# DACA and the Surge in Unaccompanied Alien Children

Catalina Amuedo-Dorantes\* (San Diego State University)
Thitima Puttitanun (San Diego State University & Kasetsart University)

### **Abstract**

Apprehensions of unaccompanied minors from Central American countries have been on the rise since 2008, even if news reports caught up with the increase after 2012. As such, some politicians posited that the 2012 *Deferred Action for Childhood Arrivals* (DACA) contributed to the surge by creating the expectation that children would be allowed to stay in the country. Immigration advocates, however, believe that the two are not related. Given the new executive order granting a temporary reprieve from deportation and work permits to parents of permanent residents or U.S. born children (*Deferred Action for Parental Accountability* or DAPA), a careful analysis of the effect of these policy measures is much needed. Using data on apprehensions of unaccompanied children by border patrol sector, nationality and year, we examine the impact that DACA might have had on the surge of apprehensions of unaccompanied alien children. We find that DACA did not significantly impact those apprehensions. Rather, the 2008 *Williams Wilberforce Trafficking Victims Protection Reauthorization Act*, along with violence in the originating countries and economic conditions both in the origin countries and the United States, emerge as some of the key determinants of the recent surge in unaccompanied minors apprehended along the southwest U.S.-Mexico border.

JEL Codes: F22, K37

**Keywords:** DACA, Unaccompanied Alien Children, Unaccompanied Minors, Central American immigrants.

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(\*) Contact author: 5500 Campanile Drive, Nasatir Hall #310, San Diego, CA 92182. Phone: 619-594-1663. Fax: 619-594-5062. Email: camuedod@mail.sdsu.edu

### I. Introduction

The number of unaccompanied alien children crossing the southern border of the United States has grown drastically since 2008, capturing congressional attention and leading to a number of hearings in the House (Rempdell 2015). Figure 1 depicts the recent surge in apprehensions of unaccompanied alien children from Mexico, El Salvador, Guatemala, and Honduras. Apprehensions of unaccompanied minors rose considerably after 2008, somewhat declined between 2009 and 2011, and surged again thereafter. In addition to its growth, it has been noted that the composition of the flow of unaccompanied alien children changed over the time period under consideration. While the vast majority of these children used to come from Mexico, the surge in unaccompanied minors observed in recent years has been dominated by children originating from three Central American countries: El Salvador, Guatemala, and Honduras (see Table 1).

A confluence of factors, including extreme violence, endemic poverty, increasingly sophisticated smuggling networks and the desire to reunite with family members in the United States, have fueled this growth. Additionally, it has been argued that legislative changes, in particular, the 2008 *Williams Wilberforce Trafficking Victims Protection Reauthorization Act* (WWTVPRA) of President Bush era and the more recent *Deferred Action for Childhood Arrivals* (DACA) announced by President Obama on June 15, 2012, might have been used by smugglers to sway migrants with false promises that they will be able to stay in the United States once they get in the country (Hing 2014, Rempdell 2015). The WWTVPRA legislated that unaccompanied minors from non-contiguous countries needed to be released into the custody of family or sponsors while they await a deportation hearing in front of a judge; thus enabling children coming from those countries to stay in the United States for what became, in most instances, years. DACA, however, emanated from past variants of the *Development, Relief, and Education* 

for Alien Minors (DREAM) Act that were never passed. As immigration reform and DREAM Act legislation stalled at the national level, on June 15, 2012, President Barack Obama announced that his administration would practice prosecutorial discretion for individuals meeting a set of criteria very similar to those proposed in the most recent version of the DREAM Act (Preston and Cushman 2012). Under DACA, individuals approved for consideration of deferred action were granted a renewable two-year reprieve from deportation proceedings and become eligible for work authorization in the United States. Because of the timing of DACA and the publicized surge in unaccompanied minors coming from Central America after 2012, Senator Sessions have called for a vote on DACA suspension. Yet, to this date, we still lack a good understanding of the role that DACA or, for that matter, the WWTVPRA might have played, if any, on such inflows.

In this paper, we explore the determinants behind the recent increase in inflows of unaccompanied alien children from Central America. In particular, given President Obama's second executive order granting a reprieve from deportation to parents of U.S. born or legal permanent resident children—the so-called *Deferred Action for Parental Accountability* (DAPA), we pay especial attention to the effect that DACA—its predecessor focusing on childhood arrivals—might have played on the surge of unaccompanied minors originating from Mexico, El Salvador, Guatemala and Honduras in recent years. Because one of the requirements of DACA involved being present in the United States, DACA might have encouraged undocumented immigration. Additionally, DACA could have stimulated inflows of unauthorized children if it somehow fostered beliefs that other deferred deportation concessions or even permanent amnesties would occur in the future.

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<sup>&</sup>lt;sup>1</sup> These are detailed in the next section.

<sup>&</sup>lt;sup>2</sup> See, for instance: http://trailblazersblog.dallasnews.com/2014/07/ted-cruz-pushes-to-undo-2012-deportation-ban-for-young-immigrants.html/

Establishing the effect of DACA on the surge of unaccompanied minors is important for several reasons. *First*, the rapid increase has resulted in children often being held in overcrowded facilities with adult asylum seekers, thus increasing their difficulty in gaining access to proper legal and medical care (Binford 2013, Stinchcomb and Hershberg 2014, MPI 2012). This led President Obama to declare the wave of unaccompanied minors an "urgent humanitarian situation", asking federal agencies to coordinate an emergency response to the situation. Yet, an appropriate response requires a good understanding of the root causes for such flows, which we still lack.

