Can Parental Leave Policies Change Leave-Taking Norms? Evidence from Immigrants*

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Abstract. When a public policy makes it less costly to take maternity leave, take-up rates are likely to increase as a direct consequence of the lower costs, but if enough people take leave, leave-taking may increase further as norms adjust. Distinguishing between the direct and indirect impacts of policy changes is difficult in general, but because immigrants in the U.S. are not exposed to home country policies but do bring with them the norms and values from their home countries, the impacts of additional weeks of paid leave in home countries on leave-taking behaviors of immigrants can be seen as evidence of a role played by norms. Exploiting variation in the timing of emigration in conjunction with the timing of changes in home country leave policies, we show that even in models controlling for country of origin fixed effects, changes in home country policies yield changes in leave-taking in the United States, a result suggesting that indeed policies can change norms. Interestingly, more recent immigrant arrivers are more affected by current day norms than the norms associated with the policies in place when they migrated, a result potentially explained by the increased role of social media in the transmission of norms.

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1. Introduction

Women's choices regarding work and childcare vary remarkably even among mothers facing similar labor market conditions and institutions. Views regarding the appropriate role of women in society and whether specific behaviors are interpreted as signals of a woman's devotion to her child or career can vary dramatically depending on context. This paper considers the role of public policies in shaping social norms focusing on whether changes in maternal leave policies lead to changes in leave-taking behaviors at least partially through changes in norms.

Researchers and policymakers have long been interested in how social interactions impact the take-up of government social programs. Peers can influence take-up by sharing practical information about policies, but they can also support or stigmatize take-up via social norms. Social interactions can thus yield long run impacts of policies that are quite different from short run impacts. A new maternal leave policy with relatively low initial take-up can have very high long run take-up rates if, as more people take leaves, taking longer leaves becomes expected of new mothers and is no longer interpreted as a signal of lack of career dedication.

It is generally challenging to distinguish between the direct and indirect effects of policies. One technique that has been used by researchers to separate the effects of culture from the effects of economic conditions and institutions is to study the behaviors of immigrants and their offspring (e.g. Fernandez and Fogli 2009). When migrants move to a new country, they are subject to the host country's laws and economic conditions but may bring with them their home country's culture and social norms. These norms are often transmitted to their children and are sustained, perhaps even strengthened, within ethnic communities.

Our paper examines the relationship between policies and norms by considering whether immigrants from countries with more generous parental leave policies take more leave after the birth of a child in the United States. An increase in mandated weeks of leave in a person's home country would directly decrease the costs of taking more leave for people in the home country. As more women in that country take longer leaves, what it means to be a "good mother" may evolve to include more time away

from the workplace after giving birth. At the same time, longer leave-taking may no longer be interpreted as a signal of lack of dedication to a person's job or career. While immigrants in the U.S. will not be directly affected by the policy's decreased costs of taking more leave, their views about what it means to be a dedicated mother and worker can be affected by the home country policy change. Thus, because immigrants are not eligible for the leave-taking provisions in their home countries and specific information about these laws is not relevant for them, any causal impact of home country parental leave policies on immigrants' leave-taking behaviors might be interpreted as evidence of the importance of culture and norms in determining leave-taking behaviors.

There is a growing literature exploring the role of culture in explaining many different family-related outcomes by studying immigrants and their offspring. Using this epidemiological approach, researchers have found that norms influence female labor force participation rates (Fernandez and Fogli 2009), fertility rates (Fernandez and Fogli 2009), divorce decisions (Furtado et al. 2013), living arrangements (Giuliano, 2007), participation in the stock market (Osili and Paulson 2008), and the decision to take out a large mortgage (Rodriguez-Planas 2018), among other things. To our knowledge, ours is the first paper to link specific home country policies, as opposed to home country behaviors, to the behaviors of immigrants in the United States.

While a relationship between home country policies and immigrant behaviors might be interpreted as evidence of the importance of norms, it is difficult to determine whether the policies themselves change norms or whether home countries with stronger leave-taking norms enact more generous leave-taking policies. Our main contribution to the literature is to include country of origin fixed effects in our model thereby examining whether *changes* in policies are associated with *changes* in norms among immigrants from the same country of origin. Immigrants from the same country of origin would have similar baseline values regarding working, but those who have left their home countries before a more generous leave policy was enacted would have less cultural exposure to the home country policy compared to those leaving after the policy enactment. To assess whether a policy change might yield cultural change, we exploit variation in the magnitude and timing of changes in the number of weeks of leave available to new mothers in an

immigrant's home country in conjunction with variation in the immigrant's year of migration, or in some cases—year of childbirth.

Our primary source of data is the 1980, 1990, and 2000 US Census 5-percent Public Use Microdata files along with the 2003-2006 and 2010-2013 waves of the American Community Survey (ACS) all of which were obtained from the Integrated Public Use Microdata Series (IPUMS) (Ruggles et al. 2015). The sample is limited to foreign born women who are either working or absent from work (but employed) and whose youngest child is under the age of 1. Information on the total duration of paid leave available (from both maternity and parental leave) in the home country by year is available for the years 1970 to 2013 for 28 countries from the OECD Gender Data Portal. For our primary specifications, we merge these country-year level data with our individual-level Census and ACS data by country of origin and year of migration so that for each foreign born new mother in our sample, we can determine how many weeks of paid leave were available to mothers in her home country in the year before she migrated to the United States.

Our first set of results confirm that foreign born new mothers are more likely to be on maternity leave within the year after giving birth if they are from countries offering more generous leave policies than if they are from countries with fewer weeks of mandated leave. To assess whether changes in policies lead to changes in leave-taking norms, we next add country of origin fixed effects to the model. Estimates from models with country of origin fixed effects suggest that as the total duration of paid parental leave available in the country of origin in the year prior to migration increases by one week, the probability of being on maternity leave within the first year post-childbirth increases by 0.12 percentage points. These results predict that there is an 18 percentage point difference in the likelihood of being on leave between immigrants coming from Slovakia, which has the longest average duration of paid leave weeks and those from Australia, which has the shortest duration. Tests for robustness suggest that these results are not driven by any particular country.

There are two main challenges in interpreting these results. The first is determining whether the changes in leave-taking behaviors among the immigrant women in our sample are driven by changes in norms about leave-taking as opposed to another unobserved characteristic that happens to be correlated

with the timing of their arrival in the U.S. relative to the timing of changes in leave policy in their home countries. The second issue is that, even if we were to definitively conclude that the leave-taking behaviors were driven by actual changes in leave-taking norms, it is difficult to determine whether the home country policies changed the norms or whether changes in home country norms caused the policies to change.

While these are two distinct difficulties, the steps we take to show that we are identifying causal impacts of the policies themselves, as opposed to impacts of changes in home country norms, should also alleviate concerns about identification more generally. First, we add controls for home country level variables that change over time such as GDP per capita and female labor force participation rates to the model and our main estimates remain the same. Second, we conduct a series of regressions aimed determining whether we are actually identifying the impact of a policy change as opposed to a more general impact of changing norms regarding work decisions for mothers. We start by showing that our results do not seem to be driven by increased preferences toward traditional family structures. In fact, increasingly generous home country leave policies tend to be associated with decreased fertility rates and later marriages among the immigrants in our sample. More generous leave policies have no statistically significant impacts on the likelihood that working age women are employed, and conditional on working, the home country policies are not associated with the likelihood that women work long hours. All of these results suggest that our estimates of interest are not driven by preferences for more traditional families.

