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Educational "How," "Where??" and "When" Implications of In-State Resident Tuition Policies for Latino Undocumented Immigrants

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Abstract

This paper presents an analysis of the effects of in-state resident tuition (IRT) policies on undocumented immigrant's college decisions by providing an assessment of if, when, and where students enroll, how they finance their education, and the type of credentials they obtain. We identify effects based on differences in pre- and post-policy outcomes between those covered and not covered by the policy, net of the educational trends of citizens, and accounting for variation across states and time. Using data from two large nationally representative data sources and multiple citizen comparison groups, we find that IRT policies not only affect whether students' enroll in college and time of entry, but can also have implications for other key educational decisions.

Keywords: Latinos, immigrant students, higher education finance, college access

Difficult economic conditions faced by U.S. states and their residents have drawn focus to the targeting of public expenditures and the efficient use of funds to encourage economic growth. Concurrently, states are evaluating how to best develop the productive resources in their communities by adopting immigration and education related policies. A policy area that resides at the nexus between these policy areas are decisions about whether to use state funds to encourage college matriculation and degree attainment among undocumented immigrants. Between 2001 and 2013, 17 states adopted an in-state resident tuition (IRT) policy that allows undocumented immigrants to pay the relatively low tuition and fees available to citizen and legal permanent resident (LPR) state residents at public colleges.

Research on IRT policies to date has mostly focused on the decision of whether to enroll in college and to a lesser extent college completion. While not uniform (Chin & Juhn, 2011), most research indicates that by making higher education more affordable, IRT policies positively affect college enrollment and associate degree completion among Mexican and Latino foreign-born non-citizens (FBNCs)—the strongest proxies for undocumented status (Conger, 2014; Flores, 2010a; 2010b; Kaushal,2008). Other research finds that IRT policies also motivate high school youth to graduate with the hope to enroll in college in the future (Bozick & Miller, 2014; Potochnick, 2014).

Financial and legal constraints associated with IRT policies, however, are also likely to affect where and when students go to college, and how they pay. Research from Texas, for instance, suggests that the state's IRT policy has had the largest effect on enrollments at community colleges (Texas Higher Education Coordinating Board, 2011) and less selective 4-year institutions (Dickson & Pender, 2013). These institutions may be particularly attractive to undocumented immigrants because they have lower tuition costs and tend to be located in urban areas with large immigrant populations (Teranishi, Suarez-Orozco, & Suarez-Orozco 2011). While the size of the tuition discount associated with IRT policies is substantial (average reduction for a 4-year institution in 2005

was $6,925; Kaushal, 2008), in-state tuition is still unaffordable for many undocumented young adults, 40% of whom live below the federal poverty line (Gonzales, 2009). Moreover, undocumented young adults are ineligible for federal financial aid and state aid in most states. Even if undocumented young adults can afford to attend college, upon graduation many of them find themselves in "legal limbo" unable to obtain work because of their immigration status (Suàrez-Orozco, Yoshikawa, Teranishi, & Suàrez-Orozco, 2011). As a consequence, undocumented immigrant youth may make educational investment decisions that place high emphasis on limiting risk by focusing on short-term costs and minimizing debt.

The decisions related to the type of educational investment undocumented immigrant youth make, as well as how they finance their education, could have a lasting impact on their economic future and the economic growth of the state. Given that more than 11 million undocumented immigrants (30% of the foreign-born population) live in the U.S. and more than 80,000 of them reach college age each year (Passel & Cohn, 2008; Passel, 2003), understanding the college behaviors of this population is important for policy development. Encouraging postsecondary educational training is a key employment and economic development policy tool for states. While individuals benefit from the higher wages associated with some postsecondary training, states can benefit from a range of social returns, including higher tax revenues, more productive communities, and reductions in social service expenditures (Avery and Turner, 2012; Moretti; 2004; Wolfe & Haveman, 2003). Research, however, suggests that not all post-secondary training (e.g., bachelor vs. associate degree) generates the same returns (Kane & Rouse, 1995) and that the decisions students make during their educational careers, such as work-school balance, age of enrollment, and full-time vs. part-time attendance, can affect academic and post-school outcomes (Light, 2001; Stinebrickner & Stinebrickner, 2003; O'Toole, Stratton, & Wetzel, 2003).

Using two nationally representative data sources, the Current Population Survey (CPS) and the National Postsecondary Student Aid Study (NPSAS), in addition to examining decisions on the extensive margin of college (i.e., whether to attend), we are the first to examine how IRT policies affect Latino FBNCs' decisions on a range of intensive margin decisions (i.e., how, when, and where they attend). We follow a research approach akin to a difference-in-differences-in-differences method, where we identify policy effects based on differences in pre- and post-policy educational outcomes between Latino FBNCs covered and not covered by the policy, net of the educational trends of citizens, and accounting for variation across states, over time, and within states over time. For robustness, we compare Latino FBNCs to two citizen comparison groups, Latino citizens and all citizens. In addition to confirming prior research regarding enrollment using more recent data, we examine whether the adoption of IRT policies affects how long to wait to matriculate after finishing high school, the choices of the type of institution attended (e.g., 2-year vs. 4-year), and course taking intensity (part-time vs. full-time). Further, we examine how students finance their college education by assessing measures of student borrowing and work behavior. Lastly, we expand on prior research on degree completion by examining more degree types and a longer time frame.

States and IRT Policies

The debate over college access for undocumented immigrants began to formalize in federal policy in 1996 with the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA), which prohibited states from providing in-state resident tuition benefits to undocumented immigrants unless all U.S. citizens and nationals were eligible for the same benefits. Starting in 2001, however, 17 states have adopted (though two states later rescinded) an IRT policy that lowers undocumented immigrant students' costs associated with attending a public college[1] and five states

[1] Undocumented immigrants must meet certain residency requirements. While the criteria varies for each state generally students must: 1) attend a school in the state for a certain number of years; 2) graduate from high school in the state or

have reduced costs even further by allowing undocumented immigrants access to state financial aid. Moreover, the Board of Regents (or Governor) in three states has adopted an internal policy similar to an IRT policy. In Table 1, we provide a list of the 17 IRT policies.

The adoption of IRT policies has been highly contentious, with some states eventually rescinding their policies and others facing legal challenges or immediate counter-legislation. Aside from the political and legal debates, states have incentives to encourage individuals to pursue postsecondary education in-state. Research consistently finds positive and growing average private returns to attending postsecondary education, including higher wages and lower unemployment rates, even after taking into account growing college costs (Avery & Turner, 2012). Importantly for policies that direct public funding for higher education, college also produces average outcomes that benefit society more broadly, with graduates associated with higher levels of civic participation and charitable giving, less criminal activity, and more productive communities among other social benefits (Moretti, 2004; Wolfe & Haveman, 2003). Because public returns can exceed private returns, public subsidies can ameliorate individual incentives to invest in one's education at a socially suboptimal level and therefore aid efficiency in the state economy by increasing the supply of productive workers.