Second, since President Obama's new executive order announced on November 20, 2014 extends the eligibility of DACA applicants and grants a *temporary* reprieve from deportation and work permits to parents of U.S. born or permanent resident children, an in-depth debate on the effect of the original reprieve from deportation offered by DACA will surely follow. As it has been previously argued in the past with regards to broad amnesty programs conceding a *permanent* reprieve from deportation through the granting of legal status –such as the 1986 Immigration Reform and Control Act (IRCA), some have alleged that these *temporary* reprieves form deportation increase illegal border crossings. However, what proof do we have? This analysis will provide some new evidence on the role of such policies in attracting recent flows of unaccompanied minors.

Finally, there is a substantial number of unauthorized immigrants in the United States. While the stock of undocumented immigrants decreased during the 2008-2009 recession, it is still estimated at approximately 11.2 million (Krogstad and Passel 2014). Aside from labor market displacement effects, concerns regarding the potential fiscal burdens they impose on state and local governments by increasing their expenditures on health and, in particular, education are

one of the main reasons for which natives tend to oppose undocumented immigration (Smith and Edmonston 1997, Hanson 2012). Therefore, it is crucial to gain a better understanding of how current policies might be impacting the inflow of unaccompanied minors.

# II. Background

Unaccompanied migrant children, legally referred to as "Unaccompanied Alien Children", are children under the age of 18 who enter the United States without lawful immigration status and do not have a parent or legal guardian with them to provide care and physical custody. According to a portion of the *William Wilberforce Trafficking Victims Protection Reauthorization Act* (WWTVPRA) of 2008, with the exception of children coming from Mexico and Canada –countries with a border with the United States, unaccompanied minors have to be transferred to Office of Refugee Resettlement (ORR) custody by the Customs Border Patrol (CBP) within 72 hours. ORR is responsible for holding them 'in the least restrictive setting that is in the best interest of the child' until the children can be released to a 'suitable family member' in the United States.<sup>3,4</sup> Children then wait for a proper hearing. Given the increase in deportation hearings from recent years, waiting periods have been known to last for years and, during that time, the children are allowed to stay in the country (Resnick, 2004).

In sum, the 2008 law significantly changed the way in which unaccompanied alien children were handled by the Department of Homeland Security (DHS), which had previously removed unaccompanied minors using expedited procedures. The new legislation was accompanied by a surge in the flow of unaccompanied alien children from El Salvador,

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<sup>&</sup>lt;sup>3</sup> 8 U.S.C. § 1232

<sup>&</sup>lt;sup>4</sup> Only recently, in July 2014, H.R. 5079 was introduced to amend the WWTVPRA and allow for any unaccompanied alien child who is not considered a victim of trafficking or does not have a credible fear of persecution to be: (1) placed in removal proceedings, (2) eligible for voluntary departure at no cost to the child, and (3) provided with access to counsel. Currently, such expedited removal requirements apply only to unaccompanied children from countries that are contiguous to the United States.

Guatemala and Honduras, worsening the bottleneck in the handling of unaccompanied minors' deportation. The confluence of all these factors led some to the conclusion that the 2008 WWTVPRA might have played a role in the increase in inflows from those countries –a deduction supported by Figure 1.

At the same time, others have pointed fingers to President Obama's 2012 executive order offering a reprieve from deportation to unauthorized immigrant childhood arrivals that fulfilled a series of requirements (the *Deferred Action for Childhood Arrivals* or DACA) as yet another cause for the increased inflows. As mentioned earlier, DACA's roots are closely tied to DREAM Act proposals, which preceded DACA by over a decade. However, the timing and political context in which DACA was announced cannot be overlooked. Its origins can be traced back to the period leading to the presidential election in late 2012, which resulted in a battle for Latino votes in the face of a potential alternative to the DREAM act presented by President Obama's challengers (Wallsten 2012). All this contributed to a political environment in which DACA was announced suddenly and implemented swiftly. For purposes of evaluating the impact of DACA, this suggests that there were relatively little anticipation effects leading up to the program's announcement.

DACA did not offer the more permanent immigration status embedded in DREAM Act proposals; rather, it provided qualified individuals with a two-year reprieve from deportation proceedings and the ability to obtain work authorization in the United States. At the expiration of the two-year period, program beneficiaries had to apply for a renewal of their DACA status, with renewals being issued in two-year increments. Although DACA did not offer a permanent legal status to undocumented eligible undocumented youth, its eligibility rules closely mirrored those in the DREAM Act legislation. Namely, U.S. Citizenship and Immigration Services

(USCIS) stipulated that an individual eligible for DACA had to: (1) Be under the age of 31 as of June 15, 2012; (2) Have arrived in the United States before reaching his 16<sup>th</sup> birthday; (3) Have continuously resided in the United States since June 15, 2007, up until the time of application (4) Have been physically present in the United States on June 15, 2012, and at the time of making the request for deferred action with USCIS; (5) Have entered without inspection prior to June 15, 2012, or had his lawful immigration status expired by that date; (6) Be currently in school, have graduated from high school or obtained an equivalent degree, or have been honorably discharged from the Coast Guard or Armed Forces of the United States; and (7) Have no criminal records or pose a threat to national security or public safety.<sup>5</sup>

