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# Second Generation Immigrants: The Effect of Parental Nativity Status on Earnings

## **Abstract**

Since a significant portion of second generation immigrants only have one parent that was born abroad and one native parent, this portion of the second generation population may have the advantage of having human capital influences from both the U.S and from abroad. Comparing the economic success of this population to that of second generation immigrants who have two parents that were born abroad and therefore less of a culturally balanced environment might give insight into what family structure and therefore what kind of environment is most conducive to the economic success of second generation immigrants. By comparing the effect of having two immigrant parents with the effect of having an immigrant father and native mother, and vice versa, this research will evaluate the effect of parental nativity status of second generation immigrants on their earnings.

*An extended treatment of this topic was awarded University Honors and may be found in the Department of Economics [Honors Projects collection](#).*

## **Keywords**

parental nativity, immigrants, earnings, second generation, economic success

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# Second Generation Immigrants: The Effect of Parental Nativity Status on Earnings

Karen Silverman

## I. Introduction & Literature Review

There has been a significant amount of debate in recent years regarding the economic performance of immigrants. There has also been a significant amount of research exploring the economic assimilation of those immigrants. There is a general consensus in the literature that a significant income gap exists between immigrants and their native counterparts (Borjas, 2015, Chiswick, 1978). There are several reasons that have been observed for this gap. One of these reasons is the lack of transferability of skills, including language, and knowledge of U.S. customs. Another is that they have less job-specific training and knowledge of opportunities for jobs (Chiswick, 1978). Many studies note that over time the wages of immigrants, through assimilation and acquiring U.S. capital, will converge with the wages of their native-born counterparts (Chiswick, 1978). However, it has also been observed that using cross-sectional data can create a false perception of immigrants catching up to and even overtaking natives in earnings (Borjas, 2015). Studies that have instead tracked the earnings of immigrants across censuses have found that the earnings of immigrants have not caught up with the earnings of natives, which is especially true for recent immigrants (Borjas, 1985).

However, it is generally believed that second generation immigrants (persons born in the U.S with at least one parent born abroad) have experienced upward income mobility (Chiswick, 1977). The research on this topic has not been as extensive as the research on first generation immigrants.

A 2013 study by the Pew Research Center (2013) found that in the U.S there are around 20 million second generation immigrants who are adults, and 16 million under the age of 18. It also found

that, given current trends in birth rates, immigrants and their U.S born children will likely account for 93% of the growth rate of the working age population between 2013 and 2050. Knowing more about the economic performance of this growing population is important in order to provide a more extensive picture of the economic effect of immigrants in the U.S. Therefore, the purpose of this study is to determine how the earnings of second generation immigrants compare not only to first generation immigrants, but to their native counterparts as well.

If there is a significant difference in earnings between second generation immigrants and natives, what are the driving forces behind it? In a study of ethnic identity and second generation immigrants, Schuller (2015) has found that an integrated family environment rather than an assimilated one is most conducive for educational success. Therefore, second generation immigrants might benefit from a diverse family structure. Furthermore, Sanders and Nee (1996) have found that an immigrant family can be a source of social human capital that provides the benefits of networking and personal ties.

Since a significant portion of second generation immigrants only have one parent that was born abroad and one native parent, this portion of the second generation population may have the advantage of having human capital influences from both the U.S and from abroad. Comparing the economic success of this population to that of second generation immigrants who have two parents that were born abroad and therefore less of a culturally balanced environment might give insight into what family structure and therefore what kind of environment is most conducive to the economic success of second generation immigrants. By comparing the effect of having two immigrant parents with the effect of having an immi-

grant father and native mother, and vice versa, this research will evaluate the effect of parental nativity status of second generation immigrants on their earnings.