These rationales result in a variety of state supports for higher education. While the federal government provides large financial aid programs such as Pell Grants and subsidized student loans, states typically provide funds that reduce public college tuition for residents of the state. IRT policies are a form of state support that allows undocumented immigrants to pay the lower in-state fee. By reducing undocumented students' tuition, these states are agreeing to subsidize a portion of these students' educational expenses in an effort to encourage attendance at public colleges in the state. Extant research indicates that lower tuition costs can lead to increased enrollment for students

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receive a state issued GED; and 3) sign an affidavit stating that they have either applied to legalize their status or will do so as soon as eligible (National Immigration Law Center (NILC), 2009).

generally (e.g., Dynarski, 2000; Heller, 1997) and that IRT policies specifically can increase college attendance among undocumented students (Flores, 2010a, 2010b; Kaushal, 2008).

For undocumented students, however, it is unclear whether an increase in postsecondary attendance has the same public and private returns. Descriptive evidence indicates that undocumented immigrants are often high-ability, but low-income (Conger & Chellman, 2013), such that removing barriers to education are likely to promote academic and vocational productivity. Since undocumented immigrants cannot legally work in the U.S. and face the threat of deportation,[2] however, expected private benefits that turn into public benefits, such as an augmented state tax base, might be limited by labor market barriers. Other public benefits such as better health and less crime that reduce strain on public services, moreover, may not be realized if graduates cannot find jobs. While some undocumented immigrant youth are able to readjust their status (Kaushal, 2008), most will remain unauthorized unless federal reforms are adopted.

Undocumented Immigrants and Educational Decisions

In order to examine the private and public returns of IRT policies, we must first consider the educational choices faced by undocumented youth. While most present research on IRT policies focus on the decision to enroll in college, this is only one part of the postsecondary education investment decision. Students must also decide where and when to attend, what degree to seek, and how to pay for their education—decisions that are likely to be continually shaped by the economic and legal constraints undocumented immigrants face.

When making educational investment decisions, undocumented immigrants, like their authorized peers, are likely to weigh the present value of expected benefits, such as higher expected

[2] While the 2012 Deferred Action for Child Hood Arrivals (DACA) executive order granted undocumented immigrant youth a 2-year deportation waiver and work permit, it is unclear whether these youth will be able to retain these work permits long-term or how employers respond to these work permits. Moreover, the majority of IRT policies were adopted prior to DACA, and thus, most undocumented immigrant youth in this study still faced deportation and work limit challenges.

wages and better labor market outcomes, against the costs of such an investment, including direct tuition costs and forgone earnings, as predicted by human capital theory (e.g., Becker, 1964). This seemingly simple comparison is far from straightforward for the average student (who must be self-aware about their abilities and expected benefits and costs) but is even more complex for undocumented students who face greater future uncertainty and potentially larger opportunity costs (e.g., choosing between paying for college and essential family needs; Greenman & Hall, 2013).

Prior research finds that uncertainty about future labor market prospects and residency in the U.S. deters some undocumented immigrants from pursuing higher education (Contreras, 2009). For others, though, a high level of resiliency, strong work ethic, and optimism, motivates them to pursue a college degree despite their concerns about the future (Abrego, 2006, 2008; Contreras, 2009; Gonzales, 2009, 2012). An estimated 48% of the 65,000 undocumented students who graduate from high school each year pursue some postsecondary education (Passel, 2005), compared to 66% of high school graduates nationwide (U.S. Bureau of Labor Statistics, 2013).

Concurrent with the decision to enroll is the determination of when to enroll and what type of college to attend. In addition to encouraging overall college enrollment, IRT policies may also shorten the amount of time that elapses between high school graduation and college enrollment for students who delay college entry in order to save enough money to pay for college. Research suggests that delayed entry may lower students' future income according to a life-cycle model of earnings, since entering school earlier can allow students to more quickly accrue income gains associated with education (Ben-Porath, 1967). Delayed entry has also been found to be associated with college dropout (Stratton, O'Toole, and Wetzel, 2008), particularly among Latino students (Ganderton & Santos, 1995).

With regards to 4-year vs. 2-year college choice, prior research on merit aid indicates that lowering the cost of education can induce new students at the margin of college entry to enroll in 2-

year colleges and also push students from 2-year colleges into 4-year colleges (Dynarski, 2004). For undocumented immigrants, there are reasons to believe that the price reduction associated with IRT policies may have a larger effect on enrollment at 2-year colleges than 4-year colleges. Research indicates that immigrants, particularly Latino immigrants, are more likely to attend community colleges because they cost less than 4-year colleges, offer more remedial coursework for English language learners, and are more accessible and accommodating (Teranishi et al., 2011).

In addition to affecting decisions about when and where to enroll, IRT policies could affect choices about how to pay, whether to work, and enrollment intensity. Increasing tuition sticker prices, constrained financial resources, and policies shifting aid from grants to loans have all contributed to increasing student borrowing nationwide. Since IRT policies lower the monetary investment associated with college enrollment, they may result in some undocumented students having to borrow less or work fewer hours—possibly enabling them to enroll full time rather than part-time—in order to pay for college costs. On the other hand, if the policies induce financially constrained students to attend college, some of these students may not be able to independently afford even the lower costs, and without access to grants, these students may end up taking out burdensome student loan debt or work while in school.

Research on the effect of working while in school provides evidence that working more hours can lead to decreases in grades (Ehrenberg & Sherman, 1987; Stinebrickner & Stinebrickner, 2003), and may also extend time to program completion (Darolia, 2014). Similar trends have been observed among undocumented immigrant college students. Qualitative research finds that because many work onerous hours to meet their financial needs they are often unable to develop supportive mentorships that facilitate college completion (Contreras, 2009; Gonzales, 2009). Moreover, quantitative assessments of undocumented students in New York, suggests that the absence of IRT

and financial aid eligibility may hinder students ability to enroll full-time (Conger, 2014; Conger, & Chellman, 2013).

Lastly, while IRT policies can increase college enrollment, they may be limited in their ability to increase college completion and may increase the completion of some degrees over others. Research on IRT policies and degree attainment, thus far, has produced mixed results. Suggesting a positive effect, Kaushal (2008) finds that IRT policies increase associate degree attainment, and Flores and Horn (2009) find that in a selective 4-year institution in Texas undocumented Latino immigrant youth remain in college at similar rates to those of their authorized peers. Research on New York's IRT policy, however, finds that undocumented students trail documented students in their rates of on-time graduation from 4-year bachelor's degree programs (Conger & Chellman, 2013). Our study adds to the evidence on IRT policies and degree completion by providing a national assessment of different types of degrees (bachelor's degree and two types of associate's degrees - vocational/occupational and academic).

Research Design

Our contribution to the literature is to analyze the effect of IRT policies on outcomes beyond enrollment by providing some of the first evidence for how IRT policies shape the "when," "where" and "how" educational behaviors at a national level. In terms of "when," we assess the effect IRT policies have on the enrollment patterns of different age groups and the timing of enrollment (e.g., delayed entry). For "where," we examine whether IRT policies are more likely to encourage 2-year vs. 4-year college enrollment. For "how," we are interested in how students finance their education and thus examine both direct (loans) and indirect factors (work behavior and enrollment intensity) likely to be affected by IRT policies. Additionally, to provide a comparison against prior research, we examine enrollment and completion outcomes of undocumented

immigrant students but use a longer time period of data. Finally, because public and private returns are maximized when students complete college, we also assess degree completion.