As noted above, since the surge in unaccompanied minors somewhat overlapped with the announcement of DACA, some politicians and critics have contended that DACA is primarily responsible for the surge in unaccompanied alien children (Hing 2014, Wolgin and Kelley 2014, Wong 2014). They have noted that these young migrants are heading north not just to flee deteriorating economic and security conditions in Central America, but also lured by rumors that they will be granted permission to stay legally and that such rumors originated from DACA. In that vein, the Economist (2014) claimed that a memo from the U.S. Customs and Border Patrol based on interviews with 230 women and children apprehended in the Rio Grande Valley concluded that they crossed mainly because they expected to be allowed to stay. However, many responses suggest that the surge started before DACA, as it appears to be the case in Figure 1. Furthermore, none of the children crossing in or after 2012 would be eligible for DACA. And, indeed, in an interview of over 400 children from Central America by the United Nations High

<sup>&</sup>lt;sup>5</sup> For greater details, visit the section entitled: "Consideration of Deferred Action for Childhood Arrivals Process" at http://www.uscis.gov

<sup>&</sup>lt;sup>6</sup> See, for instance: http://trailblazersblog.dallasnews.com/2014/07/ted-cruz-pushes-to-undo-2012-deportation-ban-for-young-immigrants.html/

<sup>&</sup>lt;sup>7</sup> Nowrasteh (2014) and *LA Times* (2014).

Commissioner for Refugees (UNHCR) regional office for the United States and the Caribbean, only a handful of the children mentioned the rumors of preferential treatment for children or potential immigration reform as a reason for coming to the United States.<sup>8</sup>

Without a real understanding of the factors driving the inflows of unaccompanied minors from Central America, we will not be able to address the root causes of the problem. Therefore, the aim of this paper is to explore in a more systematic manner the determinants of unaccompanied children migration from Central America, with a special focus on the role played by DACA, as opposed to other push and pull factors.

### **III.** Brief Literature Review

A number of authors have examined how policies granting legal status via relatively broad amnesty programs, such as the 1986 Immigration Reform and Control Act (IRCA), have impacted immigration flows. In addition to focusing on amnesties, which grant a permanent legal status as opposed to a temporary reprieve from deportation as DACA, the results from these studies are somewhat mixed. For instance, Bean *et al.* (1990), White *et al.* (1990) and Linder (2011) find that border apprehensions –a proxy for illegal immigration inflows– were significantly lower after IRCA. In contrast, Donato *et al.* (1992) and Woodrow and Passel (1990) do not. Trying to reconcile these contradictory findings, Orrenius and Zavdony (2003) look at various points in time surrounding the enactment of IRCA and find that apprehensions declined immediately after IRCA, but returned to normal levels soon after.

Studies on how *temporary* reprieves from deportation, such as DACA, affect illegal immigration and, more specifically, the flow of unaccompanied minors are virtually inexistent. Most of the literature is circumscribed to commentary pieces and news reports that are

 $^8 http://themigrationist.net/2014/06/25/why-are-unaccompanied-children-fleeing-central-america-and-how-can-the-u-s-and-others-respond/$ 

descriptive in nature. For instance, Hulse (2014) discusses how the WWTVPRA, rather than DACA, is the root of the increased flow of unaccompanied minors across the southwest border; whereas Wong (2014) suggests that violence in the sending countries, as opposed to DACA, is mostly responsible for the surge in flows during 2013 and 2014.

In what follows, we address this gap in the literature with an analysis of the role that DACA, as opposed to the WWTVPRA and other determinants of immigration flows in the home and host countries considered in the literature (*e.g.* Borjas 1987, Yang 1995, Karemera *et al.* 2000, Orrenius and Zavodny 2003, Clark *et al.* 2007, Mayda 2010), might have played in explaining the recent surge in unaccompanied minors.

# IV. Data and Descriptive Evidence

We make use of data on apprehensions of unaccompanied children by border patrol sector, nationality and year obtained via a Freedom of Information Act request. Our dependent variable is the number of apprehended unaccompanied minors from Mexico, El Salvador, Guatemala and Honduras, per year and border patrol sector along the U.S.-Mexico border. The four Central American countries account for the vast inflow of unaccompanied alien children. Our data span from 2007 through 2013 –the time period made available for which the Customs Border Patrol (CBP) made these data available. While it would be ideal to have quarterly or monthly data, yearly data was the highest frequency CBP was willing to release due to alleged confidentiality concerns. Finally, because apprehensions varied widely across border patrol sector on account of their proximity to the railroad (nicknamed "The Beast"), pre-existing crossing networks and the difficulty on making it across the border, we also requested having the data broken down by border patrol sector. In that manner, we are able to account for

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<sup>&</sup>lt;sup>9</sup> As an example, while Rio Grande Valley, TX or Tucson, AZ experienced significant increases in unaccompanied minor flows, changes in the latter were negligible in border patrol sectors such as Yuma, AZ or El Centro, CA.

differences in border patrol sector enforcement levels, unobserved time-invariant characteristics captured by border patrol sector fixed-effects and time-varying factors embodied in border patrol sector specific time trends —all of which could be responsible for differences in the volume of unaccompanied minors.