## II. Theory & Hypothesis

The main theory used in this study is human capital theory. According to the theory, any investments that increase the productivity of an individual should increase income (Rosen, 2008). Differences in labor markets and in education received abroad lead to difficulties for immigrants in trying to transfer their skills to the U.S labor market. This in turn leads to an initial disadvantage for immigrants who are not able to match the productivity levels of natives. Therefore immigrants generally receive lower incomes. With time, immigrants have been shown to increase their average wages (Chiswick, 1978). Human capital theory suggests that this is due to assimilation or, in other words, due to them acquiring human capital more conducive to success in the host country's labor market. Because second generation immigrants are defined as persons born in the U.S, it is reasonable to assume that their foreign born parents would have had some time to assimilate to the U.S labor market, and that assimilation has a positive impact on the economic performance of the second generation (Gang & Zimmermann, 2000).

In addition to benefitting from this, second generation immigrants have another advantage that their parents did not. By being born in the U.S, they have the advantage of acquiring U.S.-specific capital from the start, much like their native born counterparts. Unlike natives however, second generation immigrants may also gain an advantage by obtaining human capital unique to their parent's foreign birthplace. The theory of social capital from Sanders and Nee (1996) suggests that an immigrant family provides beneficial human capital endowments in the form of networking and personal ties. Combined with advantages from assimilation, based on human and social capital theory, the first hypothesis is that second generation immigrants will have at least reached income parity with natives, by earning equal to or more than natives.

Next, my research examines whether having two immigrant parents is an advantage or disadvantage over having one immigrant and one native

parent. It has been stressed in economic literature the importance of parents' inputs in their children's education (Becker, 1981). In addition, research done by Borjas (1992) has emphasized the importance of the skills of one's parents and human capital influences from one's ethnic group on the economic performance of the second generation. Therefore, having inputs from both a foreign parent and native parent might result in one influence washing out the other. Or they may complement each other, compensating for each other's weaknesses. Human and social capital theory suggest that there are advantages to assimilation and to the networking and personal ties that come from being a part of an immigrant family that could lead to a complementing effect. If this presents a comparative advantage for this group of second generation immigrants, then the second hypothesis is that second generation immigrants with one foreign parent and one native parent will outperform other second generation immigrants in earnings.

## III. Empirical Model

The data used in this study comes from the 2013 IPUMS current population survey (CPS) from the Minnesota Current Population Center (Flood, King, Ruggles & Warren, 2013). The CPS is a monthly U.S. household survey designed primarily to measure employment statistics. This survey is a good fit for the purpose of this research because it provides a large sample size with useful demographic information on the first and second generation immigrant populations. A restriction in using this database is the lack of information on the education levels of the parents of the second generation of immigrants which is a factor that Dustmann, Frattini, and Lanza (2012) have found to be an important in the educational attainment of their children.

Given that there is a distinct proven income gap between first generation immigrants and their native-born counterparts (Borjas 2015), this study will focus on two questions: first, is the second generation of immigrants closing that gap: second, does the nativity status of the second generation's parents affect their closing of the gap. For the purpose of this study the data will focus on the working age population and include only respondents who reported working at least 48 weeks out of the year 2013 and 36 hours a week. To assess the earnings of second

generation immigrants, the dependent variable in this study is the annual salary and wages of the respondents. The independent variables will represent the differences in nativity and parental nativity of the respondents. Natives indicates those who are born in the U.S to parents who were also born in the U.S. The immigrant variable indicates individuals who were born in a foreign country and now reside in U.S. Second generation immigrants are broken down into three groups based on the nativity of their parents. Those with an immigrant father and native mother will be labeled Immigrant Father/Native Mother. The same follows for second generation immigrants with an immigrant mother and native father, and both an immigrant father and immigrant mother.

To test the first hypothesis that second generation immigrants will have earnings that more closely resemble natives than first generation immigrants, we can use descriptive statistics to compare the mean incomes of each group. This analysis produces the results shown in Table 1.

<i>Nativity/Parental Nativity Status</i>	<i>Mean</i>	<i>N</i>
<b>Native</b>	\$37,217	81783
<b>Immigrant Father/Native Mother</b>	\$38,572	1907
<b>Immigrant Mother/Native Father</b>	\$44,380	1746
<b>Immigrant Father/Native Mother</b>	\$38,796	3753
<b>Immigrant</b>	\$30,347	22104

The descriptive statistics indicate that second generation immigrants do resemble the earnings of natives more closely than first generation immigrants. The average wages of the three second generation immigrant groups is \$40,582. This about \$3,000 more than the average earnings of natives and about \$10,000 more than the average earnings of first generation immigrants.