Identification Strategy

Our primary empirical approach is to identify the effect of IRT policies on undocumented student outcomes by comparing the differences in outcomes of Latino FBNCs covered by the policy to those not covered, while accounting for outcomes of their U.S. citizen peers and controlling for variation across states, time, and within states over time. Consider first the following framework to estimate individual level outcome *y*:

$$y_{its} = \alpha + \beta I_{ts} + \eta X_{its} + S_s + T_t + \lambda_{st} + e_{its} \quad (1)$$

Here, *i* indexes student, *t* indexes year, *s* indexes state, *a* is the intercept, and *e* is the error term. *I* is a binary policy indicator equal to one for state *s* that offers in-state tuition to undocumented immigrants in year *t*. Vectors of covariates, *X*, are included, as well as dummy variables for states, *S*, to control for time invariant state characteristics (e.g., state-specific educational policies or stagnant demographic composition) and years, *T*, to control for any national time trends that may affect both policy and non-policy states, such as nationwide changes in college enrollment and national educational policies (e.g., changes in Pell Grant maximums). State-by-year effects are captured through a state-year linear trend, λ, to control for effects specific to states that are associated with policy passage.

Estimation of equation (1) on the group of Latino FBNC individuals would allow us to measure the relative outcomes of undocumented students who have access to in-state tuition compared to those that do not based on the exogenous variation created by each state's IRT policy adoption, controlling for stagnant differences across states, national trends over time, and linear trends across states over time. However, since we are primarily interested in recovering estimates of the IRT policy effect on undocumented immigrants, interpretation of results based on equation (1)

does not allow us to rule out that other unobserved factors (e.g., state-specific shocks or policy changes) generated outcomes observed by all students in the policy adopting states.

Therefore, we estimate an equation using a pooled sample of Latino FBNCs and U.S. citizen peers:

$$y_{its} = \alpha + \beta_1 I_{ts} + \beta_2 U_i + \delta(I_{ts} \times U_i) + \eta X_{its} + S_s + T_t + \lambda_{st} + e_{its} \quad (2)$$

We add the following to equation (1): *U,* which is a binary indicator equal to one if the student is a Latino foreign born non-citizen, and the interaction of *U* and *I*. We estimate linear probability models for binary outcome variables (e.g., enrolled or not) for ease of interpretation and calculate robust standard errors clustered by state-year for all estimates.[3] We consider outcomes starting one year after the policy is enacted to account for the time delay between when institutions implement the change and students react (Flores, 2010a, 2010b; Kaushal, 2008).

Our primary variable of interest is the estimated parameter *δ,* which is akin to a difference-in-differences-in-differences estimate of the causal effect of the policy on undocumented immigrants, conditional on covariates. The policy effect can be interpreted as the effect of the IRT policy on undocumented immigrants covered by the IRT policy, net of the non-covered undocumented immigrant effect and net of the citizen effect, with additional controls for unobserved confounding factors across states, over time, and within states over time. This strategy controls for two potentially confounding trends, changes in educational outcomes of undocumented immigrants across states and time that are not related to the policy and changes in the educational outcomes of all students in states that adopted the policy.

We present results in tables from separate estimates comparing the outcomes of Latino FBNCs against two comparison groups, Latino citizens and all citizens (regardless of race/ethnicity). The use of these comparison groups allows us to isolate the IRT policy effect by accounting for the

[3] Results are robust to the use of logit models and are available upon request. The model is fit by ordinary least squares for continuous variables (e.g., private loan amount).

parallel educational trends of citizen students. We select the two comparison groups each of which has their own strengths and limitations. Since they are U.S. citizens, neither the Latino citizen nor all citizen comparison groups should be affected by the IRT law. As members of the same state of residence, however, both groups should experience similar educational policies and economic conditions as those experienced by Latino FBNCs. An added strength of the Latino citizen comparison is that this population—about 60% of whom have an immigrant parent (Fry & Passel, 2009)—is likely to experience unique trends associated with race/ethnicity and immigrant status. A limitation of the Latino citizen comparison, however, is that this group may be affected by spillover effects. Many Latino citizens live in mixed status families (i.e. have undocumented siblings or parents) and thus may benefit from the IRT policy indirectly since it alters the family budget (Kaushal, 2008). Moreover, the Latino citizen comparison group may also include undocumented youth who fear identifying themselves as non-citizens. Given this measurement error and the potential spillover effects, the Latino citizen comparison may under-estimate the effect of IRT policies. Thus, we also include the all citizens comparison group, which should not be affected by spillover effects. In combination, the Latino citizen and all citizen comparison groups should provide a credible estimate for differencing out state-specific educational trends.

We display results from two different models, and draw primary conclusions from results that are robust across specifications. The first model includes just the indicators for having an IRT policy and the Latino undocumented student proxy, along with the interaction between them, and state and year controls. In the second, we add the state-year linear trend and a vector of covariates, X, with parameter vector, η. We include individual-level controls for age, gender, race/ethnicity, and marital status, and controls for state-level time varying characteristics that may be correlated with

policy adoption, such as macroeconomic conditions measured by the unemployment rate, and educational trends (educational attainment levels of whites and Latinos).[4]

Data

We use two large nationally representative data sources in the paper. Similar with prior research on the effects of IRT policies on college behavior (Kaushal, 2008; Flores, 2010a, 2010b) we use the Merged Outgoing Rotation Group (MORG) file from the Current Population Survey (CPS), a nationally representative sample sponsored by the U.S. Census Bureau and U.S. Bureau of Labor Statistics. Using a multistage stratified sample, the CPS collects monthly demographic, employment, and enrollment information from about 60,000 housing units across the United States for the civilian population age sixteen and older. We focus on a sub-sample of high school completers since to qualify for an IRT policy an individual for most states has to complete high school in that state.

The second data source, the National Postsecondary Student Aid Study (NPSAS), is a nationally representative cross-section of college students who attend Title IV eligible postsecondary institutions. We use data on undergraduate students from four NPSAS waves to account for the time period when a number of states considered IRT policies, 2000, 2004, 2008, and 2012. NPSAS data include between approximately 60,000-114,000 records for each of these waves. In these data, we observe each student's demographic and enrollment characteristics, as well as measures of financial need and methods of college payment.

For both datasets we rely on a proxy to identify undocumented immigrants, Latino foreign-born, non-citizens (FBNC). Because no national research survey collects information on documentation status (Passel, 2005), researchers have relied on proxies for undocumented status

[4] We strive to create similar models for comparability, but there are some differences between the models using CPS and NPSAS data because of data availability. Monthly unemployment rate is included in the CPS data analysis, while yearly unemployment rate is included in the NPSAS data analysis. In the models using CPS data, we also include month controls to account for variation in college enrollment across months (e.g., the lower likelihood of enrolling or graduating during the summer months) and the number of years individuals have been in the U.S.