At this point, it is also worth noting that the number of apprehended youth is not the ideal measure of the number of unaccompanied minors who have successfully crossed into the United States or even of the number who have attempted to do so. However, given the generalized practice of turning themselves in to the border patrol agents upon crossing (Preston 2014), these numbers are likely to be correlated to the number of illegal crossings by unaccompanied minors—possibly even more so that in the case of overall apprehensions of undocumented immigrants (Bean *et al.* 1990, Espenshade 1995). As such, while one might have to be careful in assessing the exact impact of any determinant on those flows, the data can be helpful in identifying the direction of the impact that DACA, versus other factors, might be having on the recent flows of unaccompanied alien children.

In addition to data on apprehensions of unaccompanied alien children, we gather information on a number of push and pull factors possibly responsible for the observed increase in unaccompanied minor apprehensions. In particular, data on homicide counts and real GDP per capita from each Central American country is collected from the *United Nations Office on Drugs and Crime Database* and from the *World Development Indicators Database*, respectively. Data on real U.S. average weekly earnings and unemployment rates are gathered from the Bureau of Labor Statistics website. Finally, figures on the total number of legal permanent residents admitted from each Central American country and on the number of border patrol agents by sector along the southwest border of the United States and Mexico are collected from

the *Yearbook of Immigration Statistics* at the Department of Homeland Security website and from the U.S. Customs and Border Protection website, correspondingly.

Table 2 displays the summary statistics for the variables used in the analysis before the 2008 WWTVPRA, after that law and before the 2012 DACA, and after DACA. On average, apprehensions of unaccompanied alien children were the lowest prior to the implementation of the WWTVPRA and DACA –averaging 189 across the various southwest border patrol sectors in 2007. Apprehensions doubled during the 2008-2011 period following the WWTVPRA law and prior to the announcement of DACA in 2012. Then, they doubled again during 2012 and 2013, coinciding with the implementation of DACA.

Also worth noting are the ongoing changes in other potentially responsible push and pull factors. For instance, homicide counts per 100,000 doubled from 2007 to 2008-2011 –a change that could be in part responsible for the large increase in unaccompanied minor apprehensions during that same period. The increase took place despite the simultaneous increase in U.S. unemployment rates and the number of border patrol agents per sector along the southwest border –two factors that should have curtailed that surge in unaccompanied alien children. But, perhaps more puzzling is the sharp rise in the unaccompanied minors during 2012 and 2013 notwithstanding the stability in most of the variables in Table 2 during that time period. What sustained the continued growth in the flow of unaccompanied minors?

To better understand the dynamics of unaccompanied minor apprehensions, we step back to first assess the statistical significance of the increases in the number of unaccompanied alien children, as well as in some factors typically put forward as key determinants of such flows, in the different time periods displayed in Table 2. According to the descriptive statistics in Panel A of Table 3, the doubling in the number of apprehensions of unaccompanied alien children from

before to after the WWTVPRA law and prior to the announcement of DACA, as well as thereafter following the enactment of DACA, was statistically significant at the 5 percent level. Because the increases observed surrounding the WWTVPRA and DACA might have originated form distinct countries, we subsequently differentiate between arrivals from El Salvador, Guatemala and Honduras, as opposed to arrivals from Mexico, in Panels B and Panel C, respectively. According to the statistics reported in Panel B, apprehensions of unaccompanied minors from El Salvador, Honduras and Guatemala significantly increased after both the WWTVPRA and, especially, DACA. In contrast, apprehensions of unaccompanied Mexican minors do not appear to have significantly risen following DACA, even though they did increase significantly following the enactment of the WWTVPRA. Could it be the case that conditions in the two sets of Central American countries significantly differed during those two time periods?

Tables 4 and 5 address that question by comparing two commonly cited determinants of unaccompanied minor flows –namely: homicide counts per 100,000 and real GDP per capita in home countries before and after the WWTVPRA and DACA, correspondingly. Overall, homicide rates doubled from before to after the WWTVPRA law and prior to the enactment of DACA. And, while all Central Americans endured a significantly more violent environment, the increase in homicide counts per 100,000 was particularly acute in Mexico, coinciding with the war on drugs. In fact, homicides kept on rising in Mexico during the time period surrounding the enactment of DACA, whereas they did not in El Salvador, Guatemala and Honduras.

Is it possible that, instead of violence, poor economic conditions in the home country contributed to the significant increase in unaccompanied minor apprehensions during the period when DACA was announced as shown in Panel B, Table 3? Table 5 looks into that question by examining changes in the real GDP per capita in unaccompanied minors' countries of origin –a

proxy for economic well-being— during the time period surrounding the WWTVPRA and DACA. According to the descriptive statistics in Table 5, economic conditions might have helped explain what went on with apprehensions of unaccompanied minors from Mexico during the time period surrounding the enactment of the WWTVPRA. However, real GDP per capita did not significantly change in the remaining Central American countries during the time span being examined.

In sum, while apprehensions of unaccompanied minors from El Salvador, Guatemala and Honduras seem to have surged during the time period surrounding the enactment of DACA, changes in homicides rates or economic condition, as captured by real GDP per capita, do not seem to have done the same. Yet, while informative, the statistics in Tables 3 through 5 are purely descriptive. In what follows, we thoroughly assess the role that these factors, along with traditional pull and push factors in the United States, might have played in explaining the observed changes in apprehensions of unaccompanied minors once we account for a wide range of unobserved fixed and time-varying country of origin and border patrol sector characteristics potentially responsible for the observed changes in flows.

