Immigrant Impact

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Background and Motivation

Recently, there has been a lot of controversy over immigration in the USA with the muslim immigration ban. This controversy sparked our team's curiosity on the impact of immigration in the US. Does immigration negatively affect the economy and cause issues in this country? We wanted to create an interactive story to help answer these questions and better understand this complex tale. We were inspired by the "through the eyes of a survivor" interactive story posted as inspiration and hope to create a similar narrative.

Project Objectives

We are trying to understand how to use information visualization in a meaningful way. We want to use the skills that we have gained from this class in a meaningful way. Most of the information visualizations that we've seen for our in-class critiques are part of a higher order narrative and are used as a piece in storytelling.

We're interested in telling this story and exploring the following guestions:

- What impact do immigrants have on the economy?
- How do they impact the jobs/wages of American citizens?
- Are immigrants more likely to start their own businesses?
- How do immigrants give back to their new communities? Is there an impact there?
- What problems do immigrants face economically when moving to the USA?
- How do Visas impact the flow of immigration? Why?

Initial Data Sources

We looked at finding data sources for this project, we haven't been able to find full datasets for this project, however, there are quite a few articles that talk about immigration and its impact on the economy. For example, consider the following sources:

- http://www.budgetmodel.wharton.upenn.edu/issues/2016/1/27/the-effects-of-immigration-on-the-united-states-economy
- https://www.bls.gov/oes/current/oes273043.htm
- http://cis.org/node/4573
- http://www.frbsf.org/economic-research/publications/economic-letter/2010/august/effect-immigrants-us-employment-productivity/

- https://www.nap.edu/read/5779/chapter/6#154
- https://www.dhs.gov/immigration-statistics
- http://www.epi.org/publication/immigration-facts/

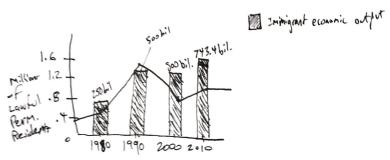
These sources have a lot of simple data-viz as part of the article. We're trying to work backwards from them and get a good idea of what data we have to use. We have not found full data sources that need cleaning as of yet.

Data Sources Selected

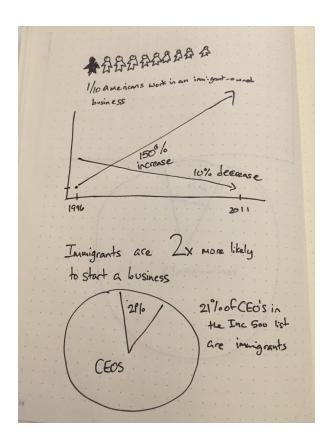
We ended up using the http://www.newamericaneconomy.org as a way to get our data, we found that this website had a huge dataset of immigration related data, in addition to being organized in state and local levels, which made it easy for us to view data.

Initial Visualizations

We started exploring what sorts of data we wanted to look at and what sorts of data we wanted to visualize, here are some of our initial sketches

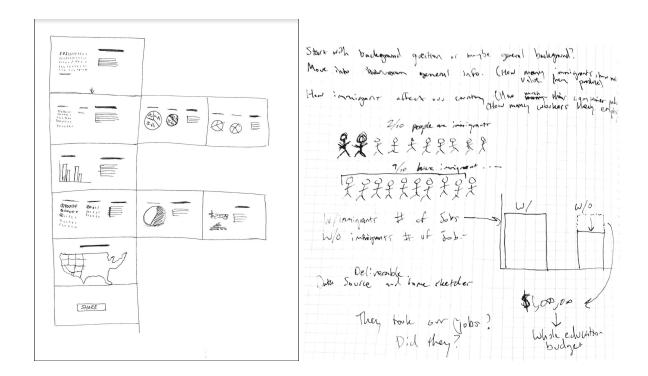






We liked these ideas and wanted to see how this data would look visualized on a bigger screen to better show our results in a story format.

Secondary Sketches

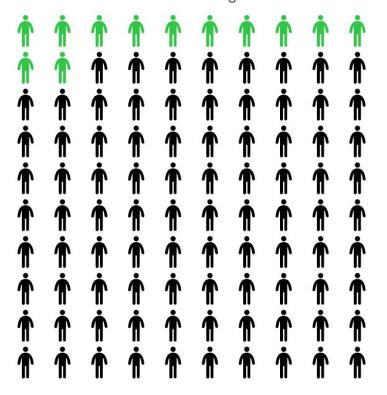


D3 Mockups

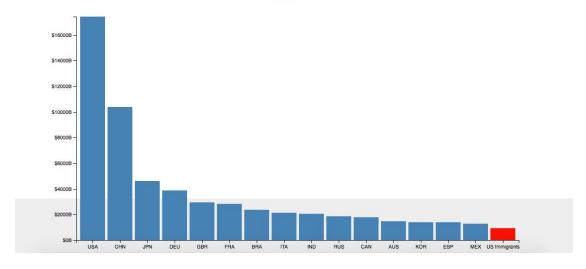
Map of Companies Owned by Immigrants



12/100 US citizens are immigrants



What if Immigrants' Spending Power was compared with GDP of countries



Data Scraping

We created multiple JSON files from our data using BeautifulSoup and did some manual scraping. We chose to create JSON files because of easy accessibility over other file formats. Here is a small sample of an some data that we collected:

```
"Mississippi": {
```