(Bozick & Miller, 2014; Dickson & Pender, 2013; Flores, 2010a; 2010b; Kaushal, 2008; Chin & Juhn, 2011; Potochnick, 2014). Given that about 80% of undocumented immigrants are Latino (Passel & Cohn, 2008) FBNC Latino is one of the strongest proxies available.[5] Nevertheless, a limitation of using a proxy to identify undocumented status is that our estimates are likely to be downwardly biased since our estimate of the policy effect includes individuals unlikely to be affected by the policy (i.e., LPRs). Moreover, though both data sets are large in total observations, the relatively smaller samples of Latino FBNCs (~12,000 in CPS and ~5,500 in NPSAS), may limit our power when trying to precisely identify policy effects.

There are several important differences between the CPS and NPSAS datasets that may contribute to variation in results across the datasets. Given their different sampling frames, for instance, the two datasets differ in their likelihood of including labor migrants (i.e., individuals who come to the U.S. to work and never enter the school system; Oropesa & Landale, 2009) who are less likely to respond to educational policies. Because the NPSAS sample is based on college enrollees the labor migrant sample is likely to be less of a confounder than the sample in CPS, which may explain some of the variation in results across the datasets. Additionally, differences in survey frequency (monthly vs. every 4 years) and survey focus (labor vs. postsecondary trends) may also contribute to variation in results across the datasets.

In Table 2, we display summary statistics for Latino FBNCs, Latino citizens, and all citizens from NPSAS and CPS. We list summary statistics for the CPS sample for outcomes and controls used in the subsequent analyses, i.e., from the 18-24 year old sample we display summary statistics for enrollment and financing and from the 26-28 year old sample we display averages related to the attainment analysis. There are key similarities and differences among Latino FBNCs, Latino citizens, and all citizens. In both age groups of CPS, Latino FBNCs are more likely to be male and married

[5] For CPS, we strengthen this proxy by excluding individuals who migrated to the U.S. before 1986 since these individuals likely received an adjustment of status under the 1986 federal immigration reform.

than Latino citizens and all citizens. Among 18-24 year olds, Latino FBNCs are less likely to be enrolled in college (21%) than Latino citizens (41%) and all citizens (40%)—particularly full-time (15% vs. 35% vs. 34%, respectively). In the NPSAS sample which includes college enrollees only, Latino FBNCs are actually more likely to be enrolled full-time (50%) than their Latino citizen (46%) and all citizen (42%) counterparts, but also more likely to be enrolled in a 2-year college (65% vs. 59% vs. 49%, respectively). In terms of work, we observe in both NPSAS and CPS that Latino FBNCs have similar employment levels compared to their citizen peers but that Latino FBNCs work more hours on average. Lastly, among the older CPS sample aged 26-28 we unsurprisingly see that academic attainment is lower among Latino FBNCs than their citizen counterparts.

Findings

To provide a comparison against prior research, we present in panel A of Table 3 estimates of the effect of IRT policies on college enrollment using three age group ranges from CPS data. In Panel B, we add to the research on college enrollment by examining delayed entry (how many years waited before entering college) using NPSAS data. In this table, we display the main effects on enrollment and delayed entry for Latino FBNCs and post-policy adoption, as well as the coefficient on the interacted term, which can be interpreted as the IRT policy effect on Latino FBNCs. We display selected full regression output in the appendix, with coefficients on control variables generally indicating expected relationships. In subsequent tables, we report only the interacted policy effect for brevity.[6] The first two columns include results from the two models using a sample of Latino FBNCs and Latino citizens, while the third and fourth columns display results from the same models using a sample of Latino FBNCs and all citizens.

[6] We report the coefficient on the interaction between the indicator for being Latino FBNC and post-policy, which represents the post-policy difference in average outcomes between Latino FBNC s and the comparator group. Tables which display full output of regressions are available upon request.

Prior studies have arrived at opposing conclusions when examining how IRT policies affect the decision to enroll in college (Flores, 2010a, 2010b; Kaushal, 2008; Chin & Juhn, 2011). Our results are consistent with studies that find IRT policies increase the likelihood of college enrollment (Flores, 2010a, 2010b; Kaushal, 2008). For 18-24 year olds, we find point estimates of about two percentage points in models including both Latino and all citizens, though the effect is only statistically significant at the 90% confidence level (CL) when compared to the latter group. This increase appears to be driven by the enrollment of younger students, as we observe a larger effect when examining 18-20 year olds, reaching four to six percentage points. A four to six percentage point effect indicates that the policies increase enrollment by about 19-29% off the Latino FBNC sample enrollment rate of about 21%. When examining older students (21-24 year olds), we do not detect a policy effect suggesting that IRT policies have a larger influence on the enrollment behavior of younger students. In all models, the coefficient on the Latino FBNC indicator indicates that these individuals were less likely to enroll in college, as would be expected.

Next, we consider IRT policy effects on the number of years students delay entry into college in panel B of Table 3. Since the NPSAS data only include students enrolled in college, these and ensuing results based on these data should be considered as the effect of the IRT policy conditional on enrollment. Reflective of the younger student enrollment increase from Panel A, we find that Latino FBNC students reduce the number of years they delay entry into college by about half to three-quarters of a year. All of these coefficients are statistically significant at the 99% CL. Unsurprisingly, we find that Latino FBNC students have a longer average duration of delayed entry into college than their citizen peers.

In Table 4, we display IRT policy effects on whether students enroll part-time or full-time and 4-year or 2-year college in the top two panels. Panel A includes analysis using CPS data and Panel B includes analysis using NPSAS data. All point estimates are approximately two to four

percentage points, though results are only statistically significant (at the 90% CL) in one model, when compared to Latino citizens using the adjusted model with the NPSAS sample. An interpretation of this result is that IRT policies induce new part-time enrollment at a mildly higher rate than it encourages students to switch from part-time to full-time enrollment. Negative point estimates provide weak directional evidence that students may be less likely to attend a 4-year college, as opposed to a two year or less college, but these effects are also not precisely estimated.

We present results from models that examine how IRT policies affect how much students work and borrow in the bottom two panels of Table 4. Because of financial challenges faced by undocumented students, policymakers and researchers should consider the financial implications to students associated with lowering tuition for undocumented immigrant students. A concern is that financially constrained students will be induced to attend college because of lower tuition associated with IRT policies, but these students may still have difficulty meeting all educational and non-educational costs accrued while attending college. Taken together, we find only suggestive evidence that enrolled Latino FBNCs are working or borrowing more post-policy. The lack of conclusive results may be because of difficulties undocumented immigrants confront in obtaining financial resources to pay for college expenses from external sources, such as employment or credit.

Using NPSAS data, results indicate that students are about three percentage points more likely to work after the passage of an IRT policy, and this result is statistically significant at the 90% CL as shown in Panel D (CPS sample estimates for working are negative but imprecisely estimated). This may be because the policies encourage working students to attend college, which corresponds with an increase in part-time students. Both the CPS and NPSAS data samples point to fewer hours worked because of IRT policies, with the results using CPS data larger in magnitude and only the results comparing Latino FBNC students to all citizens are statistically significant (at the 90% CL, IRT policy effect of about 1.5 hours worked fewer in Panel C, columns 3 and 4). As shown at the

bottom of Panel D, results point to students possibly being more likely to borrow private student loan money and of larger magnitudes, but these results are not statistically significant.