Finally, we explore how these norms regarding leave-taking are sustained over time and space. In the first part of the paper, we implicitly assume that immigrants are exposed to home country norms before migrating to the U.S., but then after arriving, lose at least some of their connections to the home country. For this reason, we measure home country mandated leaves in the year before migration and link that measure to all women from the same country migrating in the same year regardless of when they give birth. Another possibility, however, especially given the proliferation of social media and relatively low costs of international travel in recent years, is that immigrants remain tightly connected to norms in their home country many years after migration. If this is the case, then we might expect that home country policies in the year of giving birth matter more for leave-taking behaviors of immigrants than home country policies

in the year before migration. To examine this question, we start by including both variables in the same regression. We find that leave policies at the time of migration in general are more influential in leave-taking decisions. However, after splitting the sample based on whether foreign born mothers arrived in the U.S. before or after the year 1992, we show that in recent years, mothers are more the norms associated with the current day policies while mothers in 1980 and 1990 were more influenced by policies in place in their home countries in the year before they migrated.

The remainder of the paper is organized as follows. In the next section, background on parental leave policies in the U.S. and across the world is provided along with a review of the literatures on social norms as well as on parental leave taking. In Section 3, we present the data and descriptive statistics. This is followed in Section 4 with a discussion of our empirical strategies. Our baseline results are shown in Section 5 as are tests of robustness, checks for heterogeneity, and our analyses of how home country norms affect immigrant behaviors. Section 6 explores how changing social connections over time impacts norms regarding family leave. Conclusions are provided in Section 7.

2. Background and Related Literature

2.1 The Impact of Culture and Norms on Behaviors

A growing body of work aims to understand the effect of culture on economic outcomes. While culture can be understood as a set of beliefs and values that are common among ethnic, religious, or social groups, and are passed down from one generation to the next (Guiso et al. 2006), it is difficult to empirically distinguish the impact of culture from the impacts of economic conditions and institutions.

To isolate the impact of culture, researchers typically examine whether the behaviors of immigrants vary systematically with the behaviors of people in their home countries. Immigrants live and work within the labor markets and institutional structures of their host countries, but their beliefs and values often reflect their origin cultures. While they cannot bring with them the economies and laws of their home countries, they do bring with them home-country norms and often transmit these informal rules of behavior to their native-born children. Thus, immigrants living in the same host country, and so subject to the same economic

conditions and institutions, can behave very differently if they come from different home countries and so have different cultures.

Fernandez and Fogli (2009) show that second generation immigrant women are more likely to participate in the labor market and have higher fertility rates if female labor force participation rates and fertility rates are higher in their origin countries, a result indicative of the role of culture in determining labor supply and childbearing decisions. Similar approaches have been used to uncover the impact of norms on living arrangements (Giuliano 2007), participation in the stock market (Osili and Paulson 2008), son preference (Almond, Edlund, and Milligan 2013), divorce tendencies (Furtado et al. 2013), smoking (Christopoulou and Lillard 2015), gender gaps in math achievement (Nollenberger et al. 2016), having a mortgage (Rodríguez-Planas 2018), and even the likelihood of parking illegally on New York City streets (Fisman and Miguel 2007).

Our paper contributes to this growing literature by examining how culture impacts a different outcome, parental leave-taking decisions. Given our ultimate interest in determining whether policies can change norms, we differ from the bulk of the literature in that, instead of examining the effect of home country behaviors on the same behavior among immigrants, we consider the relationship between home country policies and behaviors of immigrants. In a similar vein, Osili and Paulson (2008) show that home country policies regarding the protection of private investment from expropriation increase the likelihood that immigrants in the U.S. participate in the stock market. Their results suggest that laws and institutions can have impacts on beliefs and preferences even for individuals who are no longer subject to those laws and institutions. By examining the impact of mandated weeks of leave available to women in home countries on leave-taking behaviors of immigrants in the U.S, we can examine how home country policies can change general perceptions regarding the virtue of a particular behavior, leave-taking, as opposed to beliefs about the ability of institutions to provide protection against risk.

Our main contribution to the norms literature, however, is in examining how a change in policy may result in changes in norms. Despite the fact that culture is known to evolve in response to globalization, technological change, and socioeconomic development (Inglehart and Weizel 2005), most of the literature

tests for the impact of culture using measures of culture that do not change over time. There are a few exceptions. Guiliano (2007) uses two cohorts of second generation immigrants in the U.S. to explore the relationship between home country norms regarding family living arrangements and whether adult second generation immigrants live with their parents. Christopoulou and Lillard (2015) show that variation in smoking in the United Kingdom by cohort can predict smoking behaviors of immigrants from the UK in the Australia and the U.S., a result suggesting not only that culture matters for smoking, but also that smoking culture changes over time. In addition to examining a different outcome, our paper builds on this work by explicitly linking home country *policy* changes to changes in *behaviors* in a host country.

2.2 Parental Leave in the US and Abroad

Currently, every OECD country with the exception of the U.S. offers between 14 and 20 weeks of maternity leave with wage replacements ranging from 70 to 100 percent (Ruhm 2011). Additionally, three-quarters of OECD countries provide at least a few days of paid leave specifically for fathers, with 12 countries offering paid paternity leave for 2 months or longer (OECD, 2016). In addition to explicit maternity and paternity leaves, countries also often offer a period of parental leave, which can be taken by either parent. These leaves are often at least partially paid. In contrast, the primary source of parental leave in the US is the Family Medical Leave Act (FMLA). Passed by Congress in 1993, the FMLA grants twelve weeks of unpaid, job protected leave a year to employees who meet certain criteria.[1] California, Hawaii, New Jersey, New York and Rhode Island currently offer paid leave through their temporary disability programs while California, New Jersey, Rhode Island, and New York have explicit paid family leave policies.[2] Other states do not have paid leave policies and new mothers must rely on employers to provide paid leave. According to a 2012 survey, 25 percent of working mothers return to work within two weeks of giving birth (Lerner

[1] In order to be eligible for leave, employees must have worked at least 1,250 hours in the previous 12 months and work at a firm with 50 employees or more. Due to these eligibility constraints, only around half of private sector employees are able to take advantage of leave through the FMLA.

[2] Washington and Massachusetts have since passed paid family leave policies. Both states are currently collecting contributions for the program. Workers in Washington will be eligible to take leave beginning in January 2020, while workers in Massachusetts will be eligible for leave in January 2021.

2015). As U.S. policymakers at the state and federal level grapple with establishing new parental leave policies, it is important to consider the benefits of more generous leave policies to parents and children as well as the costs to employers and taxpayers.

Several papers exploiting variation in leave-taking policies across countries and time show that more generous leave policies lead to decreases in child mortality (Ruhm 2000, Tanaka 2005). Despite this evidence, extended leaves do not always result in clear benefits for mothers and children. Exploiting a policy change in Canada that extended leave duration from 6 months to 12 at the end of the year 2000, Baker and Milligan (2008) find increases in leave duration and increases breastfeeding but were unable to detect meaningful improvements in child health up until age 3. In a companion paper, these authors showed that the policy did decrease mothers' labor market hours in the first year of children's lives but this had only a weak impact on child development. Dustmann and Schonberg (2012) show that although a policy in Germany led to large decreases in the speed at which mothers returned to work, it did not have any long term impacts on children's cognitive abilities. Bana, Bedard, and Rosin-Slater (2017) fail to find any evidence that increases in weekly benefits increase leave durations or worsen labor market outcomes.

Beyond health and well-being of children and mothers, another common goal of leave policies is to strengthen labor force attachment of women. From a theoretical perspective, more generous leave policies can make it possible for mothers to care for their children in those critical first months of the child's life without having to exit the labor force entirely. On the other hand, more generous leave policies, especially when not accompanied by father leave quotas, may result in discrimination against women of childbearing age. Especially long leaves may make it difficult for women to return to the labor force at all.

