

The Economic Cost of Brain Waste in the U.S.

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Who Was Involved

Support and collaboration

New American Economy: Angela Marek, Pavel Dramski, and Kate Brick

World Education Services: Paul Feltman and Stacey Simon

The J.M. Kaplan Fund: Suzette Brooks Masters

Research team

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Jim Bachmeier, Sociology Department, Temple University

Carl Davis and Meg Wiehe, Institute on Taxation and Economic Policy



Research Questions

1. How many immigrants are underemployed (i.e., in low-skilled jobs) or unemployed?

2. Profiles by nativity, place of education, and legal status

- Foreign born, foreign educated
- Foreign born, U.S. educated
- U.S. born, U.S. educated

3. What are the most important contributors to immigrant underemployment?



Research Questions (Cont'd)

4. What are the costs of underemployment in terms of forgone earnings?

5. What are the costs of underemployment in terms of forgone federal and state taxes?

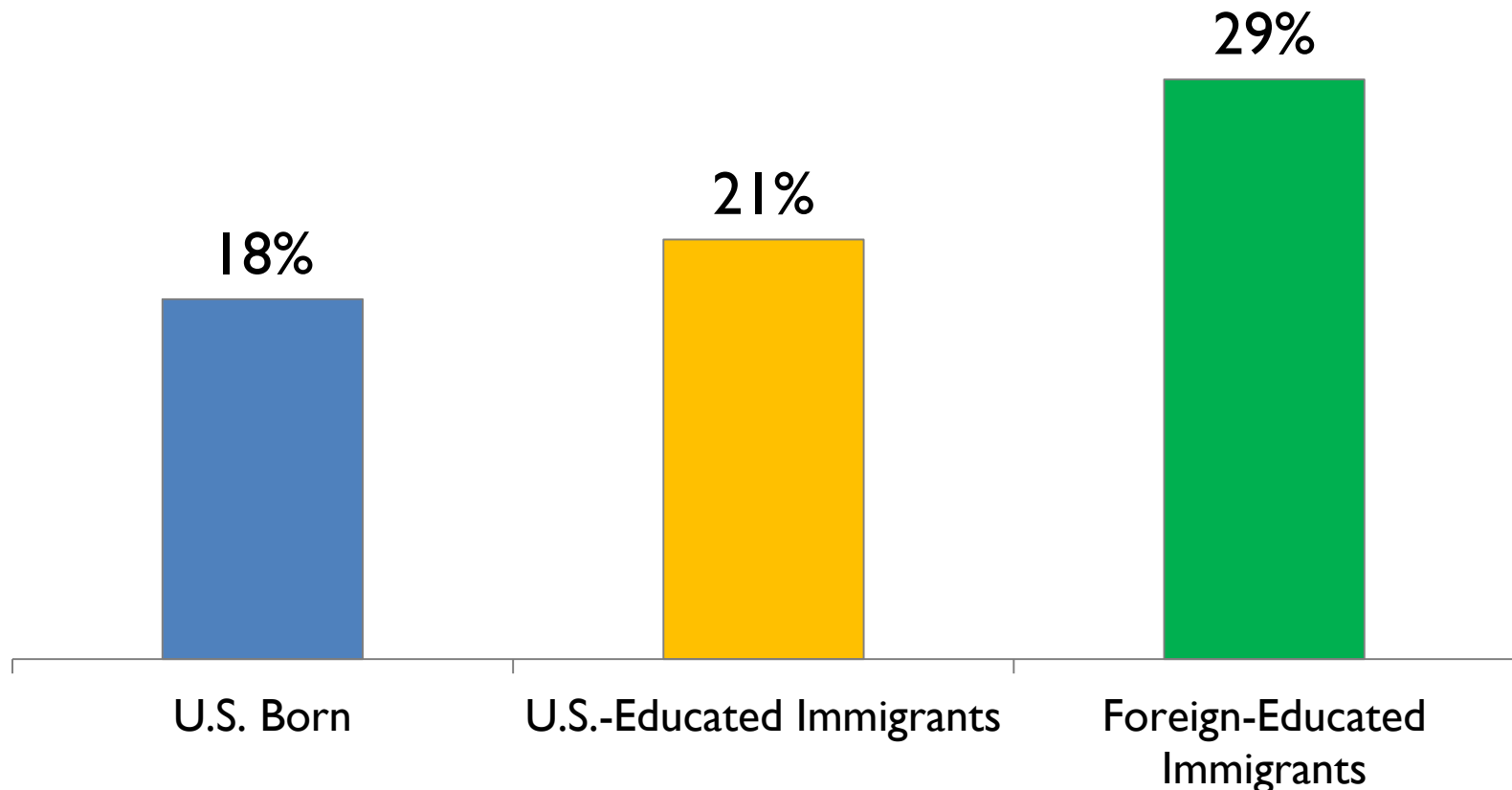


Factors Linked to Skill Underutilization

- **Place of education**
- **English language proficiency**
- **Legal status**
- **Race and ethnicity**
- **Time in the U.S.**
- **Degree level**
- **Degree field**

