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## AFFIRMATIVE ACTION BANS: ASSESSING IMPACTS IN A CROSS-STATE CONTEXT

by

JACKLYN M. SULLIVAN

Thesis submitted in partial fulfillment of the requirements for the degree

of

**UNIVERSITY HONORS** 

in

**ECONOMICS** in the Department of Economics & Finance

Approved:

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#### ABSTRACT:

This paper builds on previous research on the effect affirmative action bans have on attendance rates for minorities at public and private universities. In total, nine states have implemented affirmative action bans between the present year and 1997. This paper analyzes data from the American Community Survey and provides an overview of related court cases and voter referendums to discuss this policy's effects. We find that affirmative action bans lead to an overall decrease in college attendance for minority students, most prominently seen in an attendance decrease for black students.

#### **ACKNOWLEDGMENTS:**

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#### INTRODUCTION:

Employers, government institutions, and academic institutions in the U.S. have enacted affirmative action policies since 1961¹ to promote equal opportunity for education, employment, and earnings for traditionally underrepresented groups.² Beginning with President Kennedy's Executive Order 1095 on March 6th, 1961, affirmative action policies have spurred debate about whether or not these policies achieve their desired outcomes and have been effectively challenged in the context of education for over 40 years. To date, nine states have banned affirmative action at one point in time through voter referendums, executive orders, and state legislation:³ California, Texas, Washington, Florida, Nebraska, Michigan, Arizona, New Hampshire, and Oklahoma.⁴ While several of the universities in these states have found alternative methods of encouraging underrepresented students to attend their universities, the effect of state-level bans and alternative approaches to affirmative action are still debated. This paper seeks to build on a previous research on the effect affirmative action bans have on attendance rates for racial and ethnic minority students (defined as black, Hispanic, and Asian) at public and private institutions.

Although the effects of affirmative action bans are not clear, graduation and attendance gaps between minority and non-minority students are. White, non-Hispanic and Asian citizens ages 19-21 see university attendance rates of 62.8% and 83.8%, respectively, between 2000-2016, while black and Hispanic citizens of the same age demographic see attendance rates of 52.5% and 54.2%, respectively, during the same time period.<sup>5</sup> In 2000, 26.1 percent of white, non-Hispanic citizens and 43.9 percent of Asian citizens above 25 in the United States were college graduates, compared to just 10.6 percent of Hispanic citizens and 16.5 percent of black citizens.<sup>6</sup> Those enrolled in four-year programs between 1996 and 2003 saw similar disparities with a six-year graduation rate of 59.9 percent for white, non-Hispanic citizens and 66.3 percent for Asian citizens, compared to 48.2 percent for Hispanic citizens and 40.6 percent for black citizens.<sup>7</sup> Additionally, research suggests underrepresented minorities may self-select into different types of majors compared to white and Asian students. Previous research utilizing racial specific data at Duke University found that African American students were more likely to have lower GPAs and to switch out of quantitative majors than were white students.<sup>8</sup> An additional study similarly found

<sup>&</sup>lt;sup>1</sup> "A Brief History of Affirmative Action." UCI Office of Equal Opportunity and Diversity. Accessed October 11, <sup>2</sup> Hultin, Brenda Bautsch Suzanne. Affirmative Action | Overview. February 7, 2014. Accessed October 12,

<sup>2017.</sup> http://www.ncsl.org/research/education/affirmative-action-overview.aspx.

<sup>&</sup>lt;sup>3</sup> lbid.

<sup>&</sup>lt;sup>4</sup> Potter, Halley. "What Can We Learn from States That Ban Affirmative Action?" April 18, 2016. Accessed October 12, 2017. https://tcf.org/content/commentary/what-can-we-learn-from-states-that-ban-affirmative-action/.

<sup>&</sup>lt;sup>5</sup> United States Census Bureau. "Summary File." 2000 – 2016 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2018. Web.

<sup>6</sup> lbid. 43.

<sup>&</sup>lt;sup>7</sup> Ibid. 43.

<sup>&</sup>lt;sup>8</sup> Arcidiacono, Peter, Esteban M. Aucejo, and Ken Spenner. "What happens after enrollment? An analysis of the time path of racial differences in GPA and major choice." *IZA Journal of Labor Economics* 1, no. 1 (May 29, 2012): 5. doi:10.1186/2193-8997-1-5.

that minority students at selective universities were 19% less likely to graduate in a STEM degree five years after an affirmative action ban, despite the total number of STEM degree graduates remaining constant over the same period.9

Previous research also supports the economic value of higher education for students, colleges, and society<sup>10</sup> and its ability to improve human capital acquisition and labor market discrimination. 11 Affirmative action policies have shown promise in improving life outcomes, increasing enrollment at top-tier institutions for minorities, and increasing the quality of the student body at these universities12 which, in turn, lead to better job outcomes later in life. 13 While nine states certainly do not encompass the majority of U.S educated students, it is estimated that states engaging in affirmative action bans educate close to 29% of U.S. high school students,14 and research suggests affirmative action bans also affect students in adjacent states lacking highly selective institutions. 15 It is therefore of interest to policymakers and educators to understand affirmative action bans and its relationship to these gaps to improve outcomes for minority students and society in states with and without affirmative action bans.

<sup>9</sup> Hill, Andrew J. "State affirmative action bans and STEM degree completions." Economics of Education Review 57 (2017): 31-40.

<sup>&</sup>lt;sup>10</sup> Leslie, Larry L., and Paul T. Brinkman. "The Economic Value of Higher Education." Academe 75, no. 5 (1989): 63. doi:10.2307/40249747.

<sup>11</sup> Hinrichs, Peter. "Affirmative action bans and college graduation rates." Economics of Education Review 42 (2014): 43-52. doi:10.1016/j.econedurev.2014.06.005.

<sup>12</sup> Chan, Jimmy, and Erik Eyster. "Does banning affirmative action lower college student quality?." American Economic Review 93.3 (2003): 858-872.

<sup>13</sup> Long, Mark C. "Affirmative Action and Its Alternatives in Public Universities: What Do We Know?" Public Administration Review. April 06, 2007. Accessed January 01, 2018.

http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6210.2007.00715.x/abstract.

<sup>14 &</sup>quot;What Can We Learn from States That Ban Affirmative Action?" The Century Foundation. April 18, 2016. Accessed January 06, 2018. https://tcf.org/content/commentary/what-can-we-learn-from-states-that-banaffirmative-action/.

<sup>&</sup>lt;sup>15</sup> Blume, Grant H., and Mark C. Long. "Changes in Levels of Affirmative Action in College Admissions in Response to Statewide Bans and Judicial Rulings." Educational Evaluation and Policy Analysis 36, no. 2 (2014): 228-52. doi:10.3102/0162373713508810.