Several researchers have empirically examined the relationship between more generous leave policies and labor market outcomes of women. In the US, researchers have found increased take up rates and longer leave lengths with the implementation of both unpaid and paid leaves (Han et al. 2009, Rossin-Slater et al. 2013, Bartel et al. 2015), and no negative wage or employment effects for unpaid leaves (Waldfogel 1999). A series of reforms in Austria did not produce any harmful effects on employment or earnings for women in the long run, although the extension of leave length increased the number of women

who never return to work (Lalive and Zweimuller 2009). Similar results on long run labor force attachment also appear when examining a series of German parental leave policy changes (Schonberg and Ludstek 2014).

We might conclude from this literature that although there are children and parents that benefit quite substantially from more generous leave policies, there is variation in the impacts of these policies perhaps depending on the length of leave, whether the leave is paid or job-protected, and who is most likely to take additional leave as a result of the policy changes. As policymakers evaluate the likely costs and benefits of any new leave policy, it is important to consider the determinants of take-up of the policy in general but particularly the role that social interactions might play in take-up decisions since, as discussed in the previous section, long-term take-up rates may differ quite substantially from short-term take-up rates in contexts where information sharing and norms are influential.[3]

Several studies have found that peer effects do indeed matter for leave-taking decisions. Dahl et al (2014) first examine peer effects in the context of paid paternity leave in Norway. Using a fuzzy regression discontinuity approach, they find a large increase in the number of fathers taking paternity leave after a program reform, and then use this increased take-up to determine how it changed the behavior of coworkers and brothers. Not only do they find strong peer effects for within workplace and familial networks, but these effects are amplified over time within the firm. More recently, Weltcke and Wrohlich (2016) use the same technique to examine the peer effects associated with a 2007 reform to the German leave policy. Their results show that maternal decisions regarding leave length are heavily influenced by the decisions of their coworkers. In both studies, the authors conclude that the main channel behind these peer effects is the transmission of information about the costs and benefits of leave, perhaps especially about how specific employers will react to leave-taking. Our study contributes to the literature of indirect effects of a policy change by considering the impacts of changes in many different policies on a population that is not subject

[3] Despite the implementation of the FMLA and the more generous state-level policies, there has been no increase in leave-rates among mothers in the past twenty years (Zagansky 2017). Although leave rates among fathers have increased three fold since the mid-1990s, even today, very few fathers take more than a couple of weeks of leave after a child is born (Zagansky 2017).

to these policies. In doing so, we are able to isolate the impacts of these policies on changes in norms about leave-taking in general as opposed to information sharing about the details of any particular policy.

By comparing labor supply and fertility rates of women born into the French and German language regions at the language border in Switzerland, Steinhauer (2018) documents that German-born women are substantially less likely to be employed as mothers of young children and more likely to have remained childless compared to their French counterparts on the other side of the border. Since women on both sides of border are subject to the same laws and labor markets, Steinhauer (2018) attributes these differences to the cultural beliefs about whether mothers have an obligation not to work while raising children. Most similar in spirit to our paper, Mussino, Tervola, and Duvander (2018) consider paternity leaves among fathers in Finland and Sweden, countries with similar economies but different paternity leave policies. The authors attribute differences in paternity-leave take-up among fathers born in the same country but exposed to different paternity-leave policies due to migration to the role of policy. They attribute differences among immigrant fathers who migrated at different ages or who are married to spouses of different origins to the role of culture. Their results suggest that although norms matter for leave-taking, they are less important than policy design. We contribute to this work by considering leave-taking among immigrants from several different countries, instead of just one other country. We also examine how changes in policies can change norms even among parents who are not themselves subject to these policies.

3. Data

The data for this study comes from the 1980, 1990, and 2000 Census, as well as the 2000, 2003-2006 and 2010-2013 waves of the American Community Survey (ACS).[4] The sample is limited to foreign born women aged 18 to 64 who are currently employed, whose children were all born in the US, and their youngest child is under the age of 1. These women were most likely exposed to parental leave policies in their home countries but did not experience them firsthand for any of their children.

[4] The data was downloaded from the Integrated Public Use Microdata Series (IPUMS) database (Ruggles et al, 2015). The analysis uses the 5% Census samples, the 0.13% ACS sample for 2000, and the 1% ACS samples beginning in 2005. The 2003 and 2004 ACS samples capture 0.42% of the population.

The Census and ACS do not specifically ask respondents if they are taking parental leave, but they do ask if they are temporarily absent from work in the week prior to the survey. Following Bartel et al. (2015), we use whether the woman has reported being temporarily absent for reasons other than a layoff as the dependent variable. Examples of such temporary leaves listed in the survey include parental leave, illness, or vacation. Since the sample is limited to women with an infant in the household, the leave is very likely to be parental leave.

The independent variable of interest is the total length of paid leave available in the country of origin in the year prior to migrating to the US. The data on total length of paid leave by year is available through the OECD Gender Data Portal. We use the total duration of paid leave variable, which lists the number of weeks of paid leave (both from maternity leave and parental leave) for which mothers are eligible after childbirth. The data is available from 1970 to 2014 for 28 countries.[5]

Table 1 presents summary statistics of the variables relevant to the study by country of origin. The first column shows the average length of leave (in weeks) in each country of origin in the year before migration for the immigrants in our sample. This ranges from 161 weeks in Hungary to 0 weeks in Australia (Australia's paid leave policy was just passed in 2011). The second column shows the proportion of immigrants who take parental leave in the US, which varies greatly among countries. For example, Austrian immigrants have the fifth longest average duration of paid parental leave in the sample but only 11% take leave in the US, whereas 40% of Swiss immigrants take leave even though they have the second shortest average duration of paid leave in the sample. These discrepancies suggest that home country policies are certainly not the main determinant of leave-taking among immigrants in the U.S., but they may still play a certain role especially after controlling for other characteristics of these immigrants. For this reason, we turn to regression analysis.

[5] The 28 countries are as follows: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary (beginning in 1985), Iceland, Ireland, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, and the United Kingdom (England, Scotland, Wales and "United Kingdom, country not specified"). This data was downloaded from the OECD Gender Data portal (OECD, 2017).

4. Empirical Strategy

To identify how country parental leave policies influence immigrant women's leave taking behavior in the US, we start by estimating the following linear probability model:

$$A_{ijmkt} = \beta_1 L_{jm-1} + \beta_2 P_{st} + \beta_3 \mathbf{X_{ijmkt}} + \gamma_k + \gamma_m + \gamma_s + \gamma_t + u_{ijmt}$$

for individual *i*, from country of origin *j*, who migrated to the US in year *m* and was surveyed in year *t*. The dependent variable, *A*, is a dummy variable equal to one if a woman reports being absent from work for reasons other than a temporary layoff (which includes parental leave, illness, or vacation) during the reference week. The main right hand side variable of interest, L, is the total duration of paid parental leave available in the new mother's country of origin in the year prior to migrating to the US. If the cultural norms associated with home country parental leave policies are important and immigrants carry them over to the US when they migrate, the coefficient on this variable will be positive. We also control for US paid family leave policies in our model: P is an indicator variable equal to one if the state has paid family leave in the year of the survey.[6] The vector **X** contains controls for individual characteristics such as marital status, age, educational attainment, and English language ability.