Foreign Degree is a Major Risk Factor

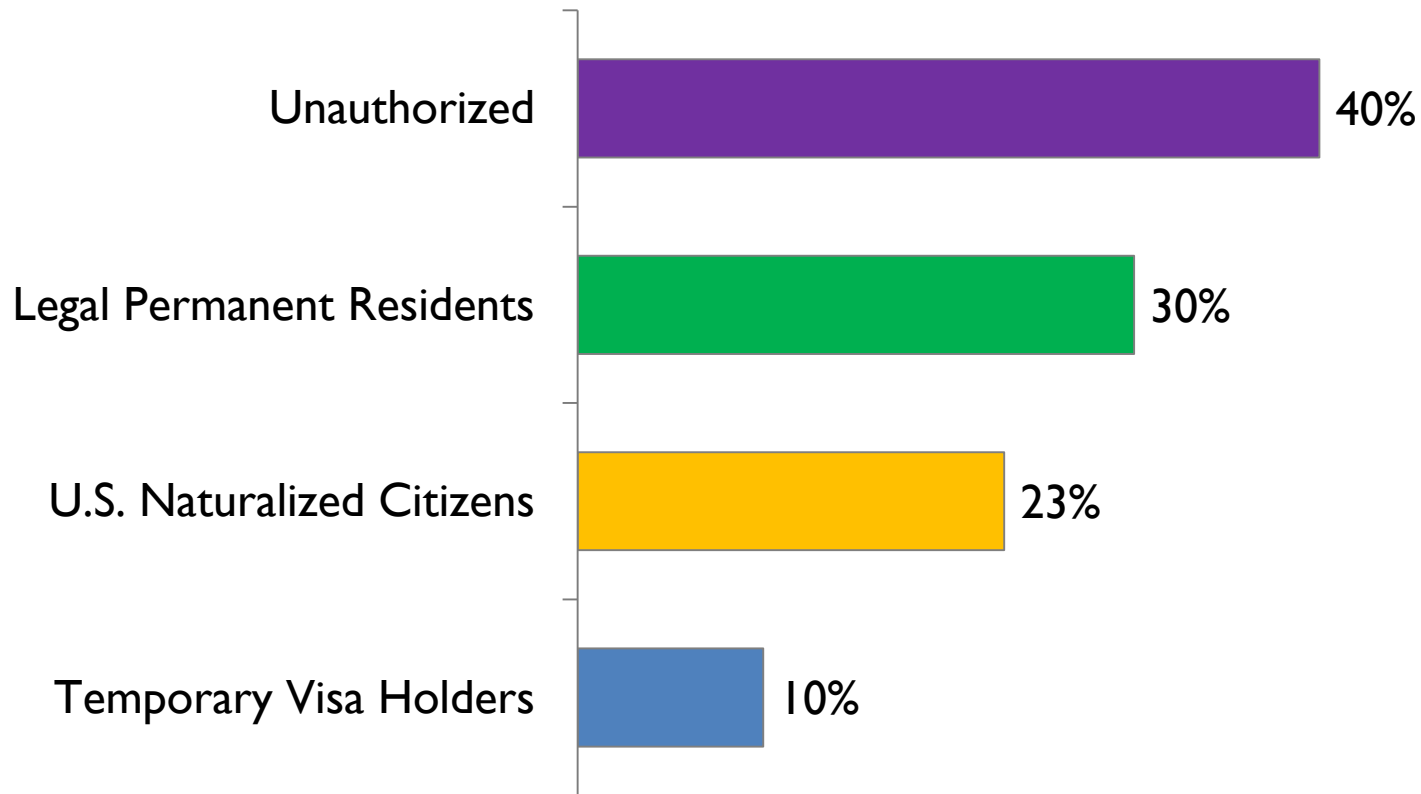
Percent in low-skilled jobs or unemployed



Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.