	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
California		Х	X	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	х	Х	х	Х	х
Texas	X	х	X	x	x	x	X											
Washington			X	x	x	х	X	x	x	X	x	x	X	x	X	x	X	х
Florida					X	х	X	x	X	X	х	х	Х	x	Х	х	X	X
Nebraska												X	X	X	X	X	X	X
Michigan												x	Х	х	Х	x	x	х
Arizona														Х	Х	Х	Х	х
Oklahoma																Х	X	x
New Hampshire																Х	Х	х

Table 1: State and year breakdown of affirmative action policy implementation
\*Note: UT-Austin returned to affirmative action policies in 2005

While affirmative action policies have shown the ability to improve future life outcomes and increase top-tier university enrollment, it should be noted that affirmative action bans have also been shown to raise graduation rates for underrepresented minorities. While there are many possible explanations for this trend, "minority mismatch" and behavioral responses tend to be the most plausible. According to minority mismatch theory, it is possible for minority students to place into universities and programs in which their credentials are lower than their peers because of affirmative action policies. Students with lower credentials can experience discouragement, disillusionment, lower motivation, and lower confidence that can hinder their learning and potentially lead to higher dropout rates. 16 Affirmative action bans may lessen this trend by preventing or discouraging minority students with lower credentials to attend and stay at top universities, raising the overall credentials of minorities in these colleges. Affirmative action bans can also lead students and institutions to behave differently. Institutions may provide better resources and support for their minority students and may engage in better recruiting tactics for top high school minority students when affirmative action is banned. Additionally, minority students may engage in more college preparation or gain more confidence knowing their credentials match their peers'. 17 However, many of these notions are greatly theoretical and are difficult to empirically prove, and research suggests the number of students displaced by the ban outweighs the small increase in graduation rates. 18 Institutional behavioral changes have also not been found to offset the decline in minority enrollment caused by affirmative action bans.19

<sup>&</sup>lt;sup>16</sup> Hinrichs, Peter. "Affirmative action bans and college graduation rates." *Economics of Education Review* 42 (2014): 44. doi:10.1016/j.econedurev.2014.06.005.

<sup>17</sup> Ibid.

<sup>18</sup> lbid.

<sup>&</sup>lt;sup>19</sup> Blume, Grant H., and Mark C. Long. "Changes in Levels of Affirmative Action in College Admissions in Response to Statewide Bans and Judicial Rulings." *Educational Evaluation and Policy Analysis* 36, no. 2 (2014): 228-52. doi:10.3102/0162373713508810.

#### **Current Affirmative Action Policies and Environment**

As previously mentioned, nine states have enacted statewide affirmative action bans at some point in time through voter referendums, executive orders, or state legislation. A brief overview of each state's ban, university policies, and notable court cases will be given for context, as these states will be used as the sample group in the study.

#### California

California was the first state to ban affirmative action with proposition 209 in 1996. The proposition banned preferential treatment and discrimination in public education, employment and contracting<sup>20</sup> and was later supported by the Supreme Court in 1997 when it refused to hear a challenge to its enforcement.<sup>21</sup> A second challenge to the ban was undertaken after the 2003 Grutter v. Bollinger Supreme Court case ruled that affirmative action could be used in college admission under certain circumstances; however, this challenge was unsuccessful after the Ninth Circuit Court of Appeals ruled against the motion in 2012.<sup>22</sup> California's affirmative action ban appears to have thus far decreased minority enrollment. Between 1995 and 1998, African American freshman enrollment at the University of California Los Angeles (UCLA) fell from 264 to 144 students and similarly fell from 215 to 126 students at University of California Berkeley during the same time.23 To increase diversity after the passing of Proposition 209, the University of California system has spent more than a half-billion dollars to diversify its students and has guaranteed university admission to the top 9 percent of each California high school.<sup>24</sup> Additionally, the University of California system has increased application weight on questions regarding whether or not a student has overcome hardships, 25 has changed application weights on standardized test scores and GPAs,<sup>26</sup> and has done away with legacy preferences during admission in response to California's affirmative action ban.<sup>27</sup> While UCLA has managed to restore the diversity of its student body to pre-proposition 209 levels, UC Berkeley has yet to catch up. California Governor Edmund G. Brown Jr. vetoed a bill in October of 2011 that would have allowed colleges to consider race in college

<sup>&</sup>lt;sup>20</sup> "Affirmative action in California." Ballotpedia. Accessed December 31, 2017. https://ballotpedia.org/Affirmative action in California.

<sup>&</sup>lt;sup>21</sup> "Affirmative action." Encyclopædia Britannica. December 15, 2017. Accessed December 31, 2017. https://www.britannica.com/topic/affirmative-action#ref739796.

<sup>&</sup>lt;sup>22</sup> The Associated Press. "California: Affirmative Action Ban Upheld." The New York Times. April 02, 2012. Accessed January 13, 2018. http://www.nytimes.com/2012/04/03/us/california-affirmative-action-ban-upheld.html.

<sup>&</sup>lt;sup>23</sup> Watanabe, Teresa. "How UCLA is boosting campus diversity, despite the ban on affirmative action." Los Angeles Times. June 23, 2016. Accessed January 01, 2018. http://beta.latimes.com/local/california/la-me-ucla-diversity-20160620-snap-story.html.

<sup>&</sup>lt;sup>24</sup> lbid.

<sup>25</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Antonovics, Kate, and Ben Backes. "The effect of banning affirmative action on college admissions policies and student quality." *Journal of Human Resources* 49.2 (2014): 295-322.

<sup>&</sup>lt;sup>27</sup> Potter, Halley. "What Can We Learn from States That Ban Affirmative Action?" The Century Foundation. April 18, 2016. Accessed January 01, 2018. https://tcf.org/content/commentary/what-can-we-learn-from-states-that-ban-affirmative-action/.

admissions, claiming the bill could lead to costly legal battles in violation of Proposition  $209.^{28}$ 