# V. Methodology

Our main aim is to gauge the role that DACA, relative to prior legislative measures and a range of home and host country characteristics, might have played in the increase in crossings of unaccompanied alien children. To that end, we regress the logarithm of unaccompanied minor apprehensions on two dummy variables indicative of the period during which DACA and the WWTVPRA laws were in place, along with a series of variables capturing push and pull factors. Among the former, we include homicide counts per 100,000 and real GDP per capita in the home country, as well as the number of border patrol agents per sector and year in the United States.

Among the pull factors, we include the average real U.S. weekly earnings and unemployment rates, in addition to the number of legal permanent residents admitted from each of the countries. Our benchmark specification is as follows:

(1) 
$$\log(UACS)_{bct} = \alpha_0 + \alpha_1 DACA_t + \alpha_2 WWTVPRA_t + \alpha_3 X_{bt} + Y_t \beta + Z_{ct} \gamma + \delta_b + \theta_c + trend + \delta_b * trend + \theta_c * trend + \varepsilon_{bct}$$

where subscript b denotes border patrol sector, c denotes home country of the unaccompanied alien children, and t denotes year of apprehension. Our dependent variable is the logarithm of unaccompanied minor apprehensions ( $log(UACS)_{bct}$ ) from each country per border patrol sector and year. Our key regressors are given by DACA<sub>t</sub> and WWTVPRA<sub>t</sub> -two dummy variables indicative of when DACA and the WWTVPRA were in effect. The vector  $X_{bt}$  includes information on the number of border patrol agents per sector and year, whereas  $Y_t$  accounts for average real weekly earnings and unemployment rates in the United States.<sup>10</sup> As noted above, we also control for home country characteristics possibly related to the observed increase in unaccompanied minor flows, such as violence and economic conditions as captured by homicide counts per 100,000 and real GDP per capita in the home country. Those two variables are included in the vector  $Z_{ct}$ , along with information on the number of legal permanent residents admitted to the United States from each of the four Central American countries. The latter could have influenced the migration of unaccompanied alien children if they came to the United States to reunite with other family members with a legal status. Alternatively, if children had migrated illegally prior to the enactment of any of the two laws, an increase in the number of new legal permanent residents should lower the apprehensions of unaccompanied minors.

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<sup>&</sup>lt;sup>10</sup> Average weekly earnings are in 1982-1984 constant dollars.

Equation (1) also includes a range of border patrol ( $\delta_b$ ) and country of origin ( $\theta_c$ ) fixedeffects to help explain flows of unaccompanied minors, such as proximity to railroad tracks
crossing Mexico (e.g. the case of Rio Grande Valley sector) or a history of high emigration (e.g.Mexico due to the Bracero program or El Salvador owing to political turmoil in the 1980s).
Importantly, because of the clear trend in apprehensions of unaccompanied alien children
exhibited in Table 1, we include a time trend and also test for serial correlation. One way to
address first-order serial correlation is to perform the estimation in first differences. However,
by doing so, we inevitably lose the 2007 data and the ability to assess the potential role of the
WWTVPRA law on the flows of unaccompanied minors. Therefore, we instead use BaltagiWu's Generalized Least Square method to remove the AR(1) component.

Finally, in addition to a time trend, equation (1) also incorporates border patrol- and country of origin-specific time trends (*i.e.* ( $\delta_b * trend$ ) and ( $\theta_c * trend$ ), respectively). These are included to address differences in the operability of border patrol sectors, sometimes related to the adoption of specific measures, as in the case of the progressive adoption of Operation Streamline by the various border patrol sectors from 2005 onwards. Similarly, countries of origin-specific time trends allow us to account for other time-varying characteristics in the home country, such as fertility rates or policy interventions.

We estimate various model specifications that progressively add the discussed pull and push factors to better gauge their role in shaping flows of unaccompanied alien children. This is particularly important in the presence of potentially endogenous regressors —as would be the case

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<sup>&</sup>lt;sup>11</sup> Wooldridge (2002)'s test for autocorrelation in panel-data models suggest that we have first-order autocorrelation in all of our specifications in Table 6 at the 1% level of significance.

<sup>&</sup>lt;sup>12</sup> See details in http://www.stata.com/manuals13/xtxtregar.pdf.

<sup>&</sup>lt;sup>13</sup> We also experimented with including an indicator for Operation Streamline. The latter turned to be collinear with the border patrol specific time trends, which prove more relevant in explaining unaccompanied minor flows. Since our key findings were unaffected by the inclusion of that policy indicator, we opted for keeping the border patrol specific time trends instead. Results using the Operation Streamline indicator are available from the authors.

with the number of border patrol agents per sector and year (in hundreds). By including it in a stepped manner, we are able to gauge unexpected changes in the estimated impact of DACA potentially driven by its endogenous nature.