Finally, we look at outcomes related to program completion among 26-28 year olds[7] in Table 5. We find mixed evidence that IRT policies increase educational attainment. We observe a 4.68 percentage point increase in attainment of an associate degree or higher when compared to Latino citizens (column 1), but this result is not statistically significant when adding additional covariates or when compared to all citizens. Our results contrast that of prior research by Kaushal (2008) which found that IRT policies had a small impact on the likelihood of attaining an associate's degree. Adding to the strength of Kaushal's analysis, our study controls for additional educational trends by including the Latino citizen and all citizen comparison group. Once we control for these general educational trends, we do not observe an IRT policy effect on educational attainment.[8]

Consider next whether IRT policies influence the type of degree attained among those who receive a degree. We find no statistically significant evidence of an IRT effect on type of associate's degree (academic vs. vocational), among students that obtained an associate's degree. We do find, however, quite large negative point estimates for an IRT effect for earning a bachelor's degree of almost 16 percentage points (as compared to earning an associate's degree, for those that obtain at least an associate's degree), when compared to all citizens. This indicates that IRT policies are encouraging completion of an associate's degree at a higher rate than a bachelor's degree. This trend is consistent with the directional influence we found in our 2-year vs. 4-year assessment as well as descriptive research that suggests community colleges (and degrees) are the choice institution of IRT students and Latinos in general (Flores, 2010b; Teranishi et al., 2011). Overall, our results suggest

[7] Because a large share of individuals in this age group are likely to be labor migrants, we exclude immigrants who arrived to the U.S. after age 15 (Oropesa & Landale, 2009).

[8] As a check, we replicated Kaushal's analysis using data up to 2012 (results not shown). We found similar policy effects on attainment of an associate's degree. However, once we added the additional comparison group (Latino citizens and all citizens) we no longer observed a policy effect. These results suggest that differential educational trends in attainment in policy vs. non-policy states were driving our results rather than a true policy effect.

that while IRT policies may increase educational enrollment, undocumented students still face barriers to completing a degree, especially at a bachelor's level.

Alternative Non-Policy State Comparison

We also run models where we include only states that considered an IRT policy but did not pass the policy (see Potochnick, 2014 for a full list) in the comparison group, since these states may be more similar to IRT policy states that states that did not consider the policy. The results presented in Table 6 indicate that our results are robust to the different state comparison group. The point estimates for all outcomes are similar (sometimes slightly larger and sometimes slightly smaller) to those of our original estimates for both comparison groups and both datasets. For example, when examining college enrollment in the CPS sample (Panel A) we still find point estimates of about four to six percentage points in the model including all citizens and the result remains significant. The results for delayed entry continue to indicate a policy effect around 5.5 percentage points or greater across all comparison groups. The point estimate for full-time enrollment in models including Latino citizens using NPSAS data increased but is no longer significant.

The estimated change in probability of being employed increases by almost a percentage point using the NPSAS data, while the change in number of hours worked in the CPS sample is no longer significant at conventional levels (the point estimates for all citizens (column 4) remains comparable to our previous estimate). In terms of degree obtainment, our new point estimates are actually larger and more precisely estimated than our original estimates when comparing undocumented immigrants to Latino citizens – nearly a six percentage point increase in probability of obtaining at least an associate's degree with the alternative state comparison group.

Overall, the results of this robustness check and the general consistency of our estimates across two different national samples (CPS and NPSAS) and three different comparison groups (Latino FBNCs in policy vs. non-policy states; Latino FBNCs vs. Latino citizens; Latino FBNCs vs.

all citizens) provides strong evidence for the policy effects detected. These policy effects remained robust to the inclusion of state-specific linear trends and were consistent when using logit regression (for dichotomous outcomes) rather than a linear probability model (results available upon request).

Discussion

The labor market preparation of a state's undocumented citizenry is becoming an increasingly important issue given that federal action has already begun to reduce legal barriers for undocumented youth. Beginning in 2012, undocumented youth enrolled in school or who have received a high school diploma/GED certificate can apply for deportation waivers and work permits under the Deferred Action for Childhood Arrivals executive order. Additionally, the federal government continues to debate national immigration reforms that would provide a pathway to citizenship, particularly for college educated undocumented youth under the Federal DREAM Act.[9] As the federal landscape continues to change, states policymakers could benefit from a more comprehensive understanding of the effects of state adopted in-state resident tuition policies that reduce financial constraints for undocumented students.

This study builds on prior research that examines the effect of IRT policies on undocumented immigrant's college investment decision by providing the first in-depth assessment of when and where students enroll, how they finance their education, and the type of credentials they obtain. Given the financial obstacles and uncertain labor prospects that undocumented immigrant youth face, IRT policies may not produce the same private and public benefits typically associated with public subsidies for higher education. Thus, to assess whether IRT policies are likely

[9] The Development, Relief, and Education for Alien Minors Act (known as the DREAM Act) has been under consideration in congress since 2001. If passed, it would enact two major changes to current federal law: 1) provide a pathway to citizenship for students who came to the U.S. at or before age 15 and who met certain criteria, and 2) eliminate the federal provision that penalizes states for providing in-state tuition without regard to immigration status (National Immigration Law Center 2009). However, if adopted, the DREAM Act will not resolve the debate over whether undocumented immigrants should qualify for in-state tuition because the bill does not require states to provide in-state tuition to undocumented immigrants.

to achieve optimal returns for the states that have adopted them we examine key indicators of the educational investment decision.

Taken together, our results, which are based on two large national datasets—the CPS and NPSAS—suggest that while IRT policies increase enrollment of undocumented immigrants in postsecondary education, further consideration is needed beyond just whether more students attend. Our study corroborates prior studies (Flores, 2010a, 2010b; Kaushal, 2008) that IRT policies lead to increased enrollment among undocumented immigrant students but also finds that the policies affect "when" students enroll. We observe that IRT policies encourage students to enroll in college sooner after college, with the time between high school completion and college enrollment reduced by about half to three quarters of a year. This can be an important improvement for many students. Extant research suggests that this reduction in delayed entry into college should increase undocumented immigrant youth's chances for college success (Ganderton & Santos, 1995; Stratton et al., 2008). Moreover, going to college quicker allows students to begin to earn the higher college degree wages sooner. This provides both immediate benefits because of augmented current income, but also benefits over workers' lifetimes due to the compounding nature of earnings increases.

Our assessment of "how" students are financing their education indicates some potential limitations of IRT policies. For example, we find suggestive evidence that IRT policies may encourage non-enrollees to enroll part-time at a higher rate than it induces part-time enrollees to move to full-time study. This may be because the lower tuition associated with IRT policies may not be a sufficient financial benefit to allow many students to overcome the work and family obligations or resource constraints that prevent them from being able to attend full-time.