#### **Texas**

Affirmative action policies were banned in public and private Texan institutions after the Fifth Circuit Court of Appeals ruled against affirmative action policies in the 1996 Hopwood v. Texas case. In response to the ban, a policy was enacted that guaranteed the top 10 percent of each Texas high school graduating class admission to any public Texas university. The premise of this policy, and other similar policies, rests on the notion that the racial segregation already found in Texas high school demographics would ensure that a fair mix of minority and non-minority students gained admission to these universities, thereby increasing diversity.<sup>29</sup> Research suggests these percent plans do well at bringing low-income and middle-class students to campus and have restored and ethnic diversity levels at the University of Texas-Austin and Texas A&M to pre-ban levels;<sup>30</sup> however, the overall effects of percentage plans are noisy, and research has challenged the ability of percentage plans to restore ethnic and racial diversity across all Texan universities with affirmative action bans.<sup>31</sup> Scholarships targeted at low income and minority students were also adopted by the UT Austin and Texas A&M,32 and Texas A&M has since dropped legacy admission preferences in response to the ban. In response to the 2003 Grutter v. Bollinger case, which ruled race could be used as a factor in admission decisions, 33 UT Austin returned to affirmative action policies in 2005.34 This decision prompted the 2013 Fisher v. University of Texas at Austin Supreme Court case, which further complicated the legality of affirmative action policies. Under this decision, affirmative action policies must be "precisely tailored to serve a compelling governmental interest" to consider it a factor in admissions.<sup>35</sup> While this ruling has the potential to validate current and future affirmative action policies, it also generates more risk for legal challenges in the future.<sup>36</sup>

<sup>&</sup>lt;sup>28</sup> Blume, Grant H., and Mark C. Long. "Changes in Levels of Affirmative Action in College Admissions in Response to Statewide Bans and Judicial Rulings." *Educational Evaluation and Policy Analysis* 36, no. 2 (2014): 228-52. doi:10.3102/0162373713508810.

<sup>&</sup>lt;sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> "What Can We Learn from States That Ban Affirmative Action?" The Century Foundation. April 18, 2016. Accessed January 06, 2018. https://tcf.org/content/commentary/what-can-we-learn-from-states-that-ban-affirmative-action/.

<sup>&</sup>lt;sup>31</sup> Long, Mark C. "Race and College Admissions: An Alternative to Affirmative Action?" *The Review of Economics and Statistics* 86, no. 4 (2004): 1020-1033. doi:10.1162/0034653043125211

Cortes, Kalena E. "Do bans on affirmative action hurt minority students? Evidence from the Texas Top 10% Plan." *Economics of Education Review* 29.6 (2010): 1110-1124.

<sup>&</sup>lt;sup>32</sup> Domina, T. (2007). Higher education policy as secondary school reform: Texas public high schools after Hopwood. Educational Evaluation and Policy Analysis, 29, 200–217.

<sup>&</sup>lt;sup>33</sup> Grutter v. Bollinger, 539 U.S. 306 (2003).

<sup>&</sup>lt;sup>34</sup> Faulkner, L. R. (2005, September 14). Address on the State of the University. Retrieved from http://theop.princeton.edu/publicity/general/UTFaulkerSpeech.pdf

<sup>35</sup> Fisher v. University of Texas, 570 U.S.(2013).

<sup>&</sup>lt;sup>36</sup> Blume, Grant H., and Mark C. Long. "Changes in Levels of Affirmative Action in College Admissions in Response to Statewide Bans and Judicial Rulings." *Educational Evaluation and Policy Analysis* 36, no. 2 (2014): 228-52. doi:10.3102/0162373713508810.

#### Washington

Affirmative action was banned at Washington public institutions in 1998 by popular vote on Initiative 200. Similar to other states, Washington's public universities responded to the ban by creating more minority outreach programs; however, unlike several other states, no percentage plans were implemented in its place.<sup>37</sup> The 1997 Supreme Court case *Smith v. University of Washington Law School* challenged affirmative action policies at the University of Washington but was returned to the 9th Circuit Court of Appeals due to the *Grutter* and *Gratz* rulings.<sup>38</sup> Admission rates for minority students fell immediately following the ban. The percentage of Native American students in Washington who attended college directly after high school dropped from 52% in 1998 to 38% in 2003, while white and Asian/Pacific Islander students only saw a one to two percent drop in attendance during the same years.<sup>39</sup> It has been hypothesized this fall was not due to a change in admission rates but rather a change in application rates, suggesting the ban created an "unwelcome environment" that has continued to intimidate minority students.<sup>40</sup>

#### Florida

Florida's affirmative action ban started with the 1999 executive order 99-281 enacted by then Governor Jeb Bush. Stated under the "One Florida" policy, the purpose was to "implement a policy prohibiting the use of racial or gender set-asides, preferences or quotas in admission to all Florida institutions of Higher Education, effectively immediately." In response to this ban, the Florida Department of Education began the "Talented 20 Program" that guaranteed admission to Florida state universities and some needs-based funding for the top 20% of each high school graduating class. Despite these efforts, it has been suggested that the percentage of minority students admitted under the "Talented 20 Program" has failed to keep pace with the growing minority population. During his presidential bid, Bush claimed that more African American and Hispanic students attended Florida state universities than before the ban. While by raw numbers this is true, factoring in changes in overall high school enrollment and state demographics show African American attendance has dropped by one percent since the ban. Hispanics have seen an overall increase in college enrollment; however, shifting demographics and

<sup>37</sup> Ibid.

<sup>38</sup> Ibid.

<sup>&</sup>lt;sup>39</sup> Diversity in Washington higher education. Olympia, WA: Washington Higher Education Coordinating Board, 2006. 19.

<sup>&</sup>lt;sup>40</sup> Brown, Susan K., and Charles Hirschman. "The End of Affirmative Action in Washington State and Its Impact on the Transition from High School to College." *Sociology of Education* 79, no. 2 (April 1, 2006): 106-30. doi:10.1177/003804070607900202.

<sup>&</sup>lt;sup>41</sup> Bush, J. (1999, November 19). Executive Order 99-281. Florida Department of Management Services. http://www.dms.myflorida.com/media/general\_counsel\_files/one\_florida\_executive\_order\_pdf <sup>42</sup> "Talented Twenty Program". Accessed January 01, 2018. http://www.fldoe.org/schools/family-community/activities-programs/talented-twenty-program/index.stml.

<sup>&</sup>lt;sup>43</sup> Powers, Scott, and Luis Zaragoza. "10 years in, 'One Florida' posts mixed results for minorities at universities." April 10, 2010. Accessed January 01, 2018. http://articles.orlandosentinel.com/2010-04-10/news/os-one-florida-10-years-later-20100410\_1\_affirmative-action-florida-s-public-universities-graduates.

changes to how students report ethnicity are likely causing this increase.<sup>44</sup> In addition to the "Talented 20 program", the University of Florida has made special effort to reach out to and provide scholarships, leadership programs, and mentorship programs for first generation, low income, and racial and ethnic minorities through their Office of Academic Support,45 though the effects of this policy are unclear.

#### Nebraska

Affirmative action was banned in Nebraskan public institutions in 2008 with the referendum passage of Initiative 424. The language on the initiative states, "The state shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting."46 Preliminary data show no effect on minority enrollment at Nebraska state universities;<sup>47</sup> however, research is sparse, and no extensive studies have been conducted on Nebraska universities specifically. Therefore, the effects of the Nebraska ban are inconclusive thus far.