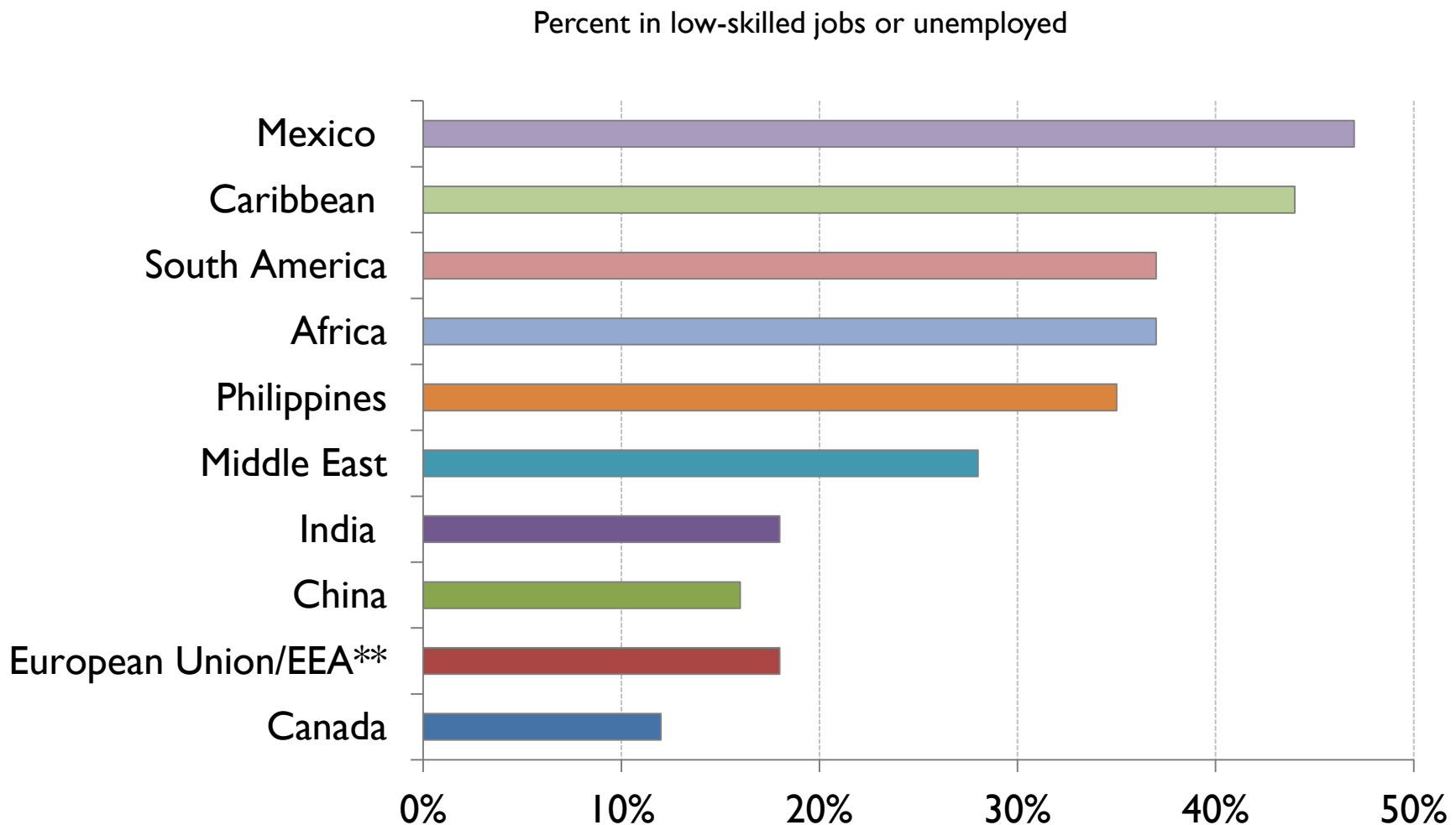
The U.S. Citizenship Premium

Percent in low-skilled jobs or unemployed



Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.

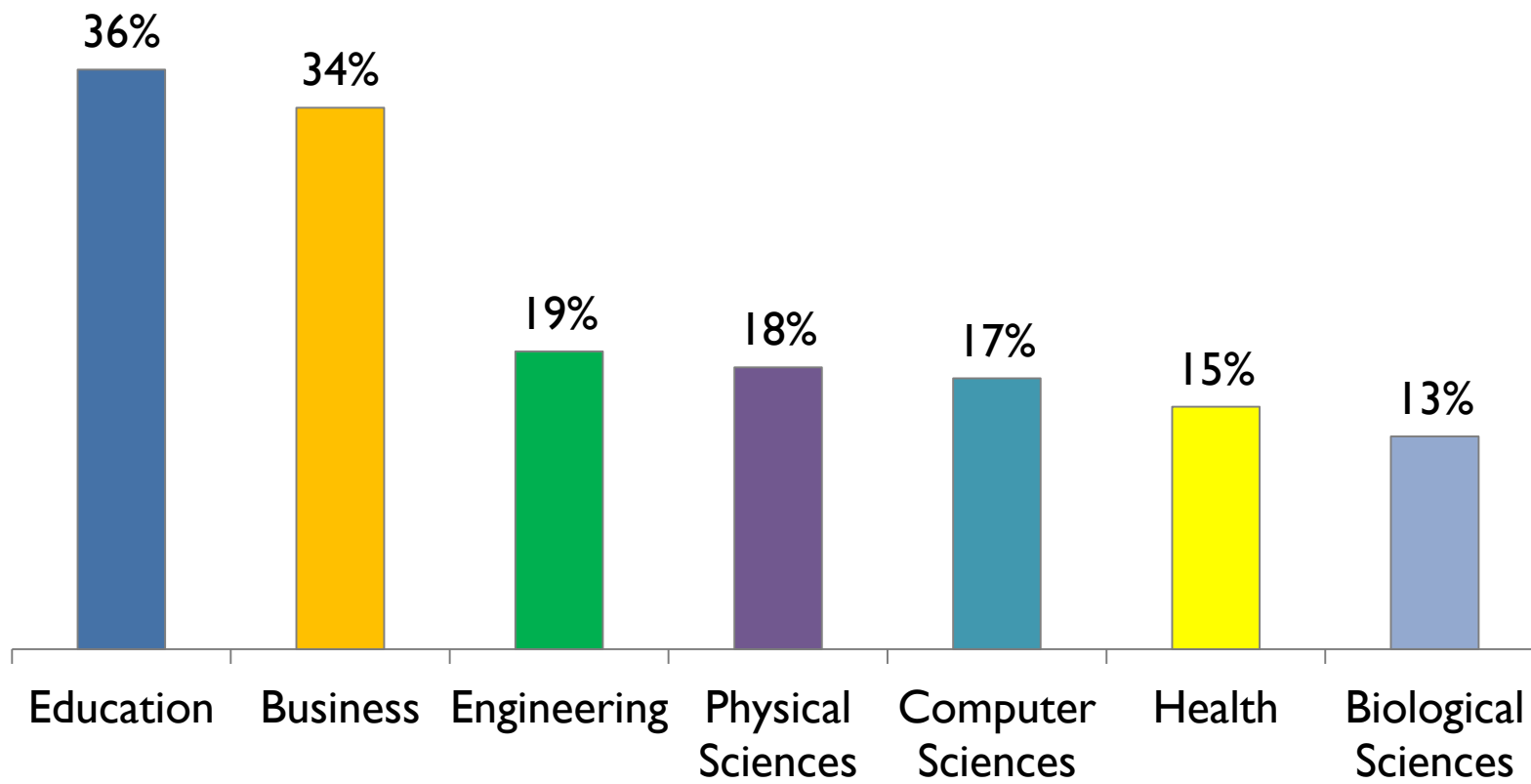
Immigrants from **Latin America** and **Africa** Have High Underutilization Rates



Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.

