

# **Cumulative Disadvantage and Income Inequality Among Immigrants**

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## **Abstract**

Concerns about growing income inequality in the United States have entered the political discourse, as inequality has reached levels not seen since the 1920s. Debates about income inequality seldom incorporate immigrants. My research will examine not only immigrants in terms of overall inequality in the U.S., but inequality among immigrants. I use the SIPP from the year 2010, and an income concept that accounts for household size, underreporting, and asset wealth. I will look at income inequality in total population and see where immigrants fit in and income inequality among immigrants. Immigrants are represented disproportionately in the lowest quintiles of the income distribution, and these immigrants tend to have lower rates of citizenship, English proficiency, and are more likely to be from Latin America than any other region. Inequality among immigrants is higher than in the total U.S. population, with noticeably higher gini coefficients for immigrants beginning at age 25.

## **Background**

National inequality has been on the rise since the early 1980s, with the top 10% receiving more than half of total income in 2010 (DeSilver 2014). In the early 1980s, research on the age patterns of inequality discovered that income inequality was higher after age 65 than at any earlier age, quickly termed “cumulative disadvantage”. This reflected the age pattern that showed inequality increased as individuals aged, that researchers concluded that initial income differences and inequality increased over the life course leading to even greater inequalities at the oldest ages. At the same time the composition of the elderly is changing, older predominantly white cohorts are being replaced by more ethnically diverse cohorts including immigrants from Asia and Latin America. The general rhetoric about immigrants and income is that with assimilation immigrants become more assimilated and increase their income, however little research has evaluated the income inequality among immigrants or their place in the U.S. income inequality picture.

Immigration policy to the United States places a high value on family reunification, which results in high levels of migrants with low levels of education compared to countries such as Canada that have policies aimed at attracting high skill migration. In 2010, employer sponsored visas accounted for about 14% of issued visas compared to almost 70% issued for family reunification (DHS 2012). Differences in the level of education between immigrants coming under these different policies, may lead to very different levels of income among these two types of immigrants. Prior research has found that immigrants who arrived after 1979 reduced the average annual wage in the U.S. by about 2% in 2007 (Burtless 2009). As the U.S. simultaneously grows older and more diverse, issues of social programs and the well being of the elderly will be increasingly important.

In this paper I will attempt to answer three main research questions: What is the current level of inequality over the life course and does the cumulative disadvantage hypothesis hold for immigrants?; Who is in the highest and lowest quintiles and where do immigrants fit in the income distribution of the U.S.?; and How does the source of income differ by quintile and what role do public programs play in buffering inequality?

## **Data and Methods**

I use the Survey of Income and Program Participation (SIPP) for the calendar year 2010 to examine distributions of income across the life course by nativity. The sample includes all individuals present for the 3 interviews in 2010, giving a sample size of 67,998 respondents (7,138 immigrants). Income is calculated as an adjusted annual household income that adjusts for household size, underreporting, and includes wealth (including 70% of home equity) as an annuity of current assets over their remaining life expectancy, similar to methods used by Crystal and Shea (1990) in evaluating cumulative advantage among the elderly. I will assess inequality by computing 3 measures of inequality: Gini, Theil, and Mean log deviation. In addition, I examine characteristics by income quintiles to examine who is in the highest and lowest quintile. Lastly the differences in source of income are calculated for all quintiles to understand the role public programs play in buffering inequality at older ages.

## Results

All three measures of inequality indicate that immigrants have greater inequality among themselves than the total U.S. population after age 25 (Figures 1-3). Similar to the total population, immigrants also experience a growing inequality at the oldest ages, indicating a cumulative disadvantage over the life course. Gini reveals the smallest differences between immigrant inequality and the total population inequality.

[Figures 1-3 about here]

Individuals in the highest quintile make on average more than 10 times as much as individuals in the lowest quintile (Table 1). Women and the non-married are over represented in the lowest quintile. Individuals in the lowest quintile are also less likely to have excellent health and less likely to have a college degree. Immigrants are also over represented in the lowest quintile, especially those from Latin America, non-citizens, late arrivals, and those with poor English ability.

[Table 1 about here]

Among those 65 and older, a large portion of financial security is in the form of homeownership. Incorporating annuitized wealth into the income stream, may distort some of the real income flows individuals have available to them. In order to explore the role of homeownership gini and mean incomes are calculated with and without including homeownership (Table 2). Immigrants 65 and older have a smaller decline in mean income without homeownership than natives and less of an increase in inequality than natives. This indicates that older immigrants are less reliant on homeownership than natives, likely due to lower rates of home ownership.

[Table 2 about here]

By looking at the sources of income for older natives and immigrants, we see that immigrants rely more on Supplemental Security Income than natives and tend to get a smaller portion of their income from Social Security. In general immigrants rely more on wage and salary than natives, this may be due to the fact that immigrants are younger on average than natives, so more are working ages. However it may also reflect that immigrants are working more at later ages because limited work histories may lessen their benefits from Social Security. Immigrants in all quintiles have a smaller portion of their income from pensions and annuitized assets compared to the native-born population.