Our analysis of working and borrowing behavior provides further inference on this. In particular, if IRT policies induce financially constrained students into college, then the financial needs of this new student group need to be considered as they may face unique challenges among

students. We observe suggestive post-policy evidence from the NPSAS data that students are more likely to work while enrolled. The effect was not as strong as we expected, perhaps because undocumented students also face legal challenges to obtaining employment. We do not find evidence of changes in borrowing behavior because of IRT policies, which may in part be due to limited credit availability for the undocumented. Nevertheless, working behavior and borrowing needs need to be carefully monitored among undocumented students. Research on the effect of working while in school provide evidence that working more hours can potentially have adverse consequences to academic performance (Darolia, 2014; Ehrenberg & Sherman, 1987). Moreover, borrowing might be particularly burdensome on undocumented immigrants since they face uncertain job prospects due to their legal status (Suarez-Orozco et al., 2011) and are expected to make less than their authorized peers (Hall, Greenman, & Farkas, 2009).

In terms of "where" students are attending, our estimates provide only weak evidence that IRT policies have a stronger effect on enrollment in the 2-year vs. 4-year college sector. We find, however, that increased enrollment is primarily leading to associate, rather than bachelor, degree attainment. This is consistent with previous findings that Latinos in general are more likely to enroll in community colleges since these colleges are more affordable and accessible than 4-year colleges (Teranishi et al., 2011). Lowering the direct costs of 4-year colleges, however, may also lead new enrollees and 2-year college students to attend or transfer to 4-year programs. Research in Texas, for instance, suggests that while the states IRT policy has had a particularly strong influence on community college enrollment it has also increased attendance at more selective 4-year institutions (Dickson & Pender, 2013; Flores, 2010b). Thus, the evidence to date suggests that admission and financial aid policies affecting undocumented youth are relevant at both 2-year and 4-year institutions.

Finally, we find weaker evidence that IRT policies increase college completion than in past research. Kaushal (2008) finds that IRT policies have a small effect on associate degree completion; however, our results suggest that the adoption of an IRT policy may not be sufficient to ensure degree completion, especially at a bachelor's level. There is evidence of returns to going to college without completion, though completing degrees provides students with the most potential benefits from college attendance (Belfield & Bailey, 2011). Amplified enrollment comes at a cost to the state, including increased outlays to support the educational endeavors of publicly subsidized students. Therefore, if states that adopt an IRT policy want to fully maximize returns on their investment, our results suggest the need for further financial and academic assistance to help students finish associate's degrees and encourage bachelor's degree completion. One potential avenue is to extend access to state financial aid and private scholarships—a policy solution that has only been adopted by a few states but rapidly gaining traction in others.

Furthermore, to reap the full returns to their investment in IRT policies, policymakers should consider undocumented immigrants' employment options. In particular, these highly skilled workers need to have incentives to reside in-state post-college. Consequently, in conjunction with educational policies, states should consider policies that allow for these productive undocumented immigrant students to formally participate in labor markets and ease other barriers (such as allowing undocumented individuals to obtain driver's licenses so they can travel to and from work). When students leave the state after increasing their skills through publicly funded education, this leakage of enhanced productivity can diminish benefits associated with states' funding. Thus, as states continue to debate college access for undocumented students, our results suggest that they would benefit from taking a more comprehensive approach that addresses financial barriers beyond in-state tuition as well as future employment limitations that shape undocumented immigrants' educational investment decision.

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Table 1: Policy Provisions for States that Allow Undocumented Students to Gain Resident Tuition Status as of 2013

State	Date Passed	Date Enacted	State Financial Aid for Undoc. Date Effective	Legislation Revoking Law: Enacted	Residency Requirement: Years of High School in State
Texas	16-Jun-01	16-Jun-01	16-Jun-01	N/A	Reside in-state with a parent 3-years prior to graduation and graduate from a TX high school or GED program
California	12-Oct-01	1-Jan-02	1-Jan-13	N/A	Attend a CA high school for 3 or more years prior to graduation or GED
Utah	6-Mar-02	1-Jul-02	N/A	N/A	Attend a UT high school for 3 or more years prior to graduation or GED
New York[1]	25-Jun-02	1-Aug-03	N/A	N/A	Two or more years at an approved NY high school, graduate from NY HS or obtain a NY issued GED, and apply within 5 years
Washington	7-May-03	1-Jul-03	N/A	N/A	Complete a full senior year at a WA high school, live in WA at least 3 years immediately prior to diploma or equivalency
Oklahoma[2]	12-May-03	12-May-03	12-May-03 Revoked: Nov-07	1-Nov-07	Live in state with a parent or legal guardian for 2 years prior to graduation or GED
Illinois	18-May-03	20-May-03	1-Aug-11	N/A	Attend IL high school for 3 years prior to graduation or GED and reside with parent while attending IL high school
Kansas	20-May-04	1-Jul-04	N/A	N/A	Attend KS high school for 3 years prior to graduation or GED
New Mexico	5-Apr-05	5-Apr-05	5-Apr-05	N/A	Attend NM high school for 1 year prior to graduation or GED
Nebraska	14-Apr-06	13-Jul-06	N/A	N/A	Reside in NB 3-years prior to graduation or GED and live with a parent or guardian while attending high school
Wisconsin	26-Jun-09	29-Jun-09	N/A	26-Jun-11	Reside in WI 3 years prior to graduation or GED
Maryland	10-May-11	1-Jul-11	N/A	N/A	Attend MD high school for three years, prove parents filed taxes, and for the first two years students can only attend community colleges
Connecticut	1-Jun-11	1-Jul-11	N/A	N/A	Complete at least 4 years of high school level education in CT
Oregon*	2-Apr-13	1-Jul-13	N/A	N/A	Attend OR high school for three years, five years attendance in any U.S.elementary or secondary school, and receive diploma in OR within 3 years of enrolling in university
Colorado*	29-Apr-13	29-Apr-13	N/A	N/A	Attend high school for at least 3 years prior to gradution or GED; be admitted to a CO institution of higher learning within 12 months of graduating
Minnesota*	24-May-13	1-Jul-13	N/A	N/A	Attend MN high school for 3 years prior to graduation or GED
New Jersey*	20-Dec-13	20-Dec-13	N/A	N/A	Attend NJ high school for 3 years prior to graduation or GED

[1]Prior to NY's policy, the State University of New York (SUNY) and the City University of New York (CUNY) provided in-state tuition to undocumented immigrants except for during the spring of 2002

[2] In 2007 OK passed another statute prohibiting undocumented immigrants from receiving in-state tuition but allowing the state's Board of Regents (which wrote a guideline memo in 2008) to award in-state tuition to undocumented students who attended an OK HS for at least two years. The legislation also made eligibility for financial aid more restrictive.

*Passed legislation outside of the sample period so treated as a non-policy state in analysis

Notes: While Rhode Island, Hawaii, and Michigan have not adopted an IRT policy, the Board of Regents and Governors in these states have adopted a similar internal policy.