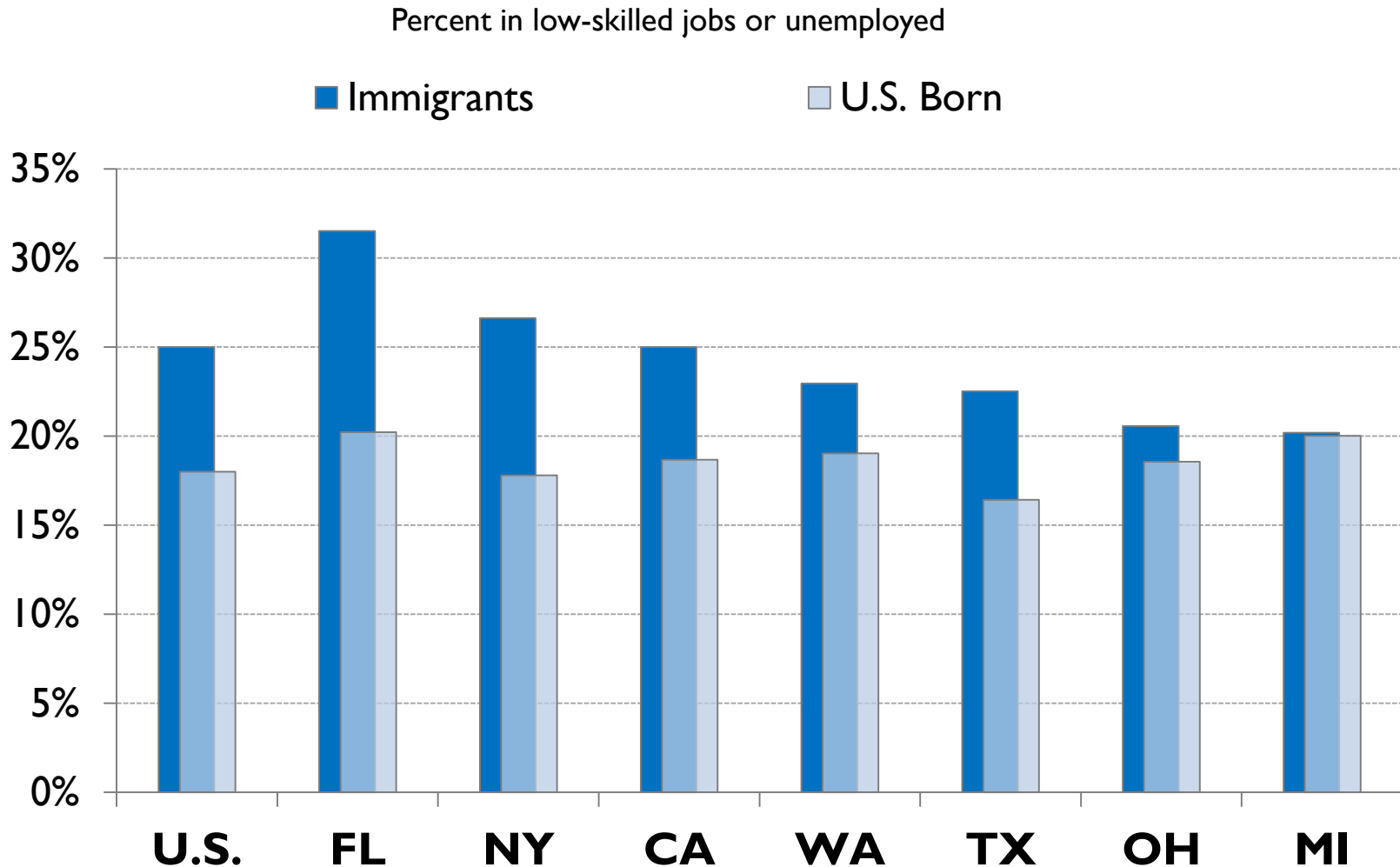
Immigrants with Degrees in **Education** and **Business** More Likely to Be Underutilized

Percent in low-skilled jobs or unemployed



Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.

Florida Has High Rate of Skill Underutilization; Michigan & Ohio: Low



Source: MPI analysis of 2009-13 ACS and 2008 SIPP U.S. Census Bureau data, with legal status assignments by Bachmeier and Van Hook.

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How Immigrant College Graduates in **FL** and **MI** Differ from the U.S.

Characteristic	Florida	Michigan
English proficiency	Less likely	More likely
With U.S. degrees	Less likely	Less likely
Advanced degree	Less likely	More likely
Temporary visa holders	Lower shares	Higher shares
Age	Older	Similar
Top origin	Caribbean and South America	Asia and Europe



Economic Impact

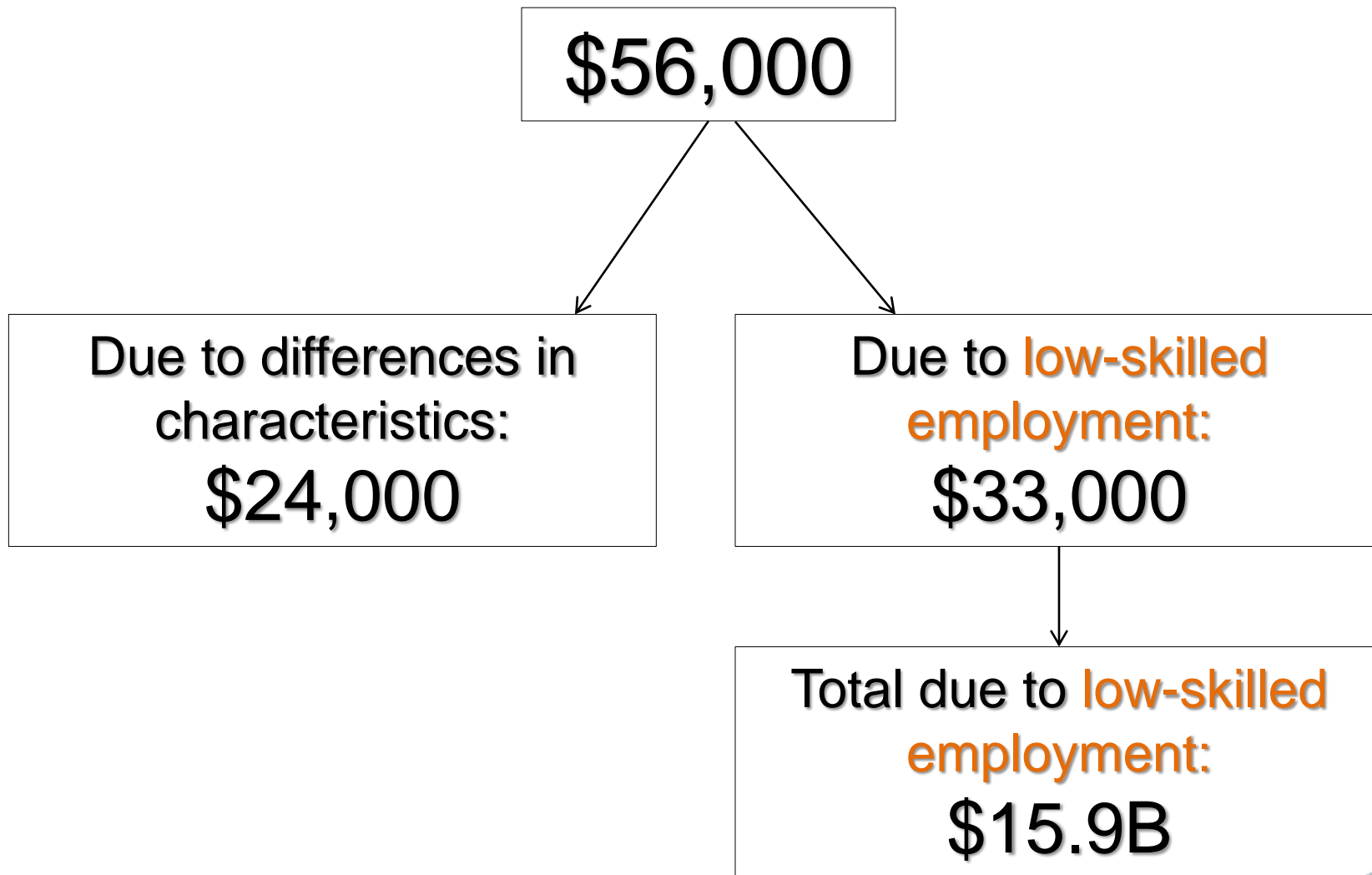
What are the costs of underemployment?