The occupation fixed effects, γ_k, are particularly important because they account for heterogeneity by occupation in terms of the flexibility for taking leave. There is also variation by firm in terms of the availability of paid leave to workers. While we are not able to link workers to specific employers, to the extent that more generous firms in terms of paid leave policies, like Google and Microsoft, are more likely to hire workers in certain occupations, we can explore how sensitive our results are to controlling for occupation fixed effects. We note, however, that occupation choice may be a mechanism through which immigrants with strong leave taking norms end up with longer leaves: they sort into occupations where

[6] California implemented paid family leave in 2004, followed by New Jersey in 2009. While other states (Rhode Island, New York, and Washington) also implemented state paid leave policies, these occur after our last year of data and thus are not included in the analysis.

leave-taking is more accepted. In models controlling for occupation, we are not allowing norms to operate in this way.[7]

In addition to state of residence paid family leave policy, our baseline specification also controls for state fixed effects, γ_s. While all states must adhere to the FMLA, several states offer more generous benefits than the legislation requires. This may include extending benefits to smaller firms (only firms with more than 50 workers are subject to FMLA), relaxing work eligibility requirements, or extending the duration of unpaid leave. If it is the case that immigrant women with more generous home country parental leave policies tend to live, by coincidence, in states which provide more generous leave benefits, then failing to control for states may overstate the effect of norms on leave taking behavior in the US. All models also include year of migration fixed effects, γ_m, to account for the fact that, for example, women migrating to the US in the 1980s (before the implementation of many of the more generous home country leave policies) may be different from women migrating in the 2000s in ways that generate differences leave-taking behaviors. All models also include year fixed effects, γ_t, to control for changes over time in the likelihood of taking leave.

Studies utilizing the epidemiological approach caution that this technique tends to bias the results towards finding that culture does not matter (Fernandez, 2010). For example, immigrants may not be representative of the people of their home countries. Their decision to migrate to the U.S. may be a result of associating more with the norms and culture of the U.S. than with the social conventions in their home countries. Moreover, even if they are representative of their home countries at the time they migrated, they are likely to have assimilated to the norms of the U.S. with time. Both of these two scenarios would make it more difficult for us to detect an impact of norms on leave-taking even if norms do in act play an important role.

The main innovation of our study is its inclusion of country of origin fixed effects:

$$A_{ijmkt} = \beta_0 + \beta_1 L_{jm-1} + \beta_2 P_{st} + \beta_3 \mathbf{X_{ijmkt}} + \gamma_k + \gamma_m + \gamma_s + \gamma_t + \gamma_j + u_{ijmt}$$

[7] We use the detailed version of 1990 occupation variable for our fixed effects. There are 286 unique occupation codes.

The country of origin fixed effects control for any unobservable characteristic, including but not limited to norms regarding leave-taking that stay constant over time, which may be correlated with home country leave policies and leave taking in the US. In models with country of origin fixed effects, identification comes from variation in in the year of migration of the immigrants in conjunction with variation in the timing of policy implementation in home countries. For example, Austria, one of the first countries in Europe to implement a maternity leave policy, extended leave from 60 weeks to 112 weeks in 1990 but later reduced leave duration from 112 to 86 weeks in 1996. Thus, women who left Austria between 1990 and 1996 may find it more important, on average, to take time away from the labor force after giving birth than women who migrated after 1996 or especially compared to those who migrated before 1990. In contrast, because Australia implemented its first paid leave policy in 2011, if policies change norms, then we would expect Australians migrating after 2011 to take more leave than those migrating before that year.

Our identifying assumption is that conditional on the covariates included in our model, the timing of policy changes and years of migration can be thought of as exogenous to leave-taking behaviors of immigrants in the United States. Several other papers (Ruhm 2000, Tomaha 2005) have estimated plausibly causal impacts of changes in leave policies by exploiting country-year variation in the timing of leave policies. Our paper takes this approach one step further by combining the variation with the timing of policies in different countries with the timing of migration from different countries. We perform several robustness checks and tests for heterogeneity which will provide support for identifying assumptions.

5. Results

5.1 Baseline

Table 2 presents results for the baseline model. All specifications include the full set of controls. Each column gradually adds more fixed effects to the model, ending with the preferred specification in the final column. The coefficient estimate on home country paid leave remains fairly stable as survey year, state,

and migration year fixed effects are added to the model, but it increases when country of origin fixed effects enter the model.

The coefficient estimate on home country paid leave is positive and highly significant in the last column of Table 2, indicating that a one week increase in the duration of paid parental leave in the year prior to migrating to the US increases the likelihood of taking leave in the US by 0.12 percentage points. While the magnitude of this coefficient is small, it is important to note that these home country policies are no longer binding once migrants come to the US, and we interpret the significant coefficient as evidence of parental leave norms influencing leave taking behavior in the US. Additionally, when comparing countries that have the shortest and longest duration of leave in the sample (0 weeks for Australia and 164 weeks for Slovakia), there is a 20 percentage point difference in the likelihood of taking leave.

Table 3 examines whether results are robust to the use of different samples. We explore whether immigrants from countries with more generous leave policies happen to live in states with more generous policies (other than paid leave) by including state by year fixed effects in the model. Results in column 2 show that even with the addition of these fixed effects, the coefficient estimate on home country paid leave remains positive and significant. Column 3 removes Mexican immigrants from our sample, since they are the largest immigrant group and there might be a concern that our results are being driven by selection of Mexican immigrants coming to the US in different years. After removing these immigrants, our sample size falls, however the coefficient estimate on home country norms is positive and marginally significant. The last two columns remove the outlier countries in terms of leave duration – Hungary offered 162 weeks of paid leave, while Australia had 0 weeks of paid leave until their policy was passed in 2012. The results from these columns 3 and 4 are nearly identical to the baseline specification, and therefore we conclude the results are not driven solely by a particular country.

A potential concern with the analysis is that the timing of home country leave policies are correlated with other time-variant home country characteristics that may be driving our results. While it is impossible to control for all home-country characteristics, we can assess how sensitive our baseline results are to the

inclusion of several controls for home country variables that may be of particular concern for our analysis.[8] As a first example, if home country gender norms are changing over time to become more family-centric and less career-oriented, then we may expect expansions in leave-duration as well as increased likelihoods that immigrants in the U.S. take more leave, even if the change in policy itself has no causal impact on norms. A potential measure of increased family orientation relative to career orientation for women is the home country labor force participation rate. The second column of Table 4 adds female labor force participation rates to the model, again in the year prior to the immigrant's migration to the US. Results show that this addition has no effect on leave taking in the US and the coefficient estimate of parental leave norms remains unchanged.

Another potential driver of increased leave policies, specifically paid-leave policies, is whether countries can afford to pay workers while they are at home with their newborns. Richer countries may be more likely to have generous leave policies. At the same time, immigrants from rich countries may only come to the U.S. if they are offered particularly high salaries, and women with high salaries, or even more so women whose husbands earn high salaries, may be more likely to afford extended leaves in the U.S., specifically because extended leaves in the U.S. are typically unpaid. The third column of Table 4 adds GDP per capita in the home country in the year prior to migration to the model as a proxy for home country household income. The addition of this control does not seem to have a large impact on our estimate of the effect of home country norms. The last column of Table 4 adds all three home country variables to the model and results do not appear much different than those presented in the baseline model.

Lastly, another concern might be that our effects of paid leave policy on leave taking may be driven by women who recently became employed to access paid parental leave. Table 5 explores if there is

[8] The additional home country variables (female labor force participation and GDP per capita) come from two sources – World Bank data and OECD statistics. The female labor force participation rate is missing for many countries prior to 1990 and so the sample is limited to individuals for which all additional home country variables are non-missing. The first column of Table 4 reproduces the baseline result with this smaller sample, and results remain similar to the full sample. The drastic decrease in sample size is mainly due to missing female LFP data from 1970 to 1990 for Mexico, which is the largest immigrant group in the sample. Further investigation needs to be done in order to recover the missing data.

selection into employment by examining the leave taking and labor force participation of women employed within the last five years. If women are simply entering the labor force right before they plan to have children in order to be eligible for paid leave, then we would not expect to see a longer work history. The results in column 3 suggest paid parental leave increases the likelihood of being on leave or out of the labor force for mothers with longer work histories. This evidence is consistent with leave policy changes being more relevant for women with high work force attachment.