Further, analysis using a regression model will test the significance of nativity and parental nativity status on earnings. The model includes most of the variables in the table above as well as human capital control variables. These variables will control for human capital factors that have consistently been shown to have significant effects on income, such as gender, age, and education. All of the variables used in the model and their descriptions are summarized in more detail in Table 2. The sample for the model includes all first and second generation immigrants and natives from the data. There is no variable for natives in the regression model because they will represent the reference group. All results will then

be interpreted relative to natives. Additionally, the natural log of wages is used as the dependent variable in the regression in order to linearize the results. The following model which uses abbreviations for the second generation immigrant variables will test both the first and second hypotheses.

### Regression Model:

$$\begin{aligned} \text{Ln(Wages)} = & \alpha_1 + \beta_1(\text{Immigrant}) + \beta_2(\text{Imm\_Father/} \\ & \text{Nat\_Mother}) + \beta_3(\text{Imm\_Mother/Nat\_Father}) + \beta_4 \\ & (\text{Imm\_Father/Imm\_Mother}) + \beta_5(\text{Recent\_Immigrant}) \\ & + \beta_6(\text{Age}) + \beta_7(\text{Age\_Squared}) + \beta_8(\text{Female}) \\ & + \beta_9(\text{HS\_Diploma}) + \beta_{10}(\text{Some\_College}) \\ & + \beta_{11}(\text{College}) + \beta_{12}(\text{Masters}) + \beta_{13}(\text{Professional}) \\ & + \beta_{14}(\text{Doctorate}) + \beta_{15}(\text{Married}) \end{aligned}$$

The coefficients of the variables above will indicate the effect they have on earnings relative to natives. If  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$ , (second generation immigrants) are positive and significant, then the hypothesis that second generation immigrants will earn equal to or more than natives will be supported. If  $\beta_2$  and  $\beta_3$  (one immigrant and one native parent) are both greater than  $\beta_4$  (two immigrant parents), then the hypothesis that second generation immigrants with one immigrant parent and one native parent earn more than all other second generation immigrants in the sample will be supported.

Table 2: Summary Table of Variables

Variable	Description	Expected Sign
<b>Dependent</b>		
LnWages	Natural Log of Individual Earnings from Salary and Wages	
<b>Independent</b>		
<i>First Generation</i>		
Immigrant	0= Native 1=First Generation Immigrant	Negative
Recent Immigrant	0=Immigrant 1=Immigrant who arrived in 2000 or later	Negative
<i>Second Generation</i>		
Immigrant Father/Native Mother	0=Native Parents 1= Immigrant Father, Native Mother	Positive
Immigrant Mother/Native Father	0=Native Parents 1= Immigrant Mother, Native Father	Positive
Immigrant Father/Immigrant Mother	0=Native Parents 1= Immigrant Father, Immigrant Mother	Positive
<b>Controls</b>		
Female	0=Male 1= Female	Negative
Age	Age of respondent	Positive
Age Squared	Age squared of respondent	Negative
HS Diploma	0=No high school diploma 1= High school diploma	Positive
Some College	0=No college complete 1= Completed 1-4 years of college	Positive
College	0=No bachelor's degree 1= Bachelor's degree	Positive
Masters	0=No Master's degree 1= Master's degree	Positive
Professional	0=No Professional school degree 1= Professional school degree	Positive
Doctorate	0=No Doctorate's degree 1= Doctorate's degree	Positive
Married	0= Single 1= Married	Positive

## IV. Results

The purpose of this section is, first, to examine the earnings of second generation immigrants compared to natives and, second, to compare the earnings of the three groups of second generation immigrants based on parental nativity status with each other. First, the human capital control variables yielded significant results and were consistent with expectations based on human capital theory. Being a female decreases earnings by about 46% compared to male natives, and obtaining a higher education increases earnings compared to high school dropouts.