[Table 3 about here]

## Discussion & Implications

Immigrants do experience cumulative disadvantage and follow a similar trajectory of rising inequality over the life course beginning around age 25. In fact inequality among immigrants is actually larger than overall inequality. Trying to understand reasons for this greater inequality, we see that though inequality is higher average income is lower for immigrants, so though there is greater dispersion the lowest low is lower for immigrants and the highest quintile income is lower for immigrants. Increases in income inequality during the pre-retirement years carry forward to late life in undiminished or magnified fashion.

One reason for this growing inequality at older ages may be that immigrants are less protected by Social Security due to limited work histories they may not be eligible for the same amount as natives. The role of these social programs may operate quite differently in

the lives of immigrants compared to natives, and this needs to be investigated more thoroughly.

In 1935, due to the increasing poverty among the elderly, policies began to be constructed to reduce old-age poverty via Social Security. While this and other policies have greatly reduced poverty among the elderly, however these policies fail to provide income to all groups, and policies that are able to address this large growing inequality at older ages must take into account the changing composition of the elderly.

Lower rates of home ownership for immigrants may also contribute to the larger inequality at older ages, home equity for those aged 65 and older often lowers inequality relative to younger ages often decreases inequality because of high rates of homeownership in this age group, who were also less effected by the housing crisis of the great recession. Elderly rely on their homes in old age as a safety-net and without this safety-net many elderly are at risk or dependent on others for housing.

Currently it is unclear what inequality among immigrants means, does it support the idea of segmented assimilation, or is it simply assimilation to the U.S. given high rates of inequality are common among the native population as well. In general it seems to support the idea of segmented assimilation and a bifurcation of immigrants between those with high levels of education here on work visas compared to low skill immigrant workers that may or may not be here legally to work in agriculture and manual labor type jobs. From the results we see that higher levels of education are associated with being in the highest quintile.

Understanding income inequality over the life course and how immigrants contribute and are marginalized by income inequality and wealth differentials are important as large groups of immigrants move into old age and may or may not experience shifts in income sources similar to that of natives. Current policies may or may not be adequate to support the increasingly diverse life experiences of the aging population.

### **Next Steps**

The next stages of this research will use the Theil index to decompose the within-group and between group levels of inequality between natives and immigrants. In addition, future research will explore how much of this is a cohort effect and how much is an age effect, by incorporating data at more time points to try and tease out the cohort and age effects.

## References

Burtless, Gary. 2009. "Impact of Immigration on the Distribution of American Well-Being". Center for Retirement Research. <http://crr.bc.edu/working-papers/impact-of-immigration-on-the-distribution-of-american-well-being/>.

Crystal, S, and D Shea. 1990. "Cumulative Advantage, Cumulative Disadvantage, and Inequality among Elderly People." *The Gerontologist* 30 (4): 437–43.

DeSilver, Drew. 2014. "U.S. Income Inequality, on Rise for Decades, Is Now Highest since 1928." *Pew Research Center*. Accessed May 7. <http://www.pewresearch.org/fact-tank/2013/12/05/u-s-income-inequality-on-rise-for-decades-is-now-highest-since-1928/>.

Firebaugh, Glenn. 2009. *The New Geography of Global Income Inequality*. Harvard University Press.

Monger, Randall, and James Yankay. 2013. *U.S. Legal Permanent Residents: 2012*. Annual Flow Report. DHS. [https://www.dhs.gov/sites/default/files/publications/ois\\_lpr\\_fr\\_2012\\_2.pdf](https://www.dhs.gov/sites/default/files/publications/ois_lpr_fr_2012_2.pdf).

**Table 1: Descriptive Statistics by Income Quintile for 65+**

	<u>Lowest Quintile</u>	<u>Highest Quintile</u>	<u>Total</u>
Average Income	\$19,940	\$211,118	\$86,888
Average Age	75	73	74
% Female	68	44	57
% Married	33	50	75
%Excellent Health	4	17	9
% College	28	76	49
<u>Immigrant</u>	16	7	10
Latino Immigrant	32	9	28
Asian Immigrant	23	28	23
European Immigrant	20	43	27
Other Immigrant	25	19	22
Citizen	73	91	79
Age @ Arrival	51	41	46
Poor English	50	7	31