5.2 Do Policies Change Norms?

We now turn an examination of whether home country leave policies specifically affect leave-taking behaviors of immigrants in the United States or whether changes in these policies happen to be correlated with other family or work related norms of the immigrants. One potential problem relates to the fact that we do not have a perfect measure of maternity leave, we only know whether a person was absent from the workplace in the week before answering the survey. If immigrants who happen to have been exposed to more generous leave policies before migrating to the U.S. are more likely to be absent from work in general, then this might be what is being picked up by our baseline estimates. If instead, the baseline estimates are measuring indirect effects of home country *parental* leave taking policies, then only immigrant women with young children should be impacted by home country parental leave policies. The first panel of Table 6 examines leave taking behavior of women who should not be influenced by the norms associated with home country leave policies – women with older children and women with no children at all. The impact of home country paid weeks of leave is practically zero and certainly statistically insignificant in both regressions.

Another potential concern is that the leave taking coefficient estimate is measuring the impact of home country norms but that these home country norms were evolving prior to the policy change. In fact, the changing norms may have been what caused the policy to change in the first place. We cannot rule out this possibility completely. Home country preferences toward combining work and family are likely to have evolved before any changes in policy. However, we argue that a discrete change in leave-taking policy spurs stronger changes in the norms specifically related to leave-taking than norms related to other family-

work related behaviors. If changes leave-taking among immigrants in the U.S. are explained by very general changes in home country preferences towards work or family (which might induce changes in home country leave taking policy among other types of policies), then we might see correlations between home country parental leave policies and several other work-family outcomes. If instead, the home country parental leave policy changes themselves change norms specifically related to leave-taking, then we might not see very strong impacts on other work and family behaviors.

To examine this empirically, we start by considering whether exposure to more generous leave policies is associated with preferences for more traditional families. Panel B of Table 4 explores this relationship by estimating the effect of paid parental leave on the likelihood of having a child, of delayed age at first marriage (or never marrying), and of being divorced. Results do not suggest countries with more generous paid leave have stronger preferences for traditional family values. While the policies do not seem to be associated with divorce likelihoods, if anything, women with more exposure to longer durations of paid leave postpone starting families, possibly until they could afford to take time off work after childbirth.

Another possibility might be that countries with more generous paid leave have different attitudes regarding work, potentially placing less value on careers for women. If this is the case, we might see immigrants with more exposure to longer leave durations having lower female labor force participation rates or women working fewer hours. As can be seen in Table 4 panel C, we do not find an effect of paid family leave on employment or work hours despite the much larger sample sizes.

5.3 Tests for Heterogeneity

When examining leave taking behavior in the US after the introduction of the FMLA, studies have shown married women and college educated women are more likely to take leave than their respective counterparts (Han et al, 2009). Rossin-Slater et al (2013) analyze the effects of the California Paid Family Leave policy and, although their sample size is smaller when they split the sample, results suggest paid leave increases the likelihood that unmarried mothers or non-college educated mothers take leave. In Appendix Table 2, we split the sample by marital status and by education to determine if the norms associated with parental

leave have differential effects by these subgroups. Results indicate that norms regarding home country paid parental leave influence the leave taking of all women, regardless of marital status or educational attainment.

While there are no differential effects of home country norms on leave taking by maternal characteristics, there is some heterogeneity in leave taking depending on the child's birth order and gender. The first panel of Appendix Table 3 shows norms associated with home country parental leave increase the likelihood of taking leave after the birth of the first or second child, but not for the third child or higher birth. The second panel of Appendix Table 3 splits the sample by gender of the child. Home country parental leave norms appear to increase the likelihood of taking leave for mothers of daughters and sons by the same amount.

6. Changes in Social Connections over Time

As discussed previously, there is no clear choice for when to measure home country parental leave policies. Measuring leave policies years before migration will allow migrants enough time to be exposed to any policy-induced changes in norms before migrating to the United States. At the other extreme, if immigrants in the U.S. continue to have close social contact with people in their home countries, then home country maternity leave policies in the year prior to giving birth, as opposed to migrating, may be what is most relevant for determining leave-taking for the immigrants in the United States.

As shown in Appendix Table 1, home country leave policies in the year prior to migration seem to be the most influential on average, but over time there has been a change in how migrants connect with family and friends in their home countries. The emergence of numerous social media platforms and their growing influence in today's society allows individuals from all over the world to connect with one another. This greatly reduces the cost of staying in touch with peer and familial networks back home for immigrants and can change the norms that influence their leave taking behavior in the US. For example, immigrants coming to the US in the 1970s or 1980s did not have as many opportunities to remain connected with friends and family back home and thus may still associate with the home country norms at the time they migrated.

With the introduction and popularity of social media sites and smartphone applications, more recent generations of immigrants have more readily available options to remain in touch with those back home and thus be more informed about current day norms in their home countries.

To test whether current day policies are having relatively stronger impacts in more recent years, potentially as a result of the expansion of social media sites, we control for two parental leave length durations: (1) the duration of paid leave available in the year prior to migrating to the US and (2) the duration of paid leave available in the year in which the respondent was surveyed. We also split the sample based on when the immigrant came to the US. If in recent years, people are more sensitive to current day home country leave policies, we should see that immigrants arriving more recently should be more affected by the survey year policies whereas immigrants arriving many years before internet expansion should be more sensitive to leave policies in the year prior to migration.

Results presented in Table 7 confirm this prediction. Migrants arriving before 1992 are driven by the norms associated with parental leave in the year prior to migration. The coefficient estimate for the policy duration in the survey year is insignificant. For those arriving in the US after 1992, the opposite is true. Norms are associated with parental leave in the year prior to migration have no effect on their leave taking behavior in the US, whereas the survey year policy norms have a positive and highly significant effect.[9]

7. Conclusion

When countries expand the number of weeks that parents can take off from work while continuing to get paid at least some fraction of their pre-leave salaries, the direct costs of taking additional leave decrease and so more people take more leave. At the same time, because these country-wide policies can increase leave-taking for a large fraction of the population, they may also affect norms regarding leave-taking after giving birth. In a country like the United States with no federal paid leave taking policy, a new mother who

[9] While this specification splits migrants based on their arrival before or after 1996, results are very similar when they are split based on migrating before or after 2001.

is on maternity leave for several months after giving birth may be perceived as less dedicated to her career than a mother in Canada, a country with a very generous paid maternity policy, who takes the same leave. At the same time, the U.S. mother who takes only a few months of leave after birth would still be perceived as a dedicated mother while a mother in Canada who takes less than a year of leave may not be.

In general, it is very difficult to distinguish the direct effects of policy changes from the indirect effects via changing perceptions and norms. This paper attempts to separate the direct effects of paid parental leave policies from the indirect effects by examining leave-taking behaviors among immigrants in the United States. The mothers in our sample are subject to US laws and institutions and so home country policies should not have any direct impacts on behaviors. However, because immigrants typically bring their home country norms with them, home country policy-induced changes in norms can still affect their leave-taking behaviors in the United States.

Our results indicate that the norms associated with leave taking in the home country are important for explaining the parental leave taking behavior of immigrants in the US. An increase in paid leave in the home country increases the likelihood of taking leave in the US by 0.12 percentage points. This result is robust to the inclusion of several other home country characteristics as controls in our models. We also present evidence suggesting that maternity leave policies have causal impacts on leave-taking norms; it does not appear to be the case that home country leave policies are associated with other types of work leaves among immigrants in the United States. Additionally, there is evidence to suggest leave taking norms are not associated with stronger family preferences, such as higher fertility rates or lower rates of divorce.

We end our analysis of leave-taking norms by examining changes in how norms are transmitted and sustained through the years. Years ago, immigrants would have brought their home country norms with them but while these home country norms may have depreciated as immigrants assimilated to U.S. culture, they would not have changed in response to home country changes in policy post-migration. In contrast, expansions in social media and decreases in the price of international air travel may have allowed for close contact among people living in different countries and so changes in home country norms may spill over to immigrants who have been living in the United States for many years. Consistent with this hypothesis, we

find that in models with home country leave policies measured in both the year before migration and the year before childbirth, it is the policy in place in the year before migration that mattered more for immigrants who migrated before 1992 while it is the policy in place before childbirth that matters more for immigrants who migrated after 1992.

