregate growth in US GDP per person from 1960 to 2010.

## CLOSING TAKEAWAY

Over time, the US economy has benefited as women have become both better educated and better able to pursue their comparative advantage. These same effects hold for black men who were previously restricted in their educational and career opportunities, though the largest aggregate effects for the economy come from the impact on gender as there are simply more total women than black men.

### READ THE WORKING PAPER

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### The Allocation of Talent and U.S. Economic Growth

[bfi.uchicago.edu/working-paper/201993](http://bfi.uchicago.edu/working-paper/201993)

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