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How much is a green card worth? Evidence from Mexican men who marry women born in the U.S.

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HIGHLIGHTS

- We measure wage gains from Permanent Resident status for Mexican immigrants to the U.S.
- Robust IV estimates indicate that expedited green cards raise men's wages 30%.
- Estimates are larger for mobile subgroups like college grads and recent immigrants.
- Removing wait times would raise the mean man's earnings $120,000+ in present value.

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ABSTRACT

Many countries impose restrictions on some immigrants' job mobility, likely reducing their wages. We quantify such effects for Mexican-born men in the U.S. by recognizing that immigrants who marry U.S. natives receive expedited "green cards" (Permanent Residency). Robust IV estimates indicate that intermarried Mexicans earn a 40 percent wage premium, and larger for the most mobile subgroups. Analogous premiums are statistically insignificant for men from Puerto Rico, who acquire no new rights because they are already U.S. citizens. Attributing the approximately 30 percent difference to green cards, we estimate that eliminating wait times would increase Mexicans' mean earnings $120,000–$150,000 in present value.

The worldwide acceleration of international migration in recent decades has not been matched by equal growth in the number of migrants granted permanent status, and the more temporary arrangements often favored by host governments typically restrict foreign workers to sectors in which there are skill shortages (United Nations, 2013). While such rules are usually intended to promote labor market flexibility and to limit competition with native workers, those benefits come at a cost to both the foreign workers and the host economy. For example, workers allowed to work only in a specific occupation (or even for a particular employer) may be unable to secure the wage growth that often comes from actual or potential job mobility, and their inability to move may preclude the formation of more efficient employment matches.

This paper aims to illuminate such costs by estimating the wage gains earned by Mexican men working in the U.S. if they obtain permanent resident status (often called a "green card") faster than usual. Several considerations suggest that this is a particularly relevant group to analyze. Mexicans living in the U.S. are the world's largest foreign-born population, and they tend to acquire permanent status quite slowly: the average Mexican who obtains a green card previously had a more temporary status for 16 years (Shear and Preston, 2013).[1] Many have low levels of skill, so they represent a group that host countries have often been reluctant to admit. Moreover, while immigrants

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[1] At 13 million, the population of Mexican natives in the U.S. exceeds the entire foreign-born population in every other country. It accounts for 28.4% of the U.S. foreign-born population and 5.6% of the world's (United Nations, 2014). U.S. immigrants from most other countries typically wait six to eight years for a green card (queues are longer for those from common source countries), but even delays of that magnitude have recently prompted several proposed reforms to expedite the process.

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from Mexico and elsewhere clearly view green cards as quite valuable, it is unclear whether this reflects potential gains from job mobility or simply the stability afforded by permanent status. Estimates from previous studies vary widely and thus offer limited guidance.

Since no sufficiently large data set reports persons' both visa status and their wages, our analysis exploits a feature of U.S. immigration law that allows some people to obtain green cards faster than others. The law prioritizes applications from immediate family of U.S. citizens, so immigrants who marry citizens (called "intermarriage") can become permanent residents in as little as six months. We thus use intermarriage as a proxy for a green card.

Our empirical strategy is then to measure the wage premium earned by intermarried men, beyond a general marriage premium. Since it would clearly be inappropriate to ascribe the full intermarriage premium to green cards if native wives offered benefits besides legal rights (e.g., knowledge of institutions or access to social networks), we compute the green card premium as a *difference* between intermarriage premiums of (a) men born in Mexico, and (b) control groups of immigrants who have permanent access to the U.S. labor market regardless of marital status. Our most common control group is men born in Puerto Rico (who are thus U.S. citizens),[2] but we also consider naturalized U.S. citizens born in Mexico and Mexicans eligible for green cards under the Immigration Reform and Control Act ("IRCA"), the 1986 law that granted amnesty to 2.7 million previously undocumented persons. However, the subtraction makes little difference in practice, as the estimated premiums are much larger for Mexicans than for the controls.

Another concern is that intermarried men may differ from others in unobserved ways that also affect their wages. A large literature shows that positive self-selection explains part of the raw earnings gap between married and unmarried men, and it is plausible that intermarried men may be even more positively selected — though previous work has found that intermarried men in several nations are actually selected negatively on unobservables (Meng and Gregory, 2005; Furtado and Theodoropoulos, 2009; Meng and Meurs, 2009).

For Mexicans, theory also provides a strong reason to expect *negative* selection into intermarriage on the basis of their employers' ability to pay immobile workers lower wages.[3] In short, immigrants whose wages have been most depressed by their inability to seek alternate employment have the strongest incentive to seek a (native) spouse who can help them obtain a green card.[4] Since their newfound mobility would then enable them to earn more competitive wages, we may observe intermarried men earning wages similar to (or even still a bit less than) those of comparable workers, yet that small gap in raw wages may mask a much larger initial wage gap and thus a large increase in wages made possible by their new green card.