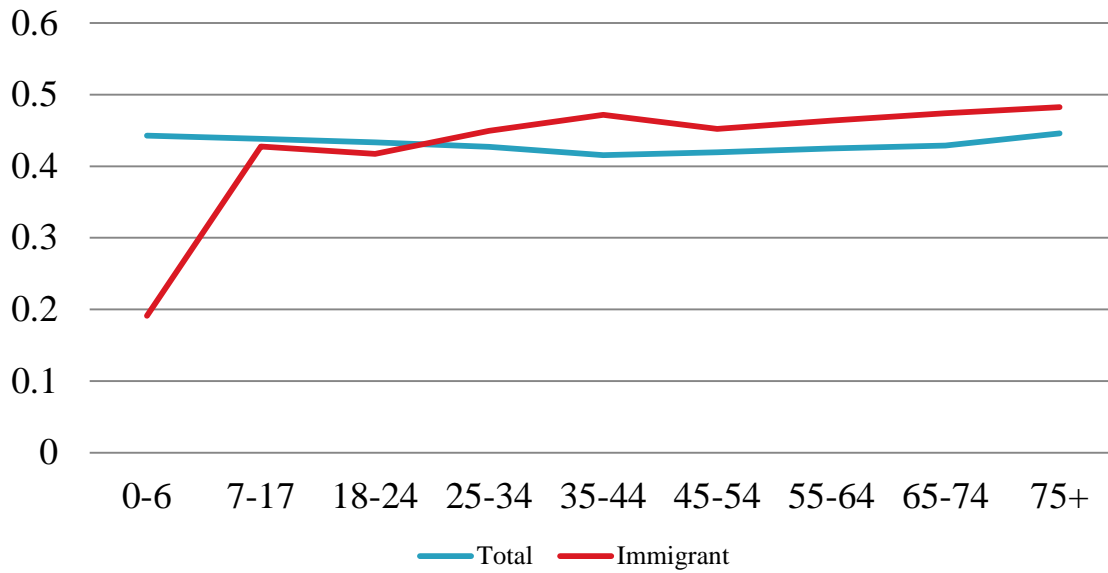
**Table 2: Income and Gini Differences by Nativity and Age**

	Natives		Foreign-born	
	0-64	65+	0-64	65+
Mean Income	\$91,474	\$89,019	\$71,386	\$71,215
Mean Income - No Home Equity	\$90,114	\$82,309	\$70,438	\$65,398
Gini -	0.42	0.43	0.46	0.48
Gini - No Home Equity	0.42	0.45	0.46	0.49

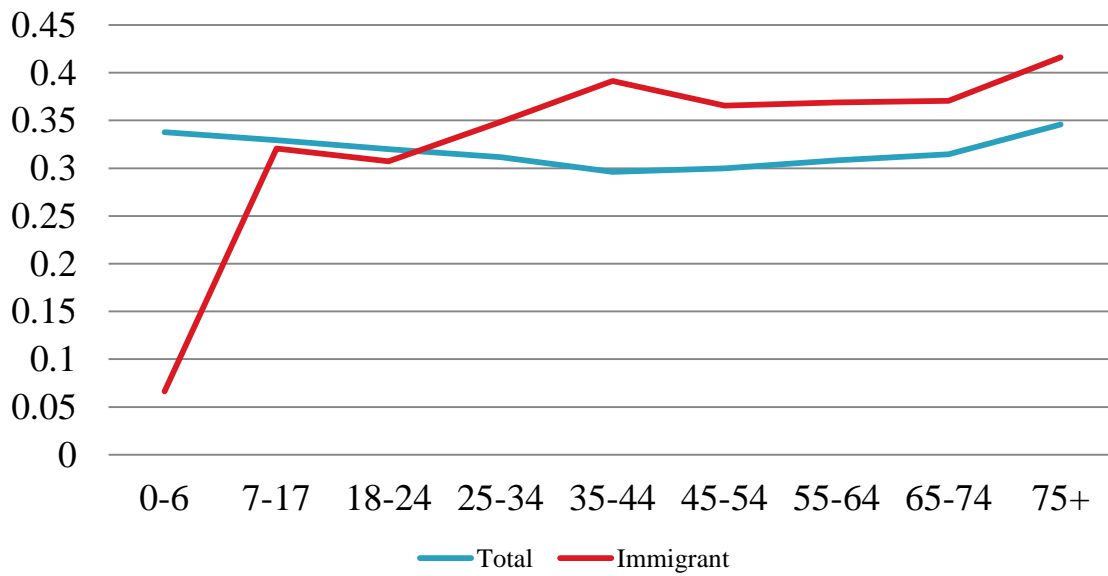
**Table 3: % of income from each source by Quintile and Nativity 65+ in 2010**

Quintile	SSI		Social Security		Wage and Salary		Private Pension		Annuitized Assets	
	Natives	Immigrants	Natives	Immigrants	Natives	Immigrants	Natives	Immigrants	Natives	Immigrants
1	4%	18%	63%	53%	5%	19%	3%	2%	13%	10%
2	1%	5%	50%	38%	13%	55%	8%	5%	21%	19%
3	1%	2%	38%	29%	19%	51%	12%	8%	24%	22%
4	0%	0%	30%	23%	17%	44%	12%	7%	30%	31%
5	0%	0%	16%	14%	23%	48%	9%	5%	44%	37%

### Figure 1: Gini by Age



### Figure 2: Theil by Age





**Figure 3: Mean Log Deviation by Age**