Michigan

Michigan's first noteworthy challenges to affirmative action occurred with the 2003 Grutter v. Bollinger and Gratz v. Bollinger Supreme Court cases. The Grutter v. Bollinger case challenged the University of Michigan Law School's use of racial preferences during admission and was upheld by the court by a 5-4 decision.48 In contrast, the court rejected the use of a point-based affirmative action system in the Gratz v. Bollinger case by a 6-3 decision.<sup>49</sup> While these cases are similar, the approaches to how affirmative action was used differ by how much race was weighted by each admissions committee. By rejecting point based affirmative action systems and supporting holistic, non-decisive affirmative action policies, the decisions on these cases have made it more difficult and risky for universities to engage in affirmative action policies. These cases have also affected key court decisions related to affirmative action in California, Texas, and Washington. Although these decisions have affected the affirmative action policies of several states and universities, previous research suggests the rulings on the Grutter and Gratz cases had no immediate, direct effect on minority enrollment.<sup>50</sup> Michigan officially banned affirmative

<sup>44</sup> Gillan, Joshua. "Florida has more black, Hispanic university students after ending affirmative action, Jeb Bush says." Politifact. March 11, 2015. Accessed January 14, 2018.

http://www.politifact.com/florida/statements/2015/mar/11/jeb-bush/florida-has-more-black-andhispanic-university-stu/.

<sup>45 &</sup>quot;Office of the University Registrar." UF Undergrad Catalog. Accessed January 06, 2018. https://catalog.ufl.edu/ugrad/current/advising/info/academic-support-programs.aspx.

<sup>46 &</sup>quot;Nebraska Civil Rights, Measure 424 (2008)." Ballotpedia. Accessed January 01, 2018. https://ballotpedia.org/Nebraska\_Civil\_Rights,\_Measure\_424\_(2008).

<sup>&</sup>lt;sup>47</sup> Dunker, Chris. "Supreme Court upholds affirmative action ban." JournalStar.com. April 22, 2014. Accessed January 01, 2018. http://journalstar.com/news/local/education/supreme-court-upholds-affirmative-actionban/article\_ae63839e-ffb4-5396-8a4f-a3557ddabc0e.html.

<sup>48</sup> Grutter v. Bollinger, 539 U.S. 306 (2003).

<sup>&</sup>lt;sup>49</sup> Gratz v. Bollinger, 539 U.S. 244 (2003).

<sup>&</sup>lt;sup>50</sup> Blume, Grant H., and Mark C. Long. "Changes in Levels of Affirmative Action in College Admissions in Response to Statewide Bans and Judicial Rulings." Educational Evaluation and Policy Analysis 36, no. 2 (2014): 228-52. doi:10.3102/0162373713508810.

action policies by voter referendum on Proposal 2 in 2006.<sup>51</sup> While federal appeals courts initially invalidated the ban, an appeal by Michigan's then attorney general brought the case to the Supreme Court in the 2014 *Schuette v. Coalition to Defend Affirmative Action* case, in which the court allowed Michigan's ban to stand by a 6-2 decision.<sup>52</sup>

#### Arizona, Oklahoma, and New Hampshire

Arizona became the sixth state to ban affirmative action in 2010 by the passage of Proposition 107. Similarly, Oklahoma banned affirmative action in 2012 with the passage of State Question 759 and state legislators banned affirmative action in public New Hampshire colleges in 2011. Research on the effects of affirmative action bans in these states is minimal, as the data on the four and six-year graduating cohorts have just recently become available. While the six-year graduation rates are out of the scope of the data for New Hampshire and Oklahoma, four-year graduation rates for these states will still be included in the study.

Outside of state bans, several circuit and Supreme Court decisions including Regents of University of California v. Bakke in 1978, Hopwood v. Texas in 1996, and Johnson v. Board of Regents of the University of Georgia in 2001 have affected affirmative action policies via court jurisdiction.<sup>53</sup> Similar to the Gratz ruling, the Bakke ruling rejected the use of quotabased affirmative action policies, affecting both public and private universities across the nation.54 In the Hopwood v. Texas case, the then attorney general of Texas upheld affirmative action bans in both Texan public universities and private universities that accept federal funding.55 Previous research suggests that while not explicitly stated in the ruling, universities in Louisiana and Mississippi were also affected by the decision due to their inclusion in the Fifth Circuit Court of Appeals.<sup>56</sup> Additionally, another circuit court ruling against the affirmative action policies of the University of Georgia in the 2000 Johnson v. Board of Regents of the University of Georgia case led the University of Georgia to discontinue the use of race altogether in admission processes.<sup>57</sup> Research suggests universities in Alabama and Georgia felt pressure by this precedent and may have been prompted to revisit their affirmative action policies after the ruling. It is likely these court rulings had large effects on affirmative action levels, and policymakers should consider these cases as significant factors affecting minority graduation rates.<sup>58</sup>

<sup>&</sup>lt;sup>51</sup> "Michigan Civil Rights Amendment, Proposal 2 (2006)." Ballotpedia. Accessed January 04, 2018. https://ballotpedia.org/Michigan Civil Rights\_Amendment, Proposal\_2\_(2006).

<sup>52</sup> Schuette v. Coalition to Defend Affirmative Action.701 F.3d 466 (6th Cir. 2012).

<sup>&</sup>lt;sup>53</sup> Dunker, Chris. "Supreme Court upholds affirmative action ban." JournalStar.com. April 22, 2014. Accessed January 01, 2018. http://journalstar.com/news/local/education/supreme-court-upholds-affirmative-action-ban/article\_ae63839e-ffb4-5396-8a4f-a3557ddabc0e.html.

<sup>54</sup> Regents of the University of California v. Bakke, 438 U.S. 265 (1978).)

<sup>&</sup>lt;sup>55</sup> Hopwood v. Texas, 78 F.3d 932 (5th Cir. 1996), cert.denied, 518 U.S. 1033 (1996).

<sup>&</sup>lt;sup>56</sup> Blume, Grant H., and Mark C. Long. "Changes in Levels of Affirmative Action in College Admissions in Response to Statewide Bans and Judicial Rulings." *Educational Evaluation and Policy Analysis* 36, no. 2 (2014): 228-52. doi:10.3102/0162373713508810.

<sup>57</sup> lbid.

<sup>58</sup> lbid.