### VI. Results

Was DACA responsible, at least in part, for the unprecedented increase in the inflow of unaccompanied alien children in 2012 and 2013? Table 6 explores that question. <sup>14</sup> In the most parsimonious model specification, DACA appears to have augmented apprehensions of unaccompanied minors by as much as 70 percent. A similar impact is also found for the 2008 WWTVPRA, which appears to have led to a 78 percent increase in apprehensions of unaccompanied alien children. These two estimates, however, significantly decrease in magnitude when we include a range of border patrol sector and country of origin fixed effects, along with a time trend and border patrol and country of origin specific time trends. Specifically, the effect of DACA on the apprehensions of unaccompanied minors goes down from 70 percent to 42 percent, whereas that of the WWTVPRA drops from 78 percent to 59 percent. In fact, as shown in specifications (3) through (7), the impact of DACA effectively becomes indistinguishable from zero when we control for the pull and push factors previously discussed in Table 2. Specifically, accounting for average weekly earnings and unemployment rates in the United States further reduces the estimated coefficient for DACA and eliminates its statistical In contrast, the estimated impact of the WWTVPRA remains practically significance. unchanged and only keeps on growing as we include the remaining controls -namely legal

<sup>&</sup>lt;sup>14</sup> The Baltagi-Wu LBI-statistics in all specifications are around 2 indicating no autocorrelation. As a rough rule of thumb, values below 1 suggests positively autocorrelation, see Sarkisian (n.d.) and Engelhardt and Prskawetz (2009).

entries, border patrol agents by sector and information on economic conditions and violence in the home country.

Our most complete specification (specification (7)) adds an interaction term of the WWTVPRA with the Mexico country dummy. Because the WWTVPRA specifically targeted minors from countries other than Canada and Mexico, we would expect the 2008 law to have impacted the flow of unaccompanied minors from El Salvador, Guatemala and Honduras, but not the flow from neighboring Mexico. As such, our expectation is that the estimated coefficients for the WWTVPRA and its interaction term with the Mexico country dummy would be jointly statistically different from zero and negative, revealing the comparatively larger impact of the 2008 law on the flow of unaccompanied minors from El Salvador, Guatemala and Honduras.

The estimates in specification (7) reveal that DACA has not been responsible for the observed increase in unaccompanied alien children in 2012 and 2013. Rather, apprehensions of unaccompanied minors from El Salvador, Guatemala and Honduras have been on the rise since 2008. They practically doubled since the passage of the aforementioned law by the U.S. Congress –likely due to the fact that children from non-neighboring countries were allowed to stay in the United States, often for years, while awaiting a hearing. In contrast, in relative terms, the WWTVPRA lowered apprehensions of unaccompanied minors originating from Mexico – who continued to be immediately returned to their home country following their apprehension via expedited removals, by approximately 26 percent. <sup>15</sup>

Other estimates in Table 6 have the expected signs. For instance, a 1 percent increase in average weekly earnings in the United States –a highly unusual event given the compression of household incomes since the 1980s, would be associated to a 29 percent increase in

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<sup>&</sup>lt;sup>15</sup> The impact of the WWTVPRA on apprehensions of unaccompanied alien children from Mexico is computed as the sum of the estimated coefficients of the WWTVPRA and the interaction term between WWTVPRA and Mexico dummy, which are jointly significant at the 1% level.

apprehensions of unaccompanied minors. <sup>16</sup> In contrast, a similar 1 percent increase in unemployment rates would lower such apprehensions by 2.7 percent. Additionally, conditions in the home countries also appear to play a significant role in shaping the flow of unaccompanied youth. In particular, a 5 percent increase in the count of homicides per 100,000 –the equivalent to an additional 445 homicides per year, on average— seems to raise apprehensions of unaccompanied alien children by 4.51 percent. In contrast, better living conditions back home as captured by a 1 percent higher real GDP per capita –a mere \$37/year increase— would reduce the aforementioned apprehensions by 7.5 percent.

In sum, while DACA does not appear to have played a significant role in shaping the recent increases in apprehensions of unaccompanied alien children along the Mexico-U.S. border, the 2008 WWTVPRA does, along with economic conditions in the United States, plus economic conditions and violence in the originating countries.

# VII. Summary and Conclusions

Apprehensions of unaccompanied minors from Central American countries had been on the rise since 2008, but news report particularly caught up with the increase after 2012 and, in particular, during the summer of 2014. The surge in unaccompanied alien children crossing the southwest border brought new attention –most of it negative– to DACA. Some politicians have posited that DACA created the expectation that children would be allowed to stay in the country and, as a result, contributed to the surge. Immigration advocates, however, believe that the two are not related. With the new executive order from November 20, 2014, granting a temporary reprieve from deportation and work permits to parents of permanent residents or U.S. born

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<sup>&</sup>lt;sup>16</sup> The marginal effect is computed as:  $(0.01*\$337/\text{week})*100*\beta$ , where \$337 is the average real weekly earnings in the U.S. as shown in Table 2. Other marginal effects are computed similarly.

children (*Deferred Action for Parental Accountability* or DAPA), a careful analysis of the effect of these policy measures is much needed.

Using data on apprehensions of unaccompanied children by border patrol sector, nationality and year, we examine the impact that DACA might have had on the recent surge in the unaccompanied minors apprehended while crossing the southwest border of the United States. We find that DACA does not appear to have a significant impact on those apprehensions once we account for traditional pull and push factors and a range of unobserved country of origin and border patrol sector time-varying and fixed effects. Rather, the 2008 WWTVPRA, along with violence in the originating countries and economic conditions both in the origin countries and the United States, emerge as some of the key determinants of the recent surge in unaccompanied minors apprehended along the southwest U.S.-Mexico border. As such, the claim that DACA is responsible for the increase in the flow of unaccompanied alien children is not supported by the data.