Which of those biases dominates is an empirical question, but we are not surprised that our results imply that the latter is much more relevant. Even if intermarried men were selected positively on their own skills, the estimated green card premium may not be seriously biased insofar as (a) we control for observed skills, (b) unobserved skills correlate with other controls (e.g., education and English fluency), or (c) remaining biases cancel when the groups' intermarriage premiums are differenced. In contrast, our control variables seem unlikely to correlate with firms' ability to pay lower wages to immobile men, and since only Mexicans could ever suffer the immobility penalty, differencing the intermarriage premiums would not remove the latter bias.

We address the potential bias by using instruments from previous work on intermarriage, most of which involve geographic variation in demographics. For example, the main variable we use to predict intermarriage is the local ratio of immigrants to natives among single Hispanic women, the idea being that men's choice between them is influenced by relative supply. This and several other—often weakly correlated—proposed instruments all yield very similar estimates.

Nonetheless, our estimates may be best interpreted as lower bounds on the true green card premium. One reason is that intermarriage is an imperfect proxy for green cards, so the resulting measurement error causes attenuation. Another is that our instruments identify the local average treatment effect (LATE) for men whose choice between a native and immigrant wife is sensitive to relative supply, which may not include men with the most to gain. We would also understate the gains for singles if joint labor supply decisions limit the mobility of married men (Mincer, 1978).

Despite all those considerations, robust estimates imply that men with green cards receive a large wage premium, on the order of 30%. Since the estimated intermarriage premium for each control group is typically around 10% and always statistically insignificant (versus 40% for Mexicans), the green card premium would be grossly overestimated only if other, non-green card benefits of intermarriage raised Mexicans' wages several times more than the controls'. Moreover, the modest estimates for control groups are consistent with Chi's (2013) recent claim that legal rights are a main source of the intermarriage wage premium.

1. Background

There are several reasons that immigrants with green cards may earn higher wages. First, green cards allow much greater mobility between jobs; this is a major source of early-career wage growth even for U.S. natives, resulting in a total gain of about 40% over the first decade of their careers (Topel and Ward, 1992; Tchernis, 2010). Just having the option to move provides leverage to negotiate for raises, as it reduces firms' monopsony power (Robinson, 1933). Recent work suggests that this is especially relevant for immigrants: Hotchkiss and Quispe-Agnoli (2012) estimate job mobility accounts for 30% of the wage gap between undocumented and other workers, Amuedo-Dorantes and Bansak (2011) argue that it was a major cause of wage growth for those granted legal status under the IRCA, and Mukhopadhyay and Oxborrow (2012) cite mobility as the main source of wage raises when highly skilled immigrants get green cards.

A second advantage of green cards is their permanence. Foreigners authorized to work in the U.S. lose that right if they are laid off or if their employer does not petition for a green card before their visa expires (typically at most six years after issuance). Many firms do not sponsor visas or hire workers lacking green cards, and others may try to offer them lower wages. For undocumented workers, another benefit is protection against exploitation — e.g., legal status enables them to seek legal recourse against dishonest employers without risking deportation. Permanence also adds incentive to invest in country-specific human capital (Cortes, 2004).

Most variation in immigrants' legal status stems from unobserved factors that affect wages directly (e.g., time since immigration, being related to a citizen, or having rare skills), so an exogenous source of variation in legal status is required to identify a causal effect. Most previous studies used apparently exogenous changes in immigration laws, most often the IRCA. Perhaps surprisingly, many found that green card recipients' wages rose less than 10% (Borjas and Tienda, 1993; Cobb-Clark et al., 1995; Kossoudji and Cobb-Clark, 2002; Barcellos, 2010). Others suggest that IRCA-based estimates may greatly understate wage gains that would result from other reforms, however, either because the act caused a huge labor supply shock or because larger estimates (up to 25%) emerge from other natural experiments in which green

[2] For lack of a better word, throughout the paper we use "immigrant" to refer to any U.S. resident who was born outside the 50 states. While consistent with dictionary definitions, this usage is considerably broader than the terminology of U.S. immigration law, which excludes, e.g., Puerto Ricans and people without immigrant visas.

[3] For example, minimum wage laws or collective bargaining may prevent employers from paying immobile workers lower wages. Immobility penalties may also vary due to diversity across firms in the value of experienced workers.

[4] While fraudulent "green card marriages" are a common media trope and the subject of extensive scrutiny by U.S. immigration officials, note that selection may also arise from more mundane mechanisms like directed search for a (non-fraudulent) spouse who is a citizen or expedited marriages by couples who might otherwise (e.g.) cohabit.