These results have important implications for both the culture and policy evaluation literatures. This study finds that changes in policy can impact and change cultural norms. It is important to consider when changing or implementing a new policy because cultural norms can play a role in policy take up and potentially its evolution over time.

References

Alesina, A., Giuliano, P. (2015). Culture and Institutions. *Journal of Economic Literature*, 53(4), 898-944.

Almond, D., Edlund, L., & Milligan, K. (2013). Son Preferences and the Persistence of Culture: Evidence from South and East Asian Immigrants to Canada. *Population and Development Review,* 39(1), 75-95.

Antecol, H. (2000). An examination of cross-country differences in the gender gap in labor force participation rates. *Labour Economics,* 7, 409-426.

Baker, M., & Milligan, K. (2008). Maternal employment, breastfeeding, and health: Evidence from maternity leave mandates. *Journal of Health Economics,* 27(4), 871-887.

Bana, S., Bedard, K., & Rossin-Slater, M. (2018). The Impacts of Paid Family Leave Benefits: Regression Kink Evidence from California Administrative Data. IZA Discussion Papers, No. 11381. Bonn: Institute of Labor Economics (IZA).

Bartel, A., Rossin-Slater, M., Ruhm, C. J., Stearns, J., & Waldfogel, J. (2015). Paid Family Leave, Fathers' Leave-Taking, and Leave-Sharing in Dual-Earner Households. National Bureau of Economic Research Working Paper No. 21747. Cambridge: National Bureau of Economic Research

Christopoulou, R., & Lillard, D. R. (2015). Is smoking behavior culturally determined? Evidence from British immigrants. *Journal of Economic Behavior and Organization,* 110, 78-90.

Dahl, G. B., Løken, K. V., & Magne, M. (2014). Peer Effects in Program Participation. *American Economic Review*, 104, 2049-74.

Dustmann, C., & Schonberg, U. (2012). Expansions in Maternity Leave Coverage and Children's Long-Term Outcomes. *American Economic Journal: Applied Economics,* 4(3), 190-224.

Fernandez, R. (2010). Does Culture Matter? IZA Discussion Paper 5122, IZA – Institute for the Study of Labor, Bonn.

Fernandez, R., Fogli, A. (2009). Culture: An Empirical Investigation of Beliefs, Work, and Fertility. *American Economic Journal: Macroeconomics*, 1(1), 146-177.

Fisman, R., & Miguel, E. (2007). Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets. *Journal of Political Economy*, 115(6), 1020-1048.

Furtado, D., Marcén, M., & Sevilla, A. (2013). Does Culture Affect Divorce? Evidence from European Immigrants in the United States. *Demography*, 50, 1013-1038.

Giuliano, P. (2007). Living Arrangements in Western Europe: Does Cultural Origins Matter? *Journal of the European Economic Association*, 5(5), 927-952.

Giuliano, P., Nunn, N. (2017). Understanding Cultural Persistence and Chang. National Bureau of Economic Research Working Paper No.23617. Cambridge: National Bureau of Economic Research.

Gruber, J., Hungerman, D. M. (2008). The Church versus the Mall: What Happens When Religion Faces Increased Secular Competition? *The Quarterly Journal of Economics*, 123 (2), 831-862.

Guiso, l., Sapienza, P., & L. Zingales. (2006). Does Culture Affect Economic Outcomes? *Journal of Economic Perspectives*, 94(3), 23-48.

Han, W., Ruhn, C. & Waldfogel, J. (2009). Parental Leave Policies and Parents' Employment and Leave-Taking. *Journal of Policy Analysis and Management*, 28(1), 29-54.

Han, W., Waldfogel, J. (2003). Parental Leave: The Impact of Recent Legislation on Parents' Leave Taking. *Demography*, 40(1), 191-200.

Lalive, R, Zweimuller, J. (2009). How Does Parental Leave Affect Fertility and Return to Work? Evidence from Two Natural Experiments. *The Quarterly Journal of Economics*, 124(3), 1363-1402.

Lerner, S. (2015). The Real War on Families: Why the U.S. Needs Paid Leave Now. http://inthesetimes.com/article/18151/the-real-war-on-families.

Nollenberger, N., Rodriguez-Planas, N., & Sevilla, A. (2016). The Math Gender Gap: The Role of Culture. *American Economic Review: Papers and Proceedings* 106(5), 257-261.

OECD (Organization of Economic Cooperation and Development). Length of maternity, paternity, and parental leave. http://www.oecd.org/gender/data/length-of-maternity-leave-parental-leave-and-paid-father-specific-leave.htm

OECD (Organization of Economic Cooperation and Development). Parental Leave: Where are the fathers? http://www.oecd.org/policy-briefs/parental-leave-where-are-the-fathers.pdf

Olivetti, C., Petrongolo, B. (2017). The Economic Consequences of Family Policies: Lessons from a Century of Legislation in High-Income Countries. *The Journal of Economic Perspectives* 31(1), 205-230.

Osili, U. O., & Paulson, A. L. (2008). Institutions and Financial Development: Evidence from International Migrants in the United States. *The Review of Economics and Statistics*, 90(3), 498-517.

Ray, R. A Detailed Look at Parental Leave Policies in 21 OECD Countries. Washington: Center for Economic Policy Research (2008).

Rodriquez-Planas, N. (2018). Mortgage finance and culture. *Journal of Regional Science*, 58(4), 786-821.

Rossin-Slater, M. (2017). Maternity and Family Leave Policy. National Bureau of Economic Research Working Paper No. 23069. Cambridge: National Bureau of Economic Research.

Rossin-Slater, M., Ruhm, C. J., & Waldfogel, J. (2013). The Effects of California's Paid Family Leave Program on Mothers' Leave-Taking and Subsequent Labor Market Outcomes. *Journal of Policy Analysis and Management*, 32(2), 224-245.

Ruggles, S., Genadek, K., Goeken, R., Grover, J., & Sobek, M. Integrated Public Use Microdata Series:

Version 6.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2015.

Ruhm, C. (2011). Policies to Assist Parents with Young Children. *The Future of Children*, 21(2) 37-68.

Schonberg, U., Ludsteck, J. (2014). Expansions in Maternity Leave Coverage and Mothers' Labor Market Outcomes after Childbirth. *Journal of Labor Economics*, 32(3), 469-505.

Stichnoth, H., Yeter, M. (2013). Cultural influences on the fertility behavior of first- and second-generation immigrants in Germany. *ZEW Discussion Paper* 13-023.

Tanaka, S. (2005). Parental Leave and Child Health Across OECD Countries. *The Economic Journal*, 115(501), F7-F28.

Trevola, J., Duvander, A., & Mussino, E. (2017). Promoting Parental Leave for Immigrant Fathers – What Role Does Policy Play? *Social Politics: International Studies in Gender, State & Society*, 24(3), 269-297.

Waldfogel, J. (1999). The Impact of the Family Medical Leave Act. *Journal of Policy Analysis and Management*, 18(2), 281-302.

Welteke, C., Wrohlich, K. (2016). Peer Effects in Parental Leave Decisions. IZA Discussion Paper 10173, IZA – Institute for the Study of Labor, Bonn.

World Bank (2017). World Development Indicators. http://data.worldbank.org/. Accessed on 13 Jun 2017.