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Figure 1: Apprehensions of Unaccompanied Minors over Time

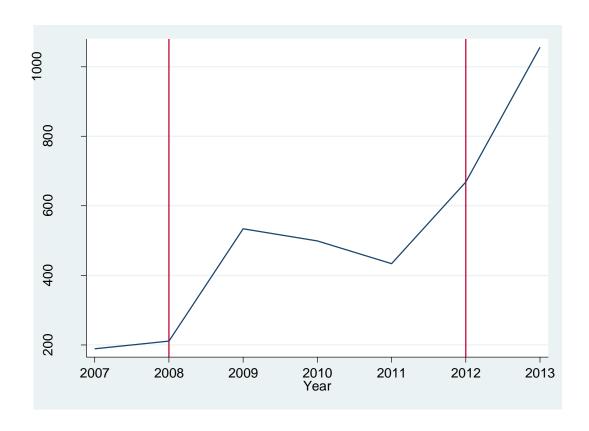


Table 1: Apprehended Unaccompanied Alien Children by Fiscal Year and Country of Origin

Country	2007	2008	2009	2010	2011	2012	2013
El Salvador	629	1,388	1,221	1,910	1,394	3,314	5,990
Guatemala	494	1,371	1,115	1,517	1,565	3,835	8,068
Honduras	797	1,568	968	1,017	974	2,997	6,747
Mexico	4,839	3,288	16,114	13,724	11,768	13,974	17,240

Source: http://www.cbp.gov/newsroom/stats/southwest-border-unaccompanied-children

**Table 2: Summary Statistics by Time Period** 

Variables	Overall (2007-2013)	Pre-WWTVPRA (2007)	Post-WWTVPRA & Pre-DACA (2008-2011)	Post-DACA (2012-2013)
UAC Apprehensions	513.246	189.139	419.833	862.125
	(1157.105)	(486.518)	(975.142)	(1583.349)
Homicide Count per 100,000 at Origin	0.09	0.054	0.094	0.098
	(0.076)	(0.022)	(0.077)	(0.086)
Real GDP per capita at Origin	3773.414	3772.709	3725.95	3868.695
	(2645.779)	(2683.923)	(2596.191)	(2758.058)
Real U.S. Average Weekly Earnings	337.286	335	339.5	334
	(4.104)	(0)	(4.168)	(1.007)
U.S. Unemployment Rate	7.669	4.617	8.41	7.713
	(1.74)	(0)	(1.532)	(0.365)
LPRs Admitted per Country in 1,000s	47.771	48.83	49.373	44.037
	(61.4)	(58.66)	(64.7)	(56.394)
BP Agents per Sector in 100s	18.888	14.774	19.107	20.507
	(9.446)	(7.584)	(8.998)	(10.615)
No. of Observations	252	36	144	72

**Note:** UAC apprehensions data is by border patrol sector and fiscal year.

Table 3: Incidence of UAC Apprehensions Pre vs. Post WWTVPRA and DACA

Variable:	Count of Apprehensions of Unaccompanied Alien Children					
Statistic:	Observations	Mean	t stat			
Panel A: From All Countries						
Period prior to DACA						
Before WWTVPRA	36	189.139	2.010**			
Before WWT VI KI	30	(486.518)	2.010**			
After WWTVPRA	144	419.833				
		(975.142)				
Period after WWTVPRA						
Before DACA	144	419.833				
Before DACA	144	(975.142)	2.173**			
After DACA	72	862.125				
		(1583.349)				
Panel B: From El Salvador, Guat	emala and Honduras					
Period prior to DACA						
Before WWTVPRA	27	71.111	2.198**			
Before www t vi KA	21	(132.494)	2.170			
After WWTVPRA	108	146.843				
		(240.791)				
Period after WWTVPRA						
Before DACA	108	146.843	2 550vv			
Before Briefi	100	(240.791)	2.558**			
After DACA	54	572.426				
		(1210.797)				
Panel C: From Mexico						
Period prior to DACA						
Before WWTVPRA	9	543.222	1.711*			
Belofe WWIVIKA	,	(889.070)	1./11			
After WWTVPRA	36	1238.806				
		(1669.737)				
Period after WWTVPRA						
Before DACA	36	1238.806	0.837			
Bolote Briefi	30	(1669.737)	0.837			
After DACA	18	1731.222				
THE DITCH		(2198.518)				

**Notes:** Standard deviations are in parentheses. The null hypothesis being tested is whether the mean of UACs after policies were implemented and the mean of UACs before policies were implemented are the same. \*\*\*, \*\*, \* denote 1%, 5%, and 10% levels of significance, respectively.

Table 4: Homicide Incidence Pre vs. Post WWTVPRA and DACA

Variable:	Ho	omicide Count per 100,00	0
Statistic:	Observations	t stat	
Panel A: From All Countries			
Period prior to DACA			
Before WWTVPRA	36	0.054	
Before W W I VI KA	30	(0.022)	5.361***
After WWTVPRA	144	0.094	
		(0.077)	
Period after WWTVPRA			
Before DACA	144	0.094	0.020
Beloic BACA	144	(0.077)	0.038
After DACA	72	0.098	
		(0.080)	
Panel B: From El Salvador, Guat	emala and Honduras		
Period prior to DACA			
Before WWTVPRA	27	0.043	4.244***
before www vi ka	21	(0.011)	7.277
After WWTVPRA	108	0.053	
		(0.012)	
Period after WWTVPRA			
Before DACA	108	0.053	1.070
Beloic BACA	100	(0.012)	-1.070
After DACA	54	0.050	
		(0.018)	
Panel C: From Mexico			
Period prior to DACA			
Before WWTVPRA	9	0.089	14.495***
	•	(0)	2
After WWTVPRA	36	0.217 (0.009)	
		(0.007)	
Period after WWTVPRA			
Before DACA	36	0.217	2.769***
		(0.009)	4.709
After DACA	18	0.244 (0.017)	
		(0.017)	

**Notes:** Standard deviations are in parentheses. The null hypothesis being tested is whether the mean of homicide count after policies were implemented and the mean of homicide count before policies were implemented are the same. \*\*\*, \*\*, \* denote 1%, 5%, and 10% levels of significance, respectively.