"info": "Today, Mississippi is home to more than 63,000 new Americans. While foreign-born residents only account for 2.1 percent of the state's total population, such immigrants serve as everything from entrepreneurs to sewing machine operators, making them critical contributors to Mississippi's economic success overall.",

```
"Employees at Immigrant-Owned Firms": "17,605", "Immigrant Spending Power (2014)": "$983.0M", "Workforce": {
```

"info": "Nationally, immigrants are 17.2 percent more likely to hold an advanced degree than the native-born. They are also more likely to have less than a high school education. Uniquely, this allows them to fill critical shortages at both ends of the skill spectrum, from high-tech fields to agriculture, hospitality, and service industries. This holds true in Mississippi, where immigrants play a particularly large role as postsecondary teachers, sewing machine operators, and carpenters. ",

```
"stats": {
  "Less Than High School": {
   "Foreign-Born Population": "31.7%",
   "Native-Born Population": "16.9%"
  },
  "High School & Some College": {
   "Foreign-Born Population": "41.9%",
   "Native-Born Population": "62.4%"
  "Graduate Degree": {
   "Foreign-Born Population": "13.6%",
   "Native-Born Population": "7.8%"
  "Bachelor's Degree": {
   "Foreign-Born Population": "12.8%",
   "Native-Born Population": "12.9%"
  }
 }
"Immigrant Share of Population": "2.1%",
"Immigrant Entrepreneurs": "5,801",
"Taxes & Spending Power": {
```

```
"Immigrant Household Income": "$1.3B",
   "Federal Taxes": "$245.4M",
   "State & Local Taxes": "$112.3M",
   "Total Spending Power": "$983.0M",
   "Taxes Paid": "$357.7M".
   "info": "Nationally, immigrants earned $1.3 trillion in 2014 and contributed more than $104
billion in state and local taxes, as well as almost $224 billion in federal taxes. This left them with
nearly $927 billion in spending power. Immigrants in Mississippi play an important role
contributing to the state's economy, both as consumers and taxpayers. "
  },
  "Demographics": {
   "info": "In the United States, immigrants are more likely to be working-age than their
U.S.-born counterparts. This allows them to contribute to the U.S. economy and to entitlement
programs as they work and pay taxes. As Mississippi's slow population growth may potentially
deprive businesses of customers and employers of a workforce they can depend on as more
baby boomers retire, immigrants are likely to help to address some of these demographic
challenges.",
   "stats": {
     "25-64": {
      "Native-Born Population Share": "50.3%",
      "Foreign-Born Population Share": "71.6%"
     "65+": {
      "Native-Born Population Share": "14.4%",
      "Foreign-Born Population Share": "10.1%"
     },
     "0-24": {
      "Native-Born Population Share": "35.3%",
      "Foreign-Born Population Share": "18.3%"
   }
  "Immigrant Residents": "63,051",
  "Entrepreneurship": {
   "People employed by immigrant-owned firms": "17,605",
   "info": "In 2010, roughly one in 10 American workers with jobs at private firms were
employed at immigrant-founded companies. Such businesses also generated more than $775
billion in annual business revenue that year. In Mississippi like the country as a whole,
immigrants are currently punching above their weight class as entrepreneurs. Foreign-born
workers currently make up 5.4 percent of all entrepreneurs in the state, despite being just 2.1
percent of Mississippi's population. ",
   "Immigrant entrepreneurs": "5,801",
```

"Business income of immigrant-owned firms": "\$81.6M"

```
},
"Immigrant Taxes Paid (2014)": "$357.7M",
"Undocumented Immigrants": {
```

"info": "The United States is currently home to an estimated 11.4 million undocumented immigrants, the vast majority of whom have lived in the country for more than five years. The presence of so many undocumented immigrants for such a long time presents many legal and political challenges. But while politicians continue to debate what to do about illegal immigration without any resolution, millions of undocumented immigrants are actively working across the country, and collectively, these immigrants have a large impact on the U.S. economy. This is true in Mississippi, where undocumented immigrants contribute tens of millions of dollars in taxes each year. ",

```
"Federal Taxes": "$16.6M",

"State & Local Taxes": "$12.4M",

"Total Spending Power": "$224.0M",

"Undocumented Household Income": "$252.9M ",

"Taxes Paid": "$29.0M",

"Undocumented entrepreneurs": "2,222",

"Undocumented immigrants": "22,939",

"Share of undocumented immigrants, working age": "75.0%"

}
```

Final Page

http://jprathipati.com/Vis-FinalProject/