Table 2. Weighted Sample Summary Characteristics

	Latino FBNC		Latino Citizens		All Citizens	
	Mean	SD	Mean	SD	Mean	SD
CPS Enrollment Sample, Age 18-24						
Age	21.51	(1.87)	21.24	(1.90)	21.23	(1.90)
Female	0.45	(0.50)	0.51	(0.50)	0.51	(0.50)
Average years in U.S.	7.23	(5.30)	21.08	(2.29)	21.03	(2.39)
Married	0.25	(0.44)	0.11	(0.31)	0.11	(0.32)
Enrolled in college	0.21	(0.40)	0.41	(0.49)	0.40	(0.49)
Enrolled part-time	0.05	(0.23)	0.06	(0.23)	0.06	(0.23)
Enrolled full-time	0.15	(0.36)	0.35	(0.48)	0.34	(0.48)
Employed	0.65	(0.48)	0.66	(0.47)	0.65	(0.48)
Hours worked[1]	37.29	(8.84)	33.71	(11.59)	33.73	(11.48)
N=	11,428				389,776	
CPS Attainment Sample, Age 26-28						
Age	27.00	(0.82)	27.00	(0.82)	27.00	(0.82)
Female	0.44	(0.50)	0.51	(0.50)	0.51	(0.50)
Average years in U.S.	7.28	(4.80)	26.63	(2.51)	26.53	(2.78)
Married	0.55	(0.50)	0.42	(0.49)	0.42	(0.49)
Obtained degree	0.19	(0.39)	0.47	(0.50)	0.45	(0.50)
Obtained vocational Associate's degree	0.03	(.16)	0.05	(.22)	0.05	(0.22)
Obtained academic Associate's degree	0.03	(.17)	0.05	(.23)	0.05	(0.23)
Obtained Bachelor's degree	0.13	(.34)	0.36	(.48)	0.34	(0.47)
N=	12,797		164,765		358,426	
NPSAS Sample						
Age	25.70	(8.00)	25.30	(8.36)	26.37	(9.66)
Female	0.59	(0.49)	0.59	(0.49)	0.57	(0.49)
Married	0.26	(0.44)	0.20	(0.40)	0.22	(0.41)
Delayed Entry Years	2.59	(4.99)	1.80	(4.44)	2.05	(5.20)
Enrolled part-time	0.50	(0.50)	0.54	(0.50)	0.58	(0.49)
Enrolled full-time	0.50	(0.50)	0.46	(0.50)	0.42	(0.49)
Enrolled in a ≤2-yr college	0.65	(0.48)	0.59	(0.49)	0.49	(0.50)
Enrolled in a 4-yr college	0.35	(0.48)	0.41	(0.49)	0.51	(0.50)
Has a private loan[1]	0.23	(0.42)	0.35	(0.48)	0.39	(0.49)
Private loan amount	5,821	(5,317)	6,323	(5,981)	6,882	(5,944)
Employed	0.51	(0.50)	0.53	(0.50)	0.53	(0.50)
Hours worked[2]	31.03	(13.07)	30.45	(13.34)	29.75	(13.92)
N=	5,470		38,740		300,790	

[1] Sample is only those with private loans, [2] Sample is only those employed. Unweighted NPSAS counts are rounded to the nearest 10. Survey weights used for sample characteristics. Source data: Current Population Survey 1998-2012 and the National Postsecondary Student Aid Study 2000, 2004, 2008, and 2012.

Table 3. Impact of IRT Policies on College Enrollment & Delayed Entry, Latino Foreign Born Non-Citizens

	Compared to Latino Citizens		Compared to All Citizens	
	(1)	(2)	(3)	(4)
A. CPS Sample				
Enrolled in College				
Age 18-24 (N=50,456 and 401,204)				
Latino FBNC X Policy	0.0194	0.0151	0.0235*	0.0217*
	(0.0121)	(0.0115)	(0.0135)	(0.0113)
Policy	0.0024	0.0132	0.0019	0.0122*
	(0.0097)	(0.0152)	(0.0044)	(0.0070)
Latino FBNC	-0.1754***	-0.0934***	-0.2237***	-0.1535***
	(0.0067)	(0.0116)	(0.0069)	(0.0089)
Age 18-20 (N=19,930 and 156,818)				
Latino FBNC X Policy	0.0554**	0.0357*	0.0608***	0.0499***
	(0.0207)	(0.0199)	(0.0208)	(0.0187)
Policy	-0.0011	0.0243	0.0073	0.0125
	(0.0149)	(0.0233)	(0.0070)	(0.0123)
Latino FBNC	-0.2059***	-0.0934***	-0.2718***	-0.1720***
	(0.0122)	(0.0225)	(0.0104)	(0.0177)
Age 21-24 (N=30,526 and 244,386)				
Latino FBNC X Policy	0.0040	0.0023	0.0022	0.0059
	(0.0116)	(0.0118)	(0.0125)	(0.0117)
Policy	0.0071	0.0079	-0.0021	0.0103
	(0.0113)	(0.0167)	(0.0051)	(0.0075)
Latino FBNC	-0.1386***	-0.0736***	-0.1791***	-0.1351***
	(0.0079)	(0.0134)	(0.0078)	(0.0114)
B. NPSAS Sample (N=44,210 and 306,260)				
Delayed Entry				
Latino FBNC X Policy	-0.7905***	-0.6090***	-0.7464***	-0.5923***
	(0.2490)	(0.1841)	(0.2694)	(0.2142)
Policy	-0.6221***	-0.7748***	-0.2694**	0.0596
	(0.1644)	(0.1831)	(0.1322)	(0.1063)
Latino FBNC	1.1457***	0.8759***	0.8895***	0.8796***
	(0.1795)	(0.1680)	(0.1860)	(0.1848)
State and Year Indicators	X	X	X	X
Additional Controls		X		X

* p<.10, ** p<.05, ***p<.01. (1) Additional demographic and state controls include: age, female, marital status, race/ethnicity, unemployment rate, the proportion of non-Hispanic white adults with some college in the state, and the proportion of Hispanic adults with a high school diploma in the state, as well as state and year indicators and a state-year linear trend; The CPS sample also includes controls for month and average years in U.S.; (2) Standard errors are adjusted for clustering by state-year; (3) survey weights used; (4) Unweighted NPSAS counts are rounded to the nearest 10.Source data: Current Population Survey 1998-2012 and the National Postsecondary Student Aid Study 2000, 2004, 2008, and 2012.