Since the dependent variable in the regression model is the natural log of wages, the coefficients in Table 3 indicate a percent change in salary. First generation immigrants experience a 4.9% decrease in their salary relative to natives, while recent immigrants experience an even larger disadvantage of 21% (16.1%+4.9%). This result is consistent with the literature that finds an income gap between immigrants and natives, and that immigrants who have more time to assimilate experience an advantage in earnings over those who have not. (Borjas 2015, Chiswick 1978). The results also show that second generation immigrants have an advantage in earnings relative to natives, and an even bigger advantage relative to first generation immigrants. The latter result is consistent with previous findings in the literature that second generation immigrants have experienced upward income mobility (Chiswick 1977). Since the coefficients for all of the second generation immigrants are positive, the hypothesis that second generation immigrants earn equal to or more than natives is supported. Even though the coefficient for respondents with an immigrant father and a native mother is insignificant, this still indicates that their earnings are not significantly different from the earnings of natives, and that they have achieved income parity.

The results also show that second generation immigrants with two immigrant parents experience a 5.2% increase in salary relative to natives and the coefficient is significant at the .01 level. Second generation immigrants with an immigrant mother and native father experience a 5.4% increase in salary relative to natives and the coefficient is significant but at the .05 level. As mentioned before, the coefficient for second generation immigrants with an immigrant father and native mother is not significant

and therefore we cannot say that their earnings are significantly different from natives. These results indicate that second generation immigrants with either two immigrant parents, or an immigrant mother and native father earn more relative to natives. However, as a whole, respondents with one immigrant parent and one native parent do not earn more relative to the respondents with two immigrant parents. This does not support the second hypothesis that second generation immigrants with one immigrant parent and one native parent would earn more than their cohorts. Instead, the results show that second generation immigrants with two immigrant parents, or an immigrant mother and native father, experience about the same advantage in their earnings over natives. Since the common factor in both groups is the presence of an immigrant mother, this suggests that having an immigrant mother increases earnings.

Table 3: Regression Results

Variable	Coefficients
Constant	9.701
<i>First Generation</i>	
Immigrant	-.049***
Recent Immigrant	-.161***
<i>Second Generation</i>	
Immigrant Father/Native Mother	.022
Immigrant Mother/Native Father	.054**
Immigrant Father/Immigrant Mother	.052***
<i>Controls</i>	
Female	-.461***
Age	.090***
Age Squared	-.001***
HS Diploma	.351***
Some College	.526***
College	.926***
Masters	1.143***
Professional	1.564***
Doctorate	1.448***
Married	.153***
Adjusted R Squared	.209
N	111,293

Notes: \* indicates significance at the .1 level; \*\* indicates significance at the .05; \*\*\* indicates significance at the .01 level.

## V. Conclusion

The purpose of this research is to determine the type of family structure for second generation immigrants that leads to earnings that closely resemble or exceed the earnings of natives. The results demonstrate a significant effect of having two immigrant parents and an immigrant mother and native father on earnings that exceed natives. The common factor in both of these structures is the presence of a foreign mother. The second immigrant generation group without a foreign mother present (immigrant father and native mother) is the only group that resembles but does not earn significantly more than natives.

The results show that the upward income mobility that first generation immigrants have experienced over time is being continued by second generation immigrants who have managed to achieved parity with and even exceed native earnings. This shows that the economic impact of immigrants includes intergenerational effects. This also suggests that assimilation has positive effects on earnings which is consistent with the findings of Gang and Zimmermann (2000). Combined with recent statistics that show the second generation is becoming a significant portion of the population, this positive picture of the economic success of second generation immigrants should be considered when discussing policy recommendations regarding the admittance of immigrants into the U.S.

The results also indicate that having an immigrant mother increases earnings by about 5% for second generation immigrants. These results do not support the theory of a comparative advantage among second generation immigrants with one immigrant parent and one native parent. Instead it suggests that there is some significance to having an immigrant mother on earnings that warrants further research. Studies that can somehow investigate the mechanisms involved would need to be conducted in order to determine why having an immigrant mother increases earnings. Lastly, an important variable that was not included in this study is the birthplace of the immigrant fathers and mothers. A continuation of this study should include this variable in order to determine if the country of origin of the immigrant mother has a significant effect on second generation earnings.

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