### LITERATURE REVIEW:

There exists a copious body of literature related to the effects of affirmative action bans on minority enrollment, self-efficacy, graduation, and post-graduation outcomes. Compiled below is a brief table of related literature:

Title	Author	Journal	Year	Findings	Citation
Do affirmative action bans lower minority college enrollment and attainment? Evidence from statewide bans	Ben Backes	Journal of Human Resources	2012	Finds that black and Hispanic enrollment dropped at the top institutions; however, little evidence that overall black enrollment at public universities fell. While fewer blacks and Hispanics graduated from college following a ban, the effects on graduation rates are noisy.	Backes, Ben. "Do affirmative action bans lower minority college enrollment and attainment? Evidence from statewide bans." <i>Journal of</i> <i>Human Resources</i> 47.2 (2012): 435- 455.
The effects of affirmative action bans on college enrollment, educational attainment, and the demographic composition of universities	Peter Hinrichs	Review of Economics and Statistics	2012	Finds that bans have no effect on the typical student and the typical college, but they decrease underrepresented minority enrollment and increase white enrollment at selective colleges. Finds ban in California shifted underrepresented minority students from more selective campuses to less selective ones at the University of California.	Hinrichs, Peter. "The effects of affirmative action bans on college enrollment, educational attainment, and the demographic composition of universities." Review of Economics and Statistics 94.3 (2012): 712-722.
Does banning affirmative action lower college student quality?	Jimmy Chan/ Erik Eyster	American Economics Review	2003	Bans may cause admissions to promote diversity by partially ignoring candidate's qualifications and therefore not admitting the best-qualified candidates from either group. A ban always reduces diversity and may also lower quality.	Chan, Jimmy, and Erik Eyster. "Does banning affirmative action lower college student quality?." <i>American Economic Review</i> 93.3 (2003): 858-872.
Race and college admissions: An alternative to affirmative action?	Mark C. Long	Review of Economic and Statistics	2004	This paper finds that the preferences given to minority applicants under affirmative action are large and that the minority share of admitted students in top-tier institutions would fall substantially after eliminating these preferences. Percentage programs are unable to replace traditional affirmative action and maintain the share of minority students.	Long, Mark C. "Race and college admissions: An alternative to affirmative action?." Review of Economics and Statistics 86.4 (2004): 1020-1033.
Affirmative action bans and college graduation rates	Peter Hinrichs	Economics of Education Review	2014	Found affirmative action bans lead to fewer underrepresented minorities becoming graduates of selective colleges.	Hinrichs, Peter. "Affirmative action bans and college graduation rates." <i>Economics of Education Review</i> 42 (2014): 43-52.
Do bans on affirmative action hurt minority students? Evidence from the Texas Top 10% Plan	Kalena E. Cortes	Economics of Education Review	2010	Study finds that the change from affirmative action to the Top 10% Plan in Texas decreased both retention and graduation rates of lower-ranked minority students.	Cortes, Kalena E. "Do bans on affirmative action hurt minority students? Evidence from the Texas Top 10% Plan." <i>Economics of Education Review</i> 29.6 (2010): 1110-1124.
Affirmative action and its mythology	Roland G. Fryer Jr./ Glenn C. Loury	Journal of Economic Perspectives	2005	Study enumerates seven commonly held (but mistaken) views about affirmative action.	Fryer Jr, Roland G., and Glenn C. Loury. "Affirmative action and its mythology." Journal of Economic Perspectives 19.3 (2005): 147-162.

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Assessing the impact of eliminating affirmative action in higher education	Jessica S. Howell	Journal of Labor Economics	2010	The results indicate that black and Hispanic representation at all 4-year colleges is predicted to decline modestly—by 2%—if race-neutral college admissions policies are mandated nationwide. Race-neutral admissions are predicted to decrease minority representation at the most selective 4-year institutions by 10%.	Howell, Jessica S. "Assessing the impact of eliminating affirmative action in higher education." <i>Journal of Labor Economics</i> 28.1 (2010): 113-166.
The effect of banning affirmative action on college admissions policies and student quality	Kate Antonovics and Ben Backes	Journal of Human Resources	2014	Presents evidence that UC campuses changed the weight given to SAT scores, high school GPA, and family background in response to California's ban on race-based affirmative action, and that these changes were able to substantially (though far from completely) offset the fall in minority admissions rates.	Antonovics, Kate, and Ben Backes. "The effect of banning affirmative action on college admissions policies and student quality." <i>Journal of Human Resources</i> 49.2 (2014): 295-322.
Affirmative action and the quality-fit trade-off	Peter Arcidiacono/ Michael Lovenheim	Journal of Economic Literature	2016	This paper reviews the literature on affirmative action in undergraduate education and law schools, focusing in particular on the tradeoff between the quality of an institution and the fit between a school and a student.	Arcidiacono, Peter, and Michael Lovenheim. "Affirmative action and the quality-fit trade-off." <i>Journal of Economic Literature</i> 54.1 (2016): 3-51.
Incentives to identify: racial identity in the age of affirmative action	Francisca Antman/ Brian Duncan	Review of Economics and Statistics	2015	Finds after a state bans affirmative action, multiracial individuals who face an incentive to identify under affirmative action are about 30% less likely to identify with their minority group. In contrast, multiracial individuals who face a disincentive to identify under affirmative action are roughly 20% more likely to identify with their minority group once affirmative action policies are banned.	Antman, Francisca, and Brian Duncan. "Incentives to identify: racial identity in the age of affirmative action." Review of Economics and Statistics 97.3 (2015): 710-713.
Changes in levels of affirmative action in college admissions in response to statewide bans and judicial rulings	Grant H. Blume/ Mark C. Long	Education Evaluation and Policy Analysis	2014	Finds substantial declines in levels of affirmative action practiced by highly selective colleges in the states affected by bans and the Hopwood and Johnson rulings, and no evidence of declines outside these states (and thus modest and generally insignificant declines nationwide). Shows how the decline in affirmative action in these particular states affects not only students in these states but also those students who live in adjacent states, particularly when the adjacent states lack highly selective colleges.	Blume, Grant H., and Mark C. Long. "Changes in levels of affirmative action in college admissions in response to statewide bans and judicial rulings." Educational Evaluation and Policy Analysis 36.2 (2014): 228-252.
Were minority students discouraged from applying to University of California campuses after the affirmative action ban?	Kate Antonovics/Ben Backes	Education Finance and Policy	2013	Show that all minority students experienced a drop in their probability of admission to at least one UC campus.	Antonovics, Kate, and Ben Backes. "Were minority students discouraged from applying to University of California campuses after the affirmative action ban?." Education Finance and Policy 8.2 (2013): 208-250.

