

# Economic Cost of Kentucky Senate Bill 1

entucky State Senator Danny Carroll recently introduced Senate Bill 1, which has been identified as a top priority for the chamber in 2020. The bill, which would effectively force local law enforcement agents to become federal immigration agents, would also punish local government entities and public colleges and universities that limit cooperation and information sharing with federal authorities on immigration matters through injunctive action.

Similar to Arizona's SB 1070, a 2010 "Show Me Your Papers" law, the adoption of SB 1 would create a hostile environment in Kentucky, potentially causing contributing members of the immigrant community to leave the state as a result. This

would cost the state several hundred million dollars in lost jobs, tax revenue, and economic activity. Previous studies have shown that Arizona's law led to a large decline in tax revenue and created significant challenges for several key industries in the state reliant on an immigrant workforce following an estimated 10 percent of the undocumented population leaving the state after the law was passed.

Undocumented immigrants of working age: Annual spending power held by undocumented immigrants:

88.4%

\$714.0M

SB 1070 should be a cautionary tale. Like in Arizona, undocumented immigrants in Kentucky are overwhelmingly employed. According to data from New

American Economy, 88.4 percent of undocumented immigrants in Kentucky are of working age (ages 16 to 64). They pay more than \$90 million each year in taxes, including nearly \$40 million in state and local taxes, and hold \$714 million in spending power that bolsters the local economy. The costs of losing a significant portion of these workers could be substantial for Kentucky economy.

## If 10% of undocumented immigrants leave Kentucky, the state stands to lose...

\$2.4M in federal taxes and

\$2.3M in state & local taxes 2,704

employed workers whose departure will reflect

\$71.8M

in lost wage earnings\*

1,588

additional jobs

that were dependent on undocumented immigrant consumers, resulting in

\$66.3M in additional lost wage earnings \$257.4M in Gross Domestic

Product (GDP)

\* State-wide, business owners in industries including food service, construction, and animal production will be greatly affected.

Note: The economic loss as it relates to jobs, earnings, taxes, and GDP is proportional to the number of undocumented immigrant workers that would leave the state. For instance, if 20 percent of undocumented immigrants leave Kentucky, the economic cost will be twice the above numbers.

#### The losses in Kentucky are significant.

Because of the role undocumented immigrants play in the state labor market—including their critical role in particularly labor-intensive jobs—U.S.-born workers, with different skill sets and professional interests, would only fill a small number of the positions vacated by immigrants.<sup>2</sup> Some businesses may have to close altogether because they can't find the appropriate workforce to fill vacant positions, leading to job losses for the U.S.-born individuals employed by those businesses. Economic activity will decrease across the board, having a dramatic effect on U.S.-born workers and many of the state's important industries that depend on paying customers, such as retail and service industries.

### METHODOLOGY FOR ESTIMATING POTENTIAL ECONOMIC COST OF KENTUCKY SENATE BILL 1

To estimate the potential economic cost of the passage of of Senate Bill 1, we first obtained 2016 American Community Survey (ACS) five-year data using the Integrated Public Use Microdata Series (IPUMS) portal. We then applied the methodological approach outlined by Harvard University economist George Borjas to arrive at an estimate of the undocumented immigrant population in Kentucky.<sup>3</sup> The foreign-born population is adjusted for misreporting in two ways. Foreign-born individuals who reported naturalization are reclassified as non-naturalized if the individual had resided in the United States for less than six years (as of 2016) or, if married to a U.S. citizen, for less than three years.

Having identified the undocumented population in the state, we then identified the top industries in which undocumented immigrants worked, and created a new category that lumps all undocumented workers working in other industries.

By using the above data and industry multipliers from the Regional Input-Output Modeling System (RIMS II), we estimated the total loss in jobs, worker earnings, and Gross Domestic Product (GDP) over a one-year period in Kentucky if 10 percent of the undocumented immigrants leave the state as a result of the proposed bill.<sup>4</sup> RIMS II is a standard economic impact tool developed by the Bureau of Economic Analysis and is widely used in economic impact studies by government agencies, corporations, and researchers.