Table 1: Summary Statistics by Country of Origin

Country	Duration of Paid Leave	Absence	Age	Married	Less than High School	High School Degree	Some College	BA or Higher Degree	N
Hungary	160.72	0.31	32.38	0.92	0.00	0.07	0.42	0.52	21
Finland	157.52	0.21	33.76	1.00	0.00	0.01	0.06	0.93	16
Slovakia	149.92	0.40	34.97	1.00	0.00	0.26	0.21	0.53	10
Czech Republic	141.19	0.30	31.56	0.92	0.16	0.07	0.25	0.52	22
Austria	83.62	0.11	33.63	1.00	0.00	0.07	0.03	0.90	14
Sweden	54.09	0.23	33.18	0.92	0.00	0.03	0.20	0.77	40
Italy	45.48	0.05	32.72	0.89	0.06	0.22	0.31	0.41	133
Norway	42.86	0.14	32.94	0.91	0.04	0.05	0.25	0.66	22
Germany	39.54	0.14	28.87	0.73	0.03	0.16	0.38	0.43	639
Denmark	33.98	0.25	29.84	0.92	0.00	0.02	0.21	0.77	11
Japan	27.77	0.13	30.83	0.92	0.00	0.18	0.37	0.45	286
Canada	27.99	0.21	32.13	0.94	0.01	0.08	0.25	0.66	621
United Kingdom	27.33	0.16	32.35	0.85	0.01	0.12	0.25	0.62	439
France	18.69	0.23	33.15	0.98	0.01	0.03	0.17	0.80	114
Poland	16.44	0.22	31.44	0.92	0.01	0.17	0.36	0.47	254
Netherlands	15.86	0.32	34.17	0.83	0.01	0.06	0.31	0.63	49
Iceland	15.53	0.40	31.22	0.40	0.00	0.60	0.00	0.40	2
Belgium	15.18	0.22	30.94	0.86	0.04	0.04	0.30	0.63	26
Spain	14.79	0.14	32.62	0.89	0.01	0.06	0.17	0.76	96
Ireland	14.23	0.05	37.98	0.90	0.25	0.08	0.30	0.37	78
Greece	14.04	0.13	32.09	0.90	0.02	0.24	0.19	0.54	43
Portugal	13.35	0.17	31.78	0.92	0.10	0.22	0.18	0.50	101
Turkey	12.45	0.28	31.46	0.98	0.03	0.11	0.23	0.63	62
Mexico	11.65	0.14	28.96	0.68	0.43	0.30	0.19	0.09	6297
Korea	3.16	0.14	33.24	0.92	0.01	0.10	0.22	0.67	530
New Zealand	0.90	0.11	32.74	1.00	0.00	0.11	0.05	0.84	19
Switzerland	0.37	0.40	34.41	0.90	0.00	0.08	0.07	0.84	23
Australia	0.00	0.17	33.08	1.00	0.03	0.14	0.19	0.63	62
Total	**16.87**	**0.15**	**29.91**	**0.75**	**0.29**	**0.24**	**0.22**	**0.25**	**10,030**
	(18.78)	**(0.36)**	**(5.78)**	**(0.44)**	**(0.46)**	**(0.43)**	**(0.41)**	**(0.43)**	

Table 1 (Continued)

Country	Number of Children	Does No Speak English	Speaks English, Not Well	Speaks English, Well	Speaks English, Very Well	N
Hungary	1.54	0.00	0.06	0.05	0.89	21
Finland	1.52	0.00	0.00	0.00	1.00	16
Slovakia	1.62	0.00	0.00	0.00	1.00	10
Czech Republic	1.46	0.00	0.00	0.04	0.96	22
Austria	1.71	0.00	0.00	0.26	0.74	14
Sweden	1.59	0.00	0.00	0.02	0.98	40
Italy	1.64	0.00	0.01	0.11	0.89	133
Norway	1.78	0.00	0.00	0.09	0.91	22
Germany	1.75	0.00	0.00	0.02	0.98	639
Denmark	1.36	0.00	0.00	0.00	1.00	11
Japan	1.57	0.00	0.03	0.11	0.86	286
Canada	0.00	0.00	0.02	0.98	621.00	621
United Kingdom	1.82	0.00	0.00	0.01	0.99	439
France	1.57	0.00	0.00	0.07	0.93	114
Poland	1.57	0.00	0.09	0.18	0.74	254
Netherlands	1.54	0.00	0.00	0.03	0.97	49
Iceland	1.00	0.00	0.00	0.00	1.00	2
Belgium	1.95	0.00	0.00	0.01	0.99	26
Spain	1.66	0.00	0.02	0.04	0.95	96
Ireland	1.48	0.25	0.00	0.00	0.74	78
Greece	2.17	0.00	0.00	0.05	0.95	43
Portugal	1.54	0.01	0.02	0.07	0.90	101
Turkey	1.52	0.00	0.01	0.07	0.93	62
Mexico	2.26	0.14	0.24	0.21	0.41	6297
Korea	1.62	0.02	0.05	0.16	0.77	530
New Zealand	1.90	0.00	0.00	0.00	1.00	19
Switzerland	1.83	0.00	0.00	0.00	1.00	23
Australia	1.51	0.00	0.00	0.00	1.00	62
Total	**2.06**	**0.10**	**0.17**	**0.16**	**0.57**	**10,030**
	(1.13)	**(0.29)**	**(0.37)**	**(0.37)**	**(0.49)**	

Notes: Summary statistics weighted using person weights. Countries are ordered by paid leave weeks, defined as the total length of paid leave available (includes both maternity leave and parental leave) in the home country. This variable was gathered from the OECD Gender Data Portal (2016). The other summary statistics were calculated from the 5% Public Use Microdata Sample of the1980, 1990, and 2000 Census and the 2003-2006 and 2010-2013 American Community Survey. The sample is limited to women who are currently employed with an infant in the household who migrated to the United States in 1970 or later. The United Kingdom includes England, Scotland, Wales, and "United Kingdom, country not specified."

Table 2 – Baseline Model

	(1)	(2)	(3)	(4)
Home Country Weeks of Paid Leave	0.000565**	0.000535**	0.000539**	0.00120***
	(0.000208)	(0.000215)	(0.000213)	(0.000282)
Paid Leave Policy in State of Residence			0.0274*	0.0273*
			(0.0138)	(0.0138)
Controls	Y	Y	Y	Y
Occupation FE	N	Y	Y	Y
State, Survey, and Year of Migration FE	N	Y	Y	Y
Country of Origin FE	N	N	N	Y
Mean Share on Leave	0.144	0.144	0.144	0.144
Observations	10,030	10,030	10,030	10,030
R-squared	0.0420	0.1048	0.1050	0.1111

Notes: Standard errors clustered by home country. Specifications are conditional on the immigrant mother being employed in the previous year and having an infant (child under the age of 1) in the household. The home country paid parental leave duration corresponds to the total length of paid leave available in the year prior to migrating to the US. Controls include age, age squared, educational attainment, marital status, and English-speaking ability.
*** p<0.01, ** p<0.05, * p<0.1

Table 3 – Robustness of Results

	(1) Baseline	(2) State-Year FE	(3) No Mexico	(4) No Hungary	(5) No Australia
Home Country Weeks of Paid Leave	0.00120***	0.000996**	0.000766*	0.00119***	0.00121***
	(0.000282)	(0.000365)	(0.000409)	(0.000285)	(0.000288)
Controls	Y	Y	Y	Y	Y
Occupation FE	Y	Y	Y	Y	Y
State FE Year FE	Y	N	Y	Y	Y
State-Year FE	N	Y	N	N	N
Yr of Mig FE	Y	Y	Y	Y	Y
Mean Leave	0.144	0.144	0.167	0.143	0.143
Observations	10,030	10,030	3,733	10,009	9,968
R-squared	0.111	0.1791	0.1800	0.1106	0.1118

Notes: Standard errors clustered by home country. Specifications are conditional on the immigrant mother being employed in the previous year and having an infant (child under the age of 1) in the household. The home country paid parental leave duration corresponds to the total length of paid leave available in the year prior to migrating to the US. Controls include age, age squared, educational attainment, marital status, English-speaking ability, and paid leave in the state of residence.

