A Demographic Portrait of Occupational Outcomes for Immigrants in the Saint Louis Metropolitan Region

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Outline of Presentation

• Motivation

• Research Objectives

• Research Design and Data

• Empirical Findings

• Summary
Motivation for the study
Foreign-born Population Trends

171% increase in the foreign-born population since 1990
The pre-tabulated tables provide important information but we are limited with our analysis.

For example, we only have five occupational categories.
The goal of this study was to develop a methodology to allow researchers and non-profit organizations to answer any question beyond the pre-tabulated tables.
RESEARCH OBJECTIVES
Three Objectives

• Develop a methodology to study occupational outcomes by demographic characteristics for:
  – Unemployed foreign-born workers
  – Employed foreign-born workers
  – Underemployed foreign-born workers
  – STEM occupations

• Develop a methodology to map the results for the Saint Louis Region

• Develop a methodology to allow for comparisons with other regions in future studies
RESEARCH DESIGN AND DATA
Data

• American Community Survey Aggregate Data from American FactFinder

• American Community Survey IPUMS
  – 5 year sample (2011-2015)
  – PUMA Geography for maps

• Analytical Plan for Occupational Outcomes
  – Unemployed foreign-born workers
  – Employed foreign-born workers
  – Underemployed foreign-born workers
    • working but living in poverty
    • working in an occupation not using their education
  – STEM foreign-born workers
Key Demographic Characteristics
• Immigrants are still trying to understand the concept of U.S. racial categories

• Slightly less than half of the immigrants had a college or post-college education
NUMBER OF COUNTRIES FOR EACH RACIAL CATEGORY

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
RACE OF WORKING-AGE IMMIGRANT POPULATION

36% of the working-age immigrant population was Asian.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
56% of working-age immigrants had less than a college education.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
Question #1

How much talent do we have in the region that is under-utilized?
IMMIGRANT POPULATION IN
SAINT LOUIS, MO

13% of employed immigrants were underemployed

28% of employed immigrants are in STEM occupations

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
Question #2

Who are the unemployed immigrants?
36% of unemployed immigrants were White.

7% of unemployed immigrants were Black.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
71% of unemployed immigrants had less than a college education.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
24% of unemployed immigrants were classified as protective and military.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
Question #3

Who are the employed immigrants?
36% of employed immigrants were Asian

31% of employed immigrants were White

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
55% of employed immigrants had less than a college education.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
28% of employed immigrants were in Business, Finance, Arts, and Science.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
Question #4

Who are the underemployed immigrants?
35% of underemployed immigrants were Latino

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
46% of underemployed immigrants had a college or post-college education.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
34% of underemployed immigrants were in services

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
Question #5

Who are the immigrants in STEM occupations?
**TOP 10 STEM OCCUPATIONS**

- Computer and Information Systems Managers: 6%
- Management Analysts: 6%
- Computer Systems Analysts: 6%
- Computer Programmers: 5%
- Software Developers: 15%
- Computer Occupations: 8%
- Physical Scientists: 7%
- Postsecondary Teachers: 18%
- Physicians and Surgeons: 18%
- Registered Nurses: 11%

25% of STEM immigrants were in occupations related to computers.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
63% of STEM immigrations were Asian

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
67% of STEM immigrants had a post-college education.

Source: American Community Survey 2011-2015 5-Year sample, IPUMS-USA, University of Minnesota, www.ipums.org. Figure created by Sandoval and Ruiz.
QUESTION #6
IS THERE A SPATIAL PATTERN FOR IMMIGRANTS?
St. Louis City had the largest concentration of working-age immigrants.
St. Louis County had the largest concentration of STEM workers.

Legend:
- 174 - 1,081
- 1,082 - 2,802
- 2,803 - 3,781
SUMMARY
General Conclusions

• 7% of working age immigrants were unemployed

• 13% of working immigrants were underemployed

• 1 out of 4 (28%) working immigrants are in STEM
Specific Trends by Occupation

• 96% in military or protective occupations were unemployed immigrants.

• Business, Finance, Arts, and Science was the largest occupation category (28%) followed by Sales, Office, and Education (21%) for the employed immigrants.

• Services occupation accounted for the largest number of underemployed immigrants.

• Of the top 10 STEM occupation, 1 out of 4 (25%) jobs were in a computer field.