State affirmative action bans and STEM degree completions	Andrew J. Hill	Economics of Education Review	2017	Finds the number of minority students completing STEM degrees at highly selective colleges falls by 19% five years after affirmative action bans, while there is no change in the total number of students completing STEM degrees.	Hill, Andrew J. "State affirmative action bans and STEM degree completions." <i>Economics of Education</i> <i>Review</i> 57 (2017): 31-40.
The End of Affirmative Action in Washington State and Its Impact on the Transition from High School to College	Susan K. Brown/ Charles Hirschman	Sociology of Education	2006	Finds decrease in minority application rates at flagship Washington school following state affirmative action ban.	Brown, Susan K., and Charles Hirschman. "The End of Affirmative Action in Washington State and Its Impact on the Transition from High School to College." Sociology of Education 79, no. 2 (April 1, 2006): 106-30. doi:10.1177/003804070607900202
What happens after enrollment? An analysis of the time path of racial differences in GPA and major choice	Peter Arcidiacono/ Esteban M. Aucejo/Ken Spenner	IZA Journal of Labor Economics	2012	Finds that the gap between white and black grade point averages falls by half between the students' freshmen and senior year, but this is likely due to black students switching out of science, engineering, and economics majors.	Arcidiacono, Peter, Esteban M. Aucejo, and Ken Spenner. "What happens after enrollment? An analysis of the time path of racial differences in GPA and major choice." IZA Journal of Labor Economics 1, no. 1 (May 29, 2012): 5. doi:10.1186/2193-8997-1-5.
Higher education policy as secondary school reform: Texas public high schools after Hopwood	Thurston Domina	Education Evaluation and Policy Analysis	2007	Finds Texas's post-Hopwood higher education policies redistributed college-related activity at public high schools and boosted high school students' academic engagement.	Domina, Thurston. (2007). "Higher education policy as secondary school reform: Texas public high schools after Hopwood." Educational Evaluation and Policy Analysis, 29, 200–217.
Affirmative Action and Its Alternatives in Public Universities: What Do We Know?	Mark C. Long	Public Administration Review	2007	Finds a decline in minorities' relative share of enrollment at flagship public universities after affirmative action was eliminated in several states, and the alternative strategies used by these universities have not offset these declines.	Long, Mark C. "Affirmative Action and Its Alternatives in Public Universities: What Do We Know?" Public Administration Review. April 06, 2007. Accessed January 01, 2018.

Table 2: literature related to affirmative action bans.

Research in this area suggests a casual relationship between affirmative action bans and decreasing attendance rates among minority students, particularly for black and Hispanic students. A large body of this research on this topic has focused its analysis on specific state or university policies in response to affirmative action bans; however, this study seeks to address the effect affirmative action bans have on minority college attendance across all states with affirmative action bans.

Hinrichs (2012)<sup>59</sup> conducted a similar study with CPS data between 1995 and 2003 and ACS data between 2005 and 2007. Hinrichs samples citizens who were 18 years old between 1995 and 2003 using ACS data between 2005 and 2007 and measures if they had attended college, received an associate's degree, or received a bachelor's degree. The sample in this study differs from Hinrichs', as we use data on 19 to 21-year-old citizens between 2000 and 2016 to measure college attendance.

We believe our study makes a number of important contributions relative to Hinrichs (2012) and other studies in the literature. First, we use the most set of state

<sup>&</sup>lt;sup>59</sup> Hinrichs, Peter. "The effects of affirmative action bans on college enrollment, educational attainment, and the demographic composition of universities." *Review of Economics and Statistics* **94.3** (2012): 712-722.

laws. Particularly, we use variation from state laws from 1997 until the most recent state law changes in 2014. Second, we focus on the prime ages that individuals are typically attending higher education, ages 19-21. And, third, we use data from 2000-2016, which consists of over 1.4 million individual records of individuals ages 19-21. Prior studies using individual data have only used a subset of these years.

#### **METHODOLOGY:**

This project aims to contribute to existing research by building upon previous studies on the relationship between attendance rates and affirmative action bans. The data used in this study is extracted from the American Community Survey (ACS). The ACS is a comprehensive database managed by the U.S. Census Bureau that currently samples roughly 3.5 million households per year on several questions that include a respondent's occupation, educational attainment, and housing situation.

We use individual-level attendance data from this database for students ages 19 through 21 in years 2000 through 2016. Students who are not U.S. citizens are dropped from the dataset. We classify students out into four mutually exclusive racial and ethnic groups: white, non-Hispanic students; black students; Hispanic students; Asian students. For the purposes of this study, we define minority students to be all students who are not categorized in the white, non-Hispanic student category.

The ACS data allows us to attend school attendance into two mutually exclusive categories: attending a public school and attending a private school. If bans decrease attendance, we expect to see the largest effect on minority students attending public schools, since public institutions are subject to state and federal affirmative action rulings; however, it should be noted that while many private schools are mostly self-funded through tuition and donations and are, in theory, exempt from these rulings, many private schools still receive some federal funding in the form of government subsidies, subjecting these schools to state and federal rulings. Thus, it is less clear if affirmative action bans would affect attendance at private schools.

While specific studies on this relationship have yet to be conducted, several studies have been conducted on the relationship between affirmative action bans and admission to top universities, which are mostly comprised of private institutions. According to the 2018 U.S. News & World Report Best National University Rankings, the best 20 schools in the United States are private institutions. Several studies<sup>60</sup> have shown a decrease in minority

<sup>&</sup>lt;sup>60</sup> Backes, Ben. "Do affirmative action bans lower minority college enrollment and attainment? Evidence from statewide bans." *Journal of Human Resources* 47.2 (2012): 435-455.

Hinrichs, Peter. "The effects of affirmative action bans on college enrollment, educational attainment, and the demographic composition of universities." *Review of Economics and Statistics* 94.3 (2012): 712-722. Long, Mark C. "Race and college admissions: An alternative to affirmative action?." *Review of Economics and Statistics* 86.4 (2004): 1020-1033.

Hinrichs, Peter. "Affirmative action bans and college graduation rates." *Economics of Education Review* 42 (2014): 43-52.

attendance at top universities following affirmative action bans due to a variety of factors, which supports the hypothesis that private universities may not be entirely isolated from federal and state affirmative action policies.

#### Empirical Strategy:

To test the effect of affirmative action bans on attendance rates, the following regression equation is used:

$$y_{ist} = \beta ddd_{ist} + \delta_{sv} + \theta_{s} \times 1(i = minority) + \lambda_{t} \times 1(i = minority) + \varepsilon_{ist}$$
 (1)

 $y_{ist}$  is the outcome variable of individual i, in state s, in year t.  $ddd_{ist}$  is the difference-indifference-in-difference-in-difference estimator of interest.  $ddd_{ist}$  takes a value of one if state s has an affirmative action ban in place in time period t and if an individual i is a minority. Otherwise,  $ddd_{ist}$  takes the value of zero.  $\delta_{sy}$  is a vector of state-by-year fixed effects.  $\theta_s \times 1 (i = minority)$  represents a vector of state-by-minority fixed effects.  $\lambda_t \times 1 (i = minority)$  represents a vector of year-by-minority fixed effects. Finally,  $\epsilon_{ist}$  is the unobserved term.