- **Forgone earnings**
- **Forgone federal and state/local taxes**

Difference in Annual Earnings Adequately Employed vs. Underemployed

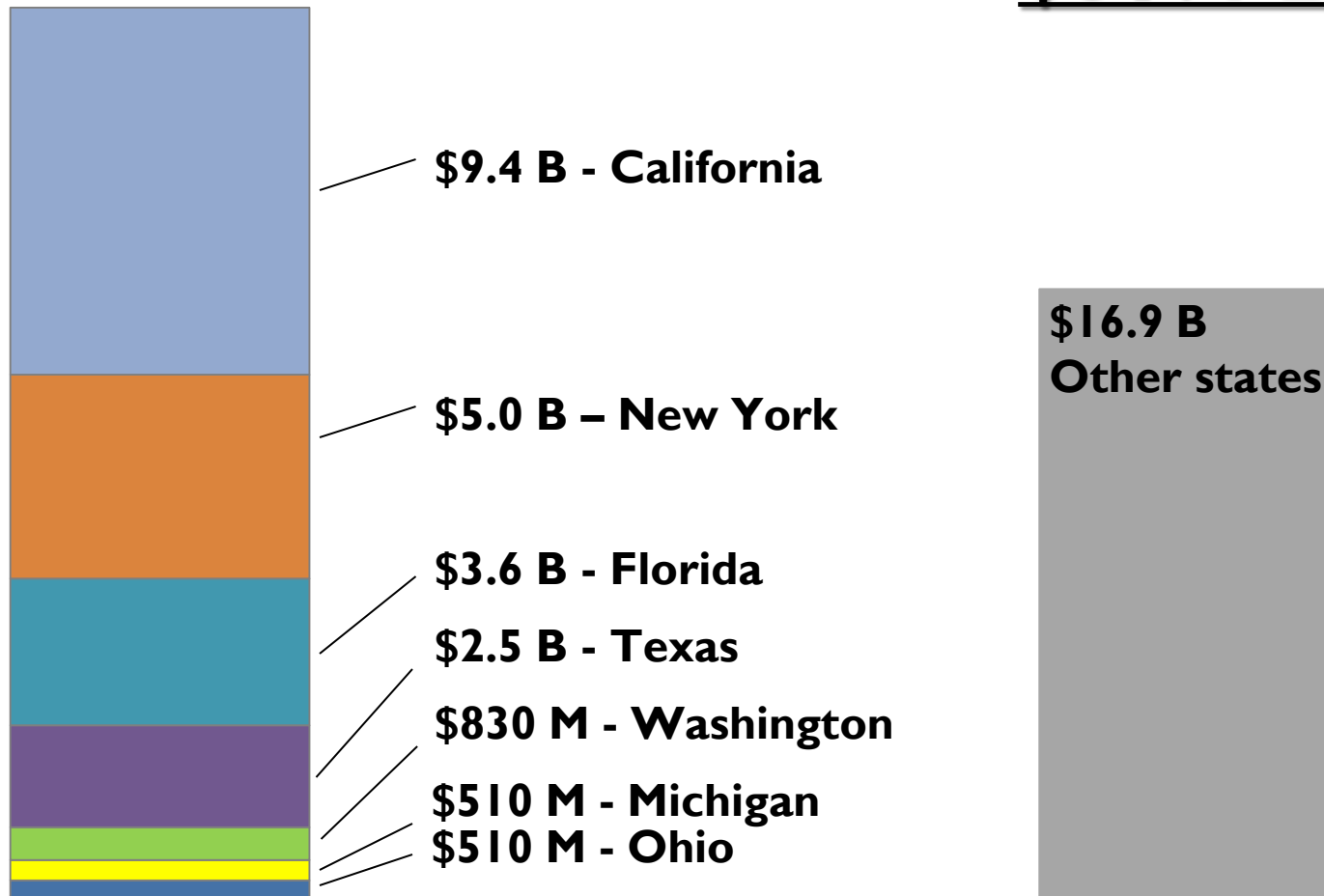
Average Annual Earnings	Foreign-Educated Men
Employed in high/middle-skilled jobs	\$96,000
Employed in low-skilled jobs	\$40,000
Gap	\$56,000