Table 5: Gross Domestic Product per Capita Pre vs. Post WWTVPRA and DACA

Variable:	GDP per Capita in 2005 Constant Dollars				
Statistic:	Observations	Mean	t stat		
Panel A: From All Countries					
Period prior to DACA					
Before WWTVPRA	36	3772.709	0.004		
Belole WWI VIIdi	50	(2683.923)	-0.094		
After WWTVPRA	144	3725.95			
		(2596.191)			
Period after WWTVPRA					
Before DACA	144	3725.95	0.244		
Deloie DACA	144	(2596.191)	0.366		
After DACA	72	3868.695			
The Brief	, 2	(2758.058)			
Panel B: From El Salvador, Guat	emala and Honduras				
Period prior to DACA					
Before WWTVPRA	27	2275.307	-0.091		
before www.rvrkA	21	(618.979)	-0.031		
After WWTVPRA	108	2263.234			
Their WWI VIIVI	100	(596.196)			
Period after WWTVPRA					
Before DACA	108	2263.234	0.700		
Before DACA	108	(596.196)	0.528		
After DACA	54	2316.369			
Alter DACA	54	(607.949)			
Panel C: From Mexico					
Period prior to DACA					
Before WWTVPRA	9	8264.916	-4.320***		
Defote www.vrkA	9	(0)	-4.320		
After WWTVPRA	36	8114.099			
THE WWITTEN	30	(209.484)			
Period after WWTVPRA					
Before DACA	36	8114.099	イイ 変更であるか		
Deloie DACA	50	(209.484)	11.776***		
Afran DAGA	10	8525.675			
After DACA	18	(6.866)			

**Notes:** Standard deviations are in parentheses. The null hypothesis being tested is whether the mean of GDP per capita after policies were implemented and the mean of GDP per capita before policies were implemented are the same. \*\*\*, \*\*, \* denote 1%, 5%, and 10% levels of significance, respectively.

**Table 6: Determinants of UAC Apprehensions** 

Key Regressors	(1) Baseline	(2) Plus Fixed Effects and Time Trends	(3) Plus Host Country Characteristics	(4) Plus Legal Entries	(5) Plus Enforcement	(6) Plus Home Country Characteristics	(7) Plus Interaction Term
DACA	0.695***	0.424**	0.177	0.195	0.192	0.290	0.249
WWTVPRA	(0.121) <b>0.776</b> ***	(0.174) <b>0.592</b> ***	(0.277) <b>0.586***</b>	(0.271) <b>0.792***</b>	(0.272) <b>0.817***</b>	(0.274) <b>0.872***</b>	(0.275) <b>0.953***</b>
Mexico*WWTVPRA	(0.134)	(0.168)	(0.182)	(0.201)	(0.208)	(0.199)	(0.208) -1.213 (0.959)
Real U.S. Average Weekly Earnings	-	-	<b>0.098</b> ** (0.039)	<b>0.100</b> *** (0.039)	<b>0.100**</b> (0.039)	<b>0.080*</b> (0.045)	<b>0.939</b> ) <b>0.086*</b> (0.045)
U.S. Unemployment Rate	-	-	<b>-0.233</b> * (0.136)	<b>-0.266**</b> (0.135)	- <b>0.254</b> * (0.137)	-0.323** (0.152)	<b>-0.357</b> ** (0.154)
LPRs Admitted per Country in 1,000s	-	-	(0.130)	-0.014** (0.006)	- <b>0.014</b> ** (0.006)	- <b>0.015</b> ** (0.006)	0.002 (0.015)
Border Patrol Agents per Sector in 100s	-	-	-	(0.000)	-0.022 (0.044)	-0.026 (0.042)	-0.032 (0.042)
Homicides per 100,000 at Origin	-	-	-	-	(0.044)	<b>5.856*</b> (3.297)	10.026** (4.661)
Real GDP per Capita at Origin	-	-	-	-	-	- <b>0.002</b> *** (0.001)	-0.002*** (0.001)
BP Sector Fixed Effects	N	Y	Y	Y	Y	Y	Y
Country of Origin Fixed Effects	N	Y	Y	Y	Y	Y	Y
Time Trend	N	Y	Y	Y	Y	Y	Y
BP Sector-Time Trends Country of Origin-Time Trends	N N	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
R <sup>2</sup> Observations	0.047 252	0.829 252	0.833 252	0.834 252	0.834 252	0.842 252	0.842 252

**Notes:** Standard errors are in parentheses and are clustered at the (country, border patrol sector) level. The dependent variable is the logarithm of unaccompanied alien children. \*\*\*, \*\*, \* denote 1%, 5%, and 10% levels of significance, respectively.