The defined regression equation is known as a difference-in-difference-in-difference estimation. The identifying assumption is that there exists no contemporaneous shock that affects the relative outcomes of minority individuals differently than white non-Hispanics, in the same state-years as the law.<sup>61</sup> Under the identifying assumption,  $\beta$ , is the parameter of interest, represents the causal intent-to-treat effect of a state's affirmative action ban on the outcomes of minorities relative to white non-Hispanics. Standard errors are clustered at the state level.

#### **RESULTS:**

#### **Summary Statistics**

Below, I list summary statistics for six racial and ethnic categories of interest by three groupings for comparability: attendance at any university, attendance at a public university, and attendance at a private university:

Howell, Jessica S. "Assessing the impact of eliminating affirmative action in higher education." *Journal of Labor Economics* 28.1 (2010): 113-166.

Blume, Grant H., and Mark C. Long. "Changes in levels of affirmative action in college admissions in response to statewide bans and judicial rulings." *Educational Evaluation and Policy Analysis* 36.2 (2014): 228-252. <sup>61</sup> Depew, Briggs. "The Effect of State Dependent Mandate Laws on the Labor Supply Decisions of Young Adults." *Journal of Health Economics* 39 (January 2015): 123-34. Doi.10.1016/j.jhealeco.2014.11.008.

		White Non-				
	All	Hispanic	Minority	Black	Hispanic	Asian
Attendance						
Any	0.608	0.628	0.569	0.525	0.542	0.838
	(0.488)	(0.483)	(0.495)	(0.499)	(0.498)	(0.368)
Attendance						
Public	0.458	0.459	0.454	0.416	0.446	0.640
	(0.498)	(0.498)	(0.498)	(0.493)	(0.497)	(0.480)
Attendance						
Private	0.150	0.168	0.115	0.109	0.096	0.198
	(0.357)	(0.374)	(0.319)	(0.311)	(0.295)	(0.399)
N	1,454,575	951,403	503,172	187,860	202,958	56,554

Standard deviations disployed in parenthesis. Data are from the American Community Survey— 2000-2016

Table 2: summary statistics for attendance rates.

From Table 2, we see 60.8% of all U.S. citizens aged 19-21 enrolled at a university, 45.8% of which are enrolled at a public institution and 15.0% of which are enrolled at a private institution. We see the highest rates of university attendance among white, non-Hispanic and Asian citizens with rates of 62.8% and 83.8%, respectively. We see an overall lower rate of university attendance among all minority students but more specifically in black and Hispanic citizens with attendance rates of 56.9%, 52.5%, and 54.2%, respectively.

#### Regression Results:

Table 3 represents the results of twelve separate regressions for four ethnic and racial groupings and three school sector groupings.

Table 3 reports the coefficient results of our difference-in-difference-in-difference estimate, i.e. the coefficient estimate of  $\beta$  in equation 1. Column one reports the results for the effect of an affirmative action ban on minorities relative to white, non-Hispanics. Similarly, column 2, column 3, and column 4 of Table 3 provide results for the effect of an affirmative action bans on black, Hispanic, and Asian students.

#### The Effect of State-level Affirmative Action Bans on School Attendance

**Panel A: Currently Attending Any School** 

	Column 1	Column 2	Column 3	Column 4
	Minority	Black	Hispanic	Asian
DDD	-0.014**	-0.018**	-0.002	0.017
	(0.006)	(0.008)	(0.005)	(0.014)

#### **Panel B: Currently Attending Public School**

	Minority	Black	Hispanic	Asian
DDD	-0.016***	-0.020**	-0.012	(0.023)
	(0.005)	(0.008)	-0.008	(0.015)

Panel C: Currently Attending Private School

	Minority	Black	Hispanic	Asian
DDD	0.0025	-0.001	-0.010	-0.006
	(0.004)	(0.006)	(0.008)	(0.010)

<sup>\*</sup>Standard errors clustered at the state level and are reported in parentheses.

Table 3: regression results for minority students at all, public, and private universities.

Panel A suggests that affirmative action bans decrease minority attendance at universities, but this effect is most prominently seen in black students. The significant coefficient of -0.014 for all minority students suggests there is an associated 1.4 percentage point decrease in attendance across any schools when affirmative action bans are in place, and the significant coefficient of -0.018 for black students suggests there is an associated 1.8 percentage point decrease in attendance across any schools for black students when affirmative action bans are in place. Panel B supports this finding with significant negative effects for minority students and black students, but yet again this effect is most prominently seen in black students. The significant coefficient of -0.016 suggest there is an associated 1.6 percentage point decrease in attendance at public universities for minority students when affirmative action bans are in place, and the significant coefficient of -0.020 suggest there is an associated 2.0 percentage point decrease in attendance at public universities for black students when affirmative action bans are in place.

Panel C suggests there is not a strong relationship between affirmative action policies and minority attendance at private universities, potentially explained by the autonomy of private universities as discussed earlier. No significant relationships were found for Hispanic or Asian students, although there is a general negative trend for Hispanic students and a general positive trend for Asian students. Current literature on the effects affirmative action bans have on Hispanic students is mixed; however, non-significant coefficients on our Asian student parameters may serve as a good specification check. While Asian students are classified as a racial and ethnic minority in the U.S. population, Asian students are excluded from underrepresented minority classifications at most schools due to their

<sup>\* 0.10, \*\* 0.05</sup> and \*\*\* 0.01 denote significance levels.

high attendance and graduation rates relative to other racial and ethnic subgroups. Thus, it is likely that affirmative action bans do not affect Asian students at the same magnitude as other racial and ethnic minorities due to their already larger attendance rates.

These results suggest affirmative action bans do affect a considerable proportion of racial and ethnic minority students' attendance across all school types. For black students specifically, a 1.8 percentage point decrease in attendance at any school corresponds to a 3.43 percent decrease in attendance for black students living in states banning affirmative action, and a 2.0 percentage point decrease in attendance at a public university corresponds to a 4.8 percent decrease in attendance for black students living in states banning affirmative action. These results indicate that institutions and policymakers interested in promoting minority, specifically black, student enrollment across all higher educational institutions, and more specifically public higher educational institutions, need to consider the effect of affirmative action bans when crafting institutional and state-level policies.