Amount and Sources of Underemployment Disadvantage: Foreign-Educated Men



Annual Forgone **Earnings** Due To Low-Skilled Employment

\$39.4 Billion





Annual Forgone **Taxes**

\$10.2 Billion

- **Federal level: \$7.2 billion**
- **State/Local level: \$3 billion**



Annual Forgone State and Local Taxes

State	Forgone State & Local Taxes
California	\$694.8 M
New York	\$594.0 M
Florida	\$214.7 M
Texas	\$167.5 M
Washington	\$74.9 M
Ohio	\$53.0 M
Michigan	\$48.6 M
Total U.S.	\$3,033.6 M



Takeaways: Brain Waste's Impacts

1.9 million or 25% of the 7.6 million university-educated immigrants

Costs

\$39.4 billion in forgone earnings

\$10.2 billion in forgone taxes, including

\$3.0 billion at state/local level

\$7.2 billion at federal level

Conservative estimates



Why Is It An Urgent Issue?

- **48%** of recent immigrant adults have with a university degree
- 7 million or 18% **U.S.-born** college graduates
- Focus on both *development* and *full use* of human capital regardless of place of education

Promising initiatives: International and U.S.

MPI's Research

National Report & Report-in-Brief

http://bitly.com/mpi_untappedtalent

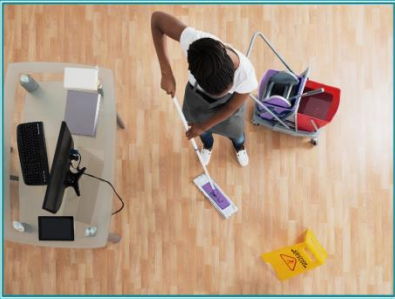
Infographic

<http://bit.ly/infobrainwaste>

State Fact Sheets
CA, FL, MI, NY,
OH, TX, WA

<http://bit.ly/untappedtalentstates>

UNTAPPED TALENT
The Costs of Brain Waste among Highly Skilled Immigrants in the United States



By Jeanne Batalova, Michael Fix, and James D. Bachmeier

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Fact Sheet

December 2014

The Costs of Brain Waste among Highly Skilled Immigrants in Washington State

By Ariel G. Ruiz Soto, Jeanne Batalova, and Michael Fix

Washington State is home to nearly 1 million immigrants, a number that has tripled since 1990.¹ The state's strong, diverse economy, led by the high-tech industry, growing services sector, and agriculture, employs immigrant workers at all skill levels. Nonetheless, a substantial number of college-educated immigrants in Washington find that they cannot put their academic and professional qualifications to full use.

Using an innovative methodology developed by the Migration Policy Institute (MPI), this fact sheet examines the skill underutilization of highly skilled immigrants—also known as “brain waste”—and its economic costs in Washington. The authors estimate the number and share of college-educated immigrants who work in low-skill jobs or are unemployed in Washington State. They identify the key factors underlying this brain waste, and estimate the amount of annual earnings and state and local taxes lost because immigrant college graduates end up working in low-skill jobs. In general, the analysis employs two types of comparisons: (1) between the foreign born² and U.S. born who are college graduates; and (2) between foreign-educated and U.S.-educated immigrants. This fact sheet accompanies a national report on skill underutilization, *Untapped Talent: The Costs of Brain Waste among Highly Skilled Immigrants in the United States*.³

Box 1. What Is Brain Waste? Quick Definitions

Brain waste describes the situation when college graduates cannot fully utilize their skills and education in the workplace despite their high professional qualifications. (The terms college educated and highly skilled are used interchangeably in this fact sheet.)

Brain waste (or skill underutilization) is defined here as comprising two unfavorable labor market outcomes: unemployment and underemployment.

- Unemployment occurs when a person who is actively searching for employment is unable to find work.
- Underemployment refers to work by the highly skilled in low-skill jobs, that is, jobs that require only moderate on-the-job training or less (e.g., home-health aides, personal-care aides, maids and housekeepers, taxi and truck drivers, and cashiers). These occupations typically require a high school diploma or less.

In contrast, highly skilled individuals who are adequately employed work in high- or middle-skilled jobs. High-skilled jobs require at least a bachelor's degree (e.g., surgeons, scientists, and engineers); middle-skilled jobs require long-term on-the-job training, vocational training or an associate's degree (e.g., carpenters, electricians, and real estate brokers).

Because individuals in middle-skilled jobs are considered adequately employed in this analysis, underemployment refers only to those who are severely underemployed or in positions substantially below their level of training.

IMMIGRANT SKILL UNDERUTILIZATION



For More Information

Topic “Brain Waste and Credential Recognition:”
www.migrationpolicy.org/topics/brain-waste-credential-recognition

Contact us at

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Key Definitions

Brain waste (aka skills underutilization): College graduates cannot fully utilize their skills and education in the workplace despite their high professional qualifications. Includes two outcomes:

1. *Unemployment.* Persons are actively searching for employment but unable to find work.
2. *Underemployment.* College graduates working in low-skilled jobs (e.g., home-health aides, personal-care aides, maids and housekeepers, taxi and truck drivers, and cashiers). These occupations typically require a high school diploma or less.

Adequate employment in high- or middle-skilled jobs. *High-skilled* jobs require at least a bachelor's degree (e.g., postsecondary teachers, surgeons, engineers); *middle-skilled* jobs require long-term on-the-job training, vocational training, or an associate's degree (e.g., carpenters, electricians, and real estate brokers).