Our model for the economic impact on Kentucky if 10 percent of undocumented immigrants leave the state is based on a study by Gonzalo Sanchez of Texas A&M University.<sup>5</sup> His research on Arizona SB 1070, a similarly controversial legislation requiring state law enforcement to enforce federal immigration law in Arizona, found that noncitizen Hispanics—a proxy used to estimate the state's undocumented population—decreased by 10 to 15 percent after the bill passed. We argue that, although the passage of SB 1 may not have the same legal implications as Arizona SB 1070, it would create a similarly hostile political climate that would encourage undocumented immigrants to leave Kentucky.

The RIMS multipliers provided the information we needed to calculate the direct, indirect, and induced economic cost in each industry. The direct cost comes from the impact on the top 10 industries that would be directly affected by the loss of undocumented workers, and the indirect cost is the impact on the industries that provide goods and services to the top 10 industries. Induced cost, on the other hand, is the impact on industries affected across the board because of loss of consumption from undocumented workers. When estimating the economic cost, we chose the RIMS multipliers corresponding to the top five industries that undocumented immigrants worked in. For the category that lumps the rest of the undocumented immigrant workers together, we apply the smallest multiplier among the rest of the industries to be conservative in our estimates.

Aside from the loss of jobs, worker earnings, and GDP, we also calculated the potential loss in federal and in state and local tax revenues over a single year if 10 percent of undocumented immigrant workers leave the state. To estimate the tax contributions of 10 percent of Kentucky's undocumented immigrants, we randomly selected 10 percent of the undocumented immigrant population in Kentucky, then estimated tax contributions for that random 10 percent sample. We repeated this estimation process 100 times, then took the minimum tax estimation out of the 100 iterations for a conservative estimate. We estimated state and local taxes using the tax rates estimates produced by the Institute on Taxation and Economic Policy (ITEP). For federal tax estimates, we used data released by the Congressional Budget Office in 2014 and calculated federal taxes based on the federal household income tax brackets.

#### **About NAE**

New American Economy (NAE) is a bipartisan research and advocacy organization fighting for smart federal, state, and local immigration policies that help grow our economy and create jobs for all Americans.

Learn more at www.NewAmericanEconomy.org.



#### **ENDNOTES**

- 1 The study referenced used Arizona's Hispanic noncitizen population as a proxy to estimate the state's undocumented population. New American Economy uses its own methodology to estimate the undocumented population.
- 2 Ottaviano, Gianmarco I. P. and Giovanni Peri. 2012. "Rethinking the Effect of Immigration on Wages." Journal of the European Economic Association 10, no. 1: 152-07, https://doi.org/10.1111/j.1542-4774.2011.01052.x.
- 3 Borjas, George J. 2016. "The Labor Supply of Undocumented Immigrants." NBER Working Paper (National Bureau of Economic Research, Inc.). https://ideas.repec.org/p/nbr/nberwo/22102.html.
- 4 Bureau of Economic Analysis. "RIMS II Multipliers." Accessed August 3, 2018. https://www.bea.gov/regional/rims/rimsii/.
- 5 Sanchez, Gonzalo. 2015. "The Response of the Hispanic Noncitizen Population to Anti-Illegal Immigration Legislation: The Case of Arizona SB 107." Working Paper. http://econweb.tamu.edu/gsanchez/immigration.
- 6 Gee, Lisa Christensen, Matthew Gardener, and Meg Wiehe, 2016. "Undocumented Immigrants' State and Local Tax Contributions." Institute on Taxation and Economic Policy. https://itep.org/immigration/.
- 7 Institute on Taxation and Economic Policy. 2015. "Who Pays? A Distributional Analysis of the Tax Systems in All Fifty States." https://itep.org/whopays/.
- 8 Congressional Budget Office. 2014. "The Distribution of Household Income and Federal Taxes, 2011." 17, no. 4: 695.a