#### **CONCLUSION:**

Previous research regarding affirmative action bans and minority student attendance supports the findings in this study and suggests there exists a causal relationship between lower minority, specifically black, attendance rates and affirmative action bans; however, the effects of affirmative action bans on Hispanic students, Asian students, and private institutions in this study remain inconclusive.

Although the data used in this study captured a large time frame and took into account a comprehensive set of state affirmative action laws, the study is limited to only citizens between the ages of 19-21. This age group represents the prime age of college attendance for traditional students but fails to capture non-traditional students who may be attending college at a later time.

While this study finds a negative effect for black student enrollment rates when affirmative action is banned, reasons for this shift, especially considering the disproportionate effect on black students compared to other minority students, remains inconclusive. Further research on why black student enrollment drops under an affirmative action ban could provide institutions and policymakers insight into additional policies and outreach programs that could offset this negative shift.

This study adds to an extensive corpus of research on affirmative action bans that should serve as a basis for policymakers and institutional administration regarding this subject. Affirmative action bans have been praised by some for their ability to mitigate racial disparities and have been criticized by others on the premise of ineffectiveness and discrimination, and this debate is likely to continue in the United States as long as racial inequalities exist; however, this study supports the notion that affirmative action policies do promote an increase in attendance for black students, and this increase holds significant potential to improve future life outcomes for these students.

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#### REFLECTIVE WRITING

To all who may be reading this, I hope this reflection provides valuable guidance on completing an Honors thesis or capstone project or provides further insight regarding my desire to complete this project, the process of this project, and the particularly fulfilling aspects of completing a senior thesis

If you are a student hoping to complete a senior thesis or wondering whether or not it is worth your time and efforts, I hope this reflection particularly provides insight for you. I would like to walk through my capstone experience under the structure of what Honors suggests all great capstones accomplish:

#### Create a capstone experience for the student's undergraduate education

My capstone project provided an avenue for me to apply economic and statistical tools I learned in my courses, and I found I learned more about data cleaning, coding, and econometrics during my capstone than I did during my courses. While there were several things I had to learn to perform the analysis in this project, my mentor was exceptionally helpful in teaching me additional code, helping me troubleshoot my data, and teaching me additional econometric techniques that were used in this study. Although there was a steep learning curve, ultimately, I felt this project provided a great bookend that forced me to apply my education in a real-world setting.

#### Add substantially to the student's overall education and/or future goals

As the previous section alludes to, I gained a substantive educational experience from the completion of this project that is critical to my career goals and future schooling. During this project, I was also in the process of applying for various applied economics programs that asked for relevant experience, knowledge, and work as part of the application. Particularly for the program I will be attending this fall, I was asked to provide two 4,000 word, single-authored essays related to my topic, and I ended up using my Honors thesis as one of these essays. Many job and graduate school applications ask for similar examples, and I was truly grateful to have my Honors thesis as an example. While these projects can be a lot of work, it can serve as a terrific launch pad into your next step, and that alone, in my opinion, justifies the work it demands.

## Create a positive, meaningful mentor relationship in support of the student's education and/or future goals

Choosing a mentor for your project might be the single most important decision during this process. I cannot emphasize enough how critical it was for me to select a mentor with knowledge in my project and who was willing to spend the time mentoring me. Before I asked my mentor if he would be willing to be my capstone advisor, I had previously taken two courses from him, and I knew his expertise aligned well with my goals for the project. Several times I struggled for hours with my code or data just to have my mentor resolve the issue within a matter of minutes next time that we met. This is as much a learning process as it is a creative process, and it is important to align yourself with someone who can best

facilitate the process. My mentor also had the opportunity to get to know me and my abilities to a point where he could speak to them in letters of recommendation, which I ultimately believe greatly improved my graduate school applications.

#### Deepen the student's research experience within his or her major

While I had done a few other research projects before my capstone, this was the first substantive project I had done using economics. It was nice to be able to coalesce my previous research experience with my economics coursework to produce something I felt was substantive. I am also grateful to have the experience of completing a true research project in my field prior to attending a Masters program. An Honors thesis allowed me to learn from my failures while the stakes were low, and because of my participation in this project, I feel significantly more prepared to complete a Masters dissertation.

#### Require critical thinking about topics in that major

Economics is not always cut-and-dry, and I spent a significant amount of time thinking through the implications of every step in the data. The study social science is imperfect because it works in imperfect conditions. I found during my project that every decision ranging from dropping certain observations out of the dataset to how variable were weighted in the regression was a large decision. A lot of these decisions, though at face value they seem small, have vast implications on the interpretability and consequences of results. As such, the collection of previous research and many discussions with my mentor were critical to teasing out these tough questions.

# Broaden the student's experience across disciplines (sometimes in more obvious ways than others, but students should always think broadly and across disciplines about the impact of their work)

Despite the vast majority of my project centering on economics, I was able to use knowledge about public policy, statistics, and coding several times throughout the project. Many may view these disciplines as siloed; however, we live in an interconnected world that demands an interdisciplinary perspective, and I saw this demand play out while completing and thinking about the implications of this project.

Engage the student in his or her local or global community (again, this engagement might be very obvious (in a service-learning capstone) or less so (in a more traditional thesis); in either case, students should reflect upon how their capstone and/or future related work might impact the lives of others)

This project was centered on the implications of affirmative action bans in the United States, and through its completion, I have learned a great deal about the intricacies of public policy and public policy analysis. I have learned that sometimes even rigorous economic and statistical research can come to different conclusions about the same topic, and I truly don't believe anything in society is cut and dry. That being said, I have also come to appreciate the knowledge that can be gleaned from an aggregation of rigorous research and the power it has to improve society. <sup>62</sup>

<sup>62</sup> Main body word count: 6,138 Reflection word count: 1,034

#### **BIOGRAPHY**

Jackie Sullivan is a senior graduating with an Honors degree in economics and hopes to pursue a research career in government or academia. Her academic interests include poverty alleviation, international cooperation, and sustainable development. Her research experience as sent her to conferences in Denmark and San Francisco, and she served as a member of the Undergraduate Research Advisory Board. Jackie served as a member of the Honors Student Advisory Board and was the Honors Student Council Service Chair. She was privileged to serve as the Co-President of the Huntsman Scholar Program and was named the Scholar of the Year for the Jon M. Huntsman School of Business. Jackie was a 2017 finalist for the competitive Harry S. Truman Scholarship, and she hopes to pursue a career in public service. She is proud to be an Aggie, and she is grateful for her incredible experience at Utah State. In her free time, she enjoys teaching guitar, attending concerts, discussing politics, and watching Friends.