*** p<0.01, ** p<0.05, * p<0.1

Table 4: Adding Home Country Variables

	(1)	(2)	(3)	(4)
Home Country Weeks	0.00114**	0.000911**	0.00113**	0.000901**
of Paid Leave	(0.000438)	(0.000412)	(0.000425)	(0.000400)
Home Country		-0.000261		-0.000598
Female LFP		(0.00271)		(0.00268)
Home Country GDP			2.72e-06*	2.75e-06
Per Capita			(1.60e-06)	(1.65e-06)
Controls	Y	Y	Y	Y
State, Year Mig FE	Y	Y	Y	Y
Occupation FE	Y	Y	Y	Y
Country of Origin FE	Y	Y	Y	Y
Mean Share on Leave	0.149	0.149	0.149	0.149
Observations	5,404	5,404	5,404	5,404
R-squared	0.145	0.145	0.145	0.145

Notes: Standard errors clustered by home country. Specifications are conditional on the immigrant mother being employed in the previous year and having an infant (child under the age of 1) in the household, and include a full set of both controls and fixed effects. Data on GDP per capita was gathered from the World Bank. The sample size falls due to missing data on female labor force participation.

*** p<0.01, ** p<0.05, * p<0.1

Table 5 – Selection into Employment?

	(1) On Leave	(2) On Leave or Out of Labor Force	(3) On Leave or Out of Labor Force
Home Country Weeks of Paid Leave	0.00120***	0.000439	0.000800***
	(0.000282)	(0.000467)	(0.000276)
Controls	Y	Y	Y
Occupation FE	Y	N	Y
Sample	Employed (Baseline)	Employed within the last 5 years	Employed within the last 5 years
Observations	10,030	28,624	28,624
R-Squared	0.111	0.339	0.106

Notes: Standard errors clustered by home country. Specifications are conditional on the immigrant mother having an infant (child under the age of 1) in the household and are either currently employed or employed within the last five years. All models include state of residence, year of survey, year of migration, and country of origin fixed effects, along with the full set of control variables.

*** p<0.01, ** p<0.05, * p<0.1

Table 6 – Placebo Regressions

Panel A: Alternate Sample		
	(1)	**(2)**
	On Leave	**On Leave**
Home Country Weeks of Paid Leave	0.00004	-0.00001
	(0.00004)	(0.00002)
Controls	Y	Y
Occupation FE	Y	Y
Mean of Dep. Variable	0.019	0.018
Sample	Employed with Children Age 5-17	Employed with No Children
Observations	111,739	256,392
R-Squared	0.019	0.012

Panel B: Family Related Preferences			
	(1)	**(2)**	**(3)**
	Infant	**Never Married**	**Currently Divorced**
Home Country Weeks of Paid Leave	-0.000186***	0.000520***	-0.000310
	(5.09e-05)	(0.000119)	(0.000188)
Controls	Y	Y	Y
Occupation FE	N	Y	Y
Mean of Dep. Variable	0.075	0.223	0.062
Sample	Age <45	All Working Age Women	Once Married
Observations	495,505	671,177	521,964
R-Squared	0.022	0.236	0.032

Panel C: Work Related Preferences		
	(4)	**(5)**
	Employed	**Work >50 Hours per Week**
Home Country Weeks of Paid Leave	-0.000952	-0.000119
	(0.000767)	(9.20e-05)
Controls	Y	Y
Fixed Effects	Y	Y
Mean of Dep. Variable	0.506	0.103
Sample	All Working Age Women	Employed and working more than zero hours
Observations	671,177	328,803
R-Squared	0.107	0.045

Notes: Standard errors clustered by home country. Since the sample varies across each of the specifications, the bottom row in each panel briefly describes the sample of women for each regression. All models include state of residence, year of survey, year of migration, and country of origin fixed effects, along with the full set of control variables.
*** p<0.01, ** p<0.05, * p<0.1

Table 7 – Social Connections and Culture over Time

	(1) Full Sample	(2) Arrival Before 1992	(3) Arrival 1992 or Later
Home Country Weeks of Paid	0.00116***	0.00216**	-0.000224
Leave Year Prior to Migration	(0.000279)	(0.000953)	(0.000934)
Home Country Weeks of Paid	0.000660*	0.000112	0.00278***
Leave In Survey Year	(0.000354)	(0.000277)	(0.000901)
Controls	Y	Y	Y
Fixed Effects	Y	Y	Y
Mean Share on Leave	0.144	0.136	0.156
Observations	10,030	6,230	3,800
R-Squared	0.111	0.168	0.160

Notes: Standard errors clustered by home country. All specifications are conditional on the immigrant mother being employed and having an infant (child under the age of 1) in the household, and include the full set of both controls and fixed effects. This specification includes the total duration of paid leave in the home country in both the year prior to migrating to the US, as well as the duration available in the year in which respondents are surveyed (which can also be thought of as the current year policy for the respondents).

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 1 – Additional Matching

	(1) 5 Yrs Prior to Migration	(2) 3 Yrs Prior to Migration	(3) 2 Yrs Prior to Migration	(4) 1 Year Prior to Migration	(5) Migration Year	(6) 5 Years Post Migration	(7) Survey Year	(8) 1 Year Post Survey Year
Home Country Paid Leave	0.00147***	0.00110***	0.000967***	0.00120***	0.000871**	0.000396	0.000620*	0.000750
	(0.000436)	(0.000357)	(0.000281)	(0.000282)	(0.000335)	(0.000543)	(0.000354)	(0.000497)
Observations	9,142	9,792	9,935	10,030	10,031	10,025	10,059	10,025
R-Squared	0.119	0.115	0.113	0.111	0.111	0.111	0.110	0.111

Notes: Standard errors clustered by home country. Specifications are conditional on the immigrant mother being employed in the previous year and having an infant (child under the age of 1) in the household. Controls include age, age squared, educational attainment, marital status, English-speaking ability, and paid leave in the state of residence. Year of survey, year of migration, state of residence, country of origin, and occupation fixed effects are included in all specifications.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 2 – Heterogeneity by Maternal Characteristics

Panel 1: Split by Marital Status	**(1)** **Married**	**(2)** **Not Married**
Home Country Paid Leave	0.00114***	0.000640**
	(0.000308)	(0.000261)
Mean Share on Leave	0.150	0.118
Observations	7,935	2,061
R-Squared	0.140	0.261

Panel 2: Split by Education	**(1)** **High School Degree or Less**	**(2)** **Some College or More**
Home Country Paid Leave	0.000840	0.00145**
	(0.000512)	(0.000542)
Mean Share on Leave	0.119	0.170
Observations	5,250	4,746
R-Squared	0.175	0.155

Notes: Standard errors clustered by home country. All specifications are conditional on the immigrant mother being employed and having an infant (child under the age of 1) in the household and include the full set of controls and fixed effects.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 3 – Heterogeneity by Child Characteristics

Panel 1: Birth Order	**(1)** **First Birth**	**(2)** **Second Birth**	**(3)** **Third or Higher**
Home Country Paid Leave	0.00139*** (0.000441)	0.00126* (0.000725)	0.00121 (0.000774)
Mean Share on Leave	0.158	0.150	0.131
Observations	4,059	3,476	2,987
R-squared	0.208	0.279	0.232

Panel 2: Child Gender	**(1)** **Girl**	**(2)** **Boy**
Home Country Paid Leave	0.00125** (0.000534)	0.00121** (0.000489)
Mean Share on Leave	0.146	0.152
Observations	5,363	5,159
R-squared	0.168	0.168

Notes: Standard errors clustered by home country. All specifications are conditional on the immigrant mother being employed and having an infant (child under the age of 1) in the household, and include survey year fixed effects as well as a full set of controls.
*** p<0.01, ** p<0.05, * p<0.1