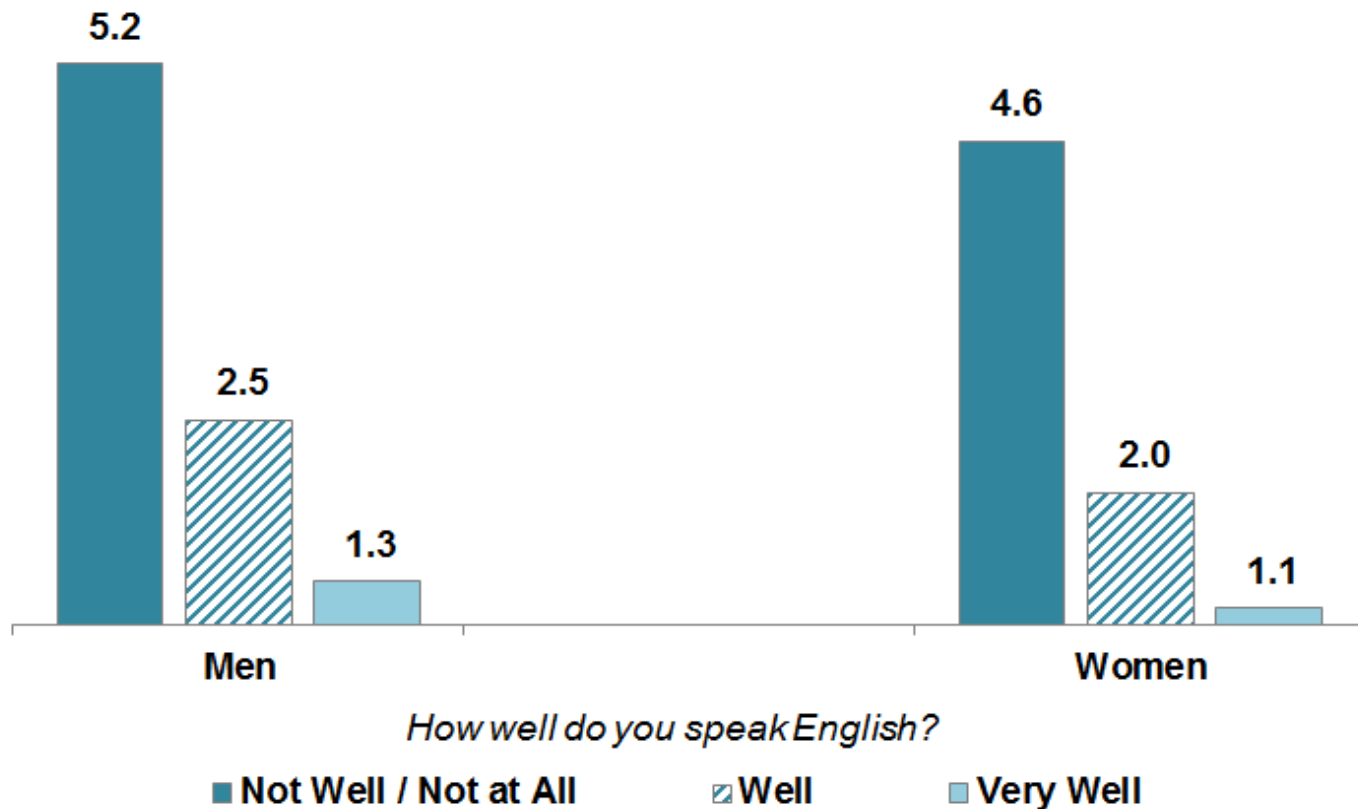
How Serious is Brain Waste in the United States?

Of the 7.6 million immigrant college graduates in the U.S. labor force

- **1.9 million – one in four – are in low-skilled jobs or unemployed**
- Nearly 1.4 million are in middle-skilled jobs
- 4.4 million in high-skilled jobs

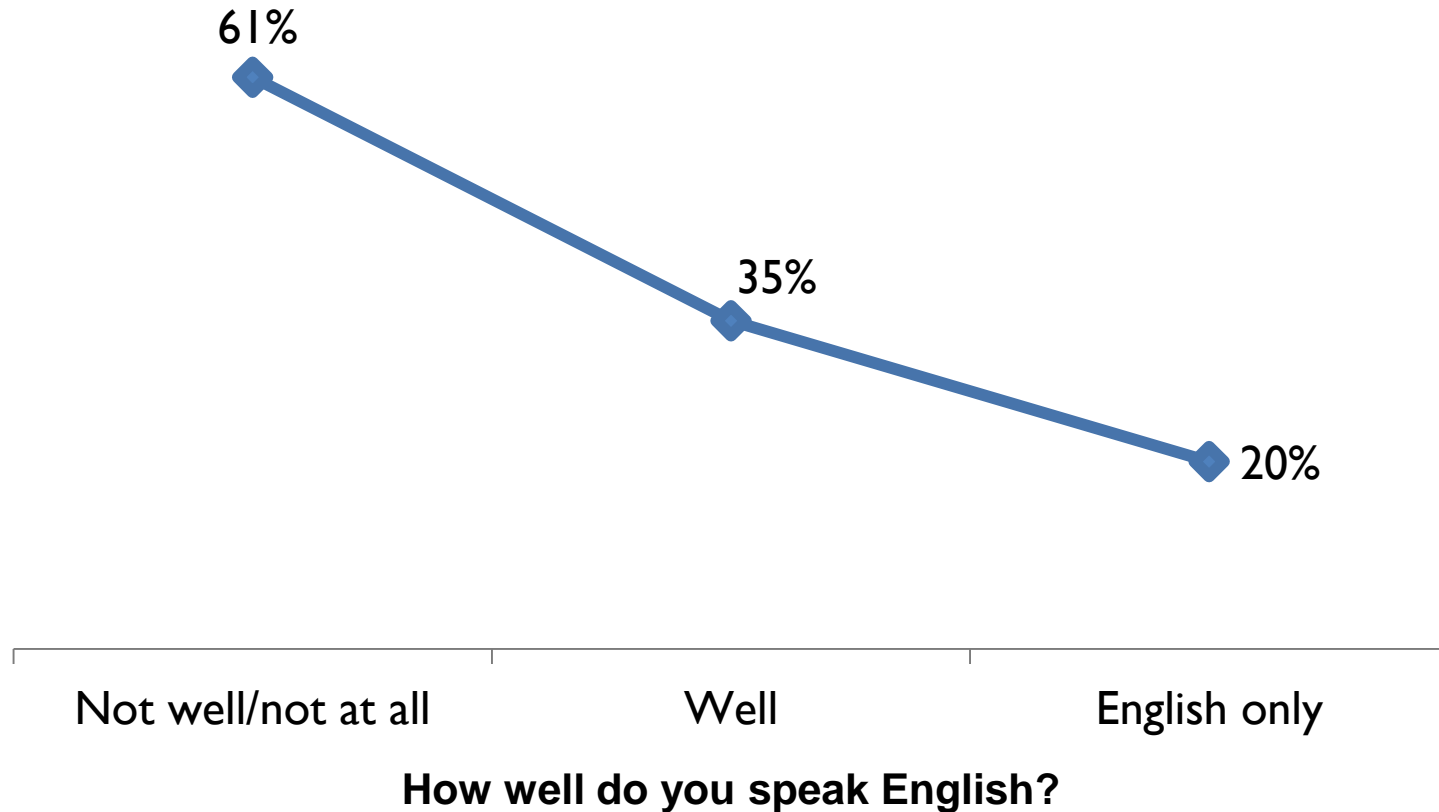
Immigrants with Low English Skills Are 5 Times More Likely to Be Underemployed