Table 4. Impact of IRT Policies on Enrollment Status, Working, & Borrowing, Enrolled Latino Foreign Born Non-Citizens

	Compared to Latino Citizens		Compared to All Citizens	
	(1)	(2)	(3)	(4)
A. Enrollment Status, CPS Sample (N=17,048 and 158,954)				
Enrolled Full-Time vs. Part-Time	-0.0204	-0.0251	-0.0189	-0.0220
	(0.0206)	(0.0224)	(0.0206)	(0.0208)
B. Enrollment Status, NPSAS Sample (N=44,210 and 306,260)				
Enrolled Full-Time vs. Part-Time	-0.0302	-0.0387*	-0.0275	-0.0315
	(0.0276)	(0.0218)	(0.0294)	(0.0235)
Enrolled in a 4-yr College	0.0051	-0.0018	-0.0286	-0.0197
	(0.0248)	(0.0230)	(0.0358)	(0.0329)
C. Employment, CPS Sample (N=18,160 and 164,658)				
Employed	-0.0200	-0.0196	-0.0193	-0.0261
	(0.0253)	(0.0255)	(0.0241)	(0.0243)
Number of Hours Worked (if worked; N= 8,230 and 77,006)	-1.2123	-1.1962	-1.4321*	-1.5851*
	(0.8312)	(0.8029)	(0.8556)	(0.8119)
B. Employment & Borrowing, NPSAS Sample (N=44,210 and 306,260)				
Employed	0.0323*	0.0324*	0.0340*	0.0314*
	(0.0175)	(0.0174)	(0.0183)	(0.0179)
Number of Hours Worked (if worked, N = 19,690 and 136,760)	-0.1756	-0.1321	-0.0218	-0.1480
	(0.6881)	(0.6171)	(0.7452)	(0.6138)
Has a Private Loan	0.0030	0.0036	0.0067	0.0082
	(0.0089)	(0.0083)	(0.0088)	(0.0081)
Private Loan Amount (if has loan, N = 3,290 and 28,810)	884.5566	361.1509	799.1285	381.2156
	(879.7108)	(859.0980)	(742.4968)	(685.5479)
State and Year Indicators	X	X	X	X
Additional Controls		X		X

* p<.10, ** p<.05, ***p<.01. (1) Additional demographic and state controls include: age, female, marital status, race/ethnicity, unemployment rate, the proportion of non-Hispanic white adults with some college in the state, and the proportion of Hispanic adults with a high school diploma in the state, as well as state and year indicators and a state-year linear trend; The CPS sample also includes controls for month and average years in U.S.; (2) Standard errors are adjusted for clustering by state-year; (3) survey weights used; (4) Unweighted NPSAS counts are rounded to the nearest 10. Source data: Current Population Survey 1998-2012 and the National Postsecondary Student Aid Study 2000, 2004, 2008, and 2012.

Table 5. Impact of IRT Policies on College Attainment, Latino Foreign-Born Non-Citizens Ages 26-28

	Compared to Latino Citizens		Compared to All Citizens	
	(1)	(2)	(3)	(4)
Obtained Associate's degree or Higher (N = 17,153 and N = 181,203)	0.0468*	0.0428	-0.0110	-0.0209
	(0.0282)	(0.0282)	(0.0283)	(0.0277)
Academic vs. Vocational Associate's Degree (if obtained associate's degree; N = 1,841 and N = 19,663)	0.0962	0.1191	0.0816	0.0993
	(0.1066)	(0.1069)	(0.1043)	(0.1031)
Bachelor's vs. Associate's Degree (if obtained degree; N = 5,237 and N = 82,146)	-0.0820	-0.0753	-0.155**	-0.1587**
	(0.0714)	(0.0712)	(0.0716)	(0.0707)
State and Year Indicators	X	X	X	X
Additional Controls		X		X

* p<.10, ** p<.05, ***p<.01. (1) Additional demographic and state controls include: age, female, marital status, race/ethnicity, unemployment rate, the proportion of non-Hispanic white adults with some college in the state, and the proportion of Hispanic adults with a high school diploma in the state, as well month indicators and state and year linear trends; (2) Standard errors are adjusted for clustering by state-year; (3) survey weights used, (4) excludes Latino FBNCs who arrived after age 15. Source data: Current Population Survey 1998-2012.

Table 6. IRT Policies Impact on Latino FBNCs, Using Only States that Considered the Policy

	Compared to Latino Citizens		Compared to All Citizens	
	(1)	(2)	(3)	(4)
Enrolled in College (CPS)				
Age 18-24	0.0166	0.0118	0.0229	0.0199*
	(0.0124)	(0.0118)	(0.0139)	(0.0117)
Age 18-20	0.0502*	0.0301	0.0601***	0.0472**
	(0.0212)	(0.0206)	(0.0213)	(0.0192)
Age 21-24	0.0032	0.0007	0.0012	0.0042
	(0.0121)	(0.0123)	(0.0131)	(0.0122)
Delayed Entry (NPSAS)	-0.8299***	-0.5792**	-0.7690**	-0.5555*
	(0.3029)	(0.2493)	(0.3388)	(0.2918)
Enrolled Full-Time vs. Part-Time (CPS)	-0.0262	-0.0302	-0.0207	-0.0243
	(0.0211)	(0.0231)	(0.0211)	(0.0214)
Enrolled Full-Time vs. Part-Time (NPSAS)	-0.0326	-0.0441	-0.0320	-0.0329
	(0.0410)	(0.0303)	(0.0427)	(0.0316)
Enrolled in a 4-yr College (NPSAS)	0.0045	0.0101	-0.0389	-0.0169
	(0.0300)	(0.0306)	(0.0474)	(0.0473)
Employed (CPS)	-0.0214	-0.0221	-0.0191	-0.0255
	(0.0260)	(0.0264)	(0.0249)	(0.0250)
Employed (NPSAS)	0.0421*	0.0402*	0.0484**	0.0430*
	(0.0235)	(0.0234)	(0.0226)	(0.0231)
Number of Hours Worked (if worked, CPS)	-0.8036	-0.8473	-1.0431	-1.2426
	(0.8428)	(0.8131)	(0.8754)	(0.8310)
Number of Hours Worked (if worked, NPSAS)	-0.4984	-0.2984	-0.0287	-0.1639
	(0.7954)	(0.6975)	(0.8903)	(0.6943)
Has a Private Loan (NPSAS)	0.0039	0.0038	0.0073	0.0080
	(0.0107)	(0.0095)	(0.0106)	(0.0093)
Private Loan Amount (if has loan, NPSAS)	970.8093	607.4896	915.0578	586.2558
	(906.6271)	(718.5916)	(791.7054)	(647.8818)
Obtained Associate's Degree or Higher (CPS)	.05998**	.0590**	-0.0041	-0.0087
	(0.0297)	(0.0299)	(0.0305)	(0.0298)
Academic vs. Vocational Associate's Degree (if obtained associate's degree, CPS)	0.1205	0.1479	0.0963	0.1187
	(0.1114)	(0.1095)	(0.1099)	(0.1080)
Bachelor's vs. Associate's Degree (if obtained degree, CPS)	-0.0582	-0.0537	-0.1246	-.1261*
	(0.0748)	(0.0753)	(0.0756)	(0.0745)
State and Year Indicators	X	X	X	X
Additional Controls		X		X

* p<.10, ** p<.05, ***p<.01. (1) 20 States have considered IRT legislation. See Potochnick (2014) for a list of states. (2) Additional demographic and state controls include: age, female, marital status, race/ethnicity, unemployment rate, the proportion of non-Hispanic white adults with some college in the state, and the proportion of Hispanic adults with a high school diploma in the state, as well as state and year indicators and a state-year linear trend; The CPS sample also includes controls for month and average years in U.S.; (3) Standard errors are adjusted for clustering by state-year; (4) survey weights used; (5) Unweighted NPSAS counts are rounded to the nearest 10. Source data: Current Population Survey 1998-2012 and the National Postsecondary Student Aid Study 2000, 2004, 2008, and 2012.

Appendix: Full Regression Output Impact of IRT Policies on College Enrollment & Delayed Entry, Latino Foreign Born Non-Citizens