Odds Ratios of Low-Skilled Employment:
Compared to "English Only" Speakers



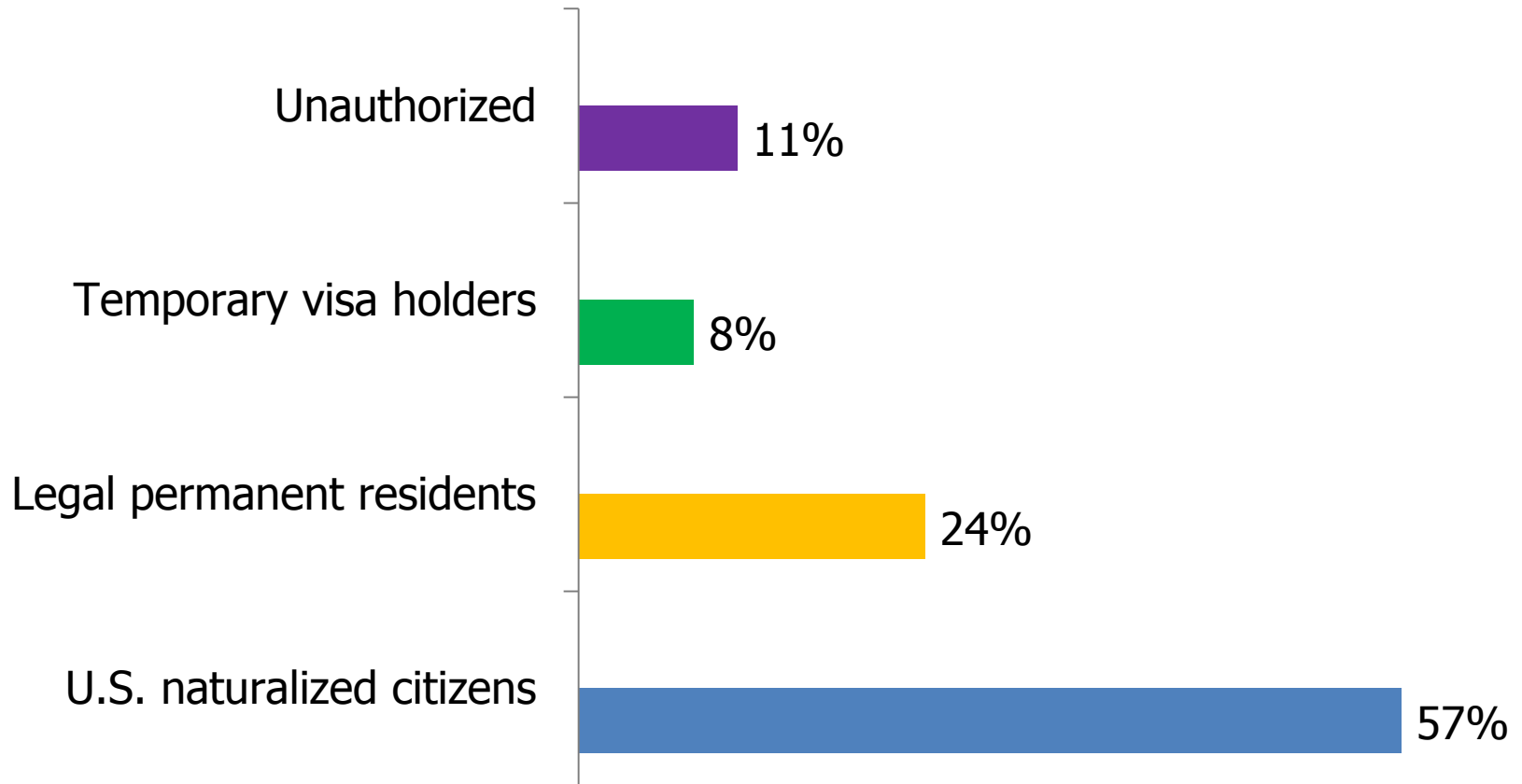
English Proficiency The Strongest Predictor

Percent in low-skilled jobs or unemployed



The **U.S. Citizenship** Premium

Distribution by citizenship/legal status



Immigrants with Degrees in **Education** and **Business** More Likely to Be Underutilized

Percent in low-skilled jobs or unemployed

■ Immigrants ■ U.S. Born

