

LATINOS IN ARIZONA: A GAP ANALYSIS OF PUMS MICRODATA



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- Maricopa Integrated Health System
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- Navajo Nation Div. Economic Development
- The Pakis Foundation
- Phoenix Convention Center
- The Phoenix Philanthropy Group
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- Pinal County
- Protect the Flows
- Public Service New Mexico (PNM)
- Raytheon
- Republic Services Inc.
- Rio Tinto
- Rosemont Copper Mine
- Salt River Project (SRP)
- Science Foundation Arizona (SFAZ)
- Tenet Healthcare
- Turf Paradise
- Valley METRO Light Rail
- Tenet Healthcare
- Vote Solar Initiative
- Waste Management Inc.
- Wells Fargo
- Yavapai County Jail District

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1 Introduction

The following is an analysis of publicly available micro-data from the 2022 5-year American Community Survey (ACS) for the state of Arizona, specifically the so-called Public Use Microdata Sample (PUMS) person records. The data is comprised of 341,258 individual observations (252,681 non-Hispanics and 88,577 Hispanics), which, when properly weighted, represent 7,172,282 individuals (4,874,611 and 2,297,671 non Latino and Latino individuals, respectively).

The primary purpose of this analysis is to uncover gaps that prevent Latinos from reaching the middle class, both for advocacy and information efforts, as well as to inform the construction of a survey instrument, which will deepen our understanding of the root causes of limited economic mobility.

For ease of interpretation the present analysis abstracts from noting statistically significant differences. However, the reader can still consult the relevant point estimates, standard errors, t statistics, and associated 1 and 2 tailed p-values for both types of hypothesis tests in the attached spreadsheet. In the vast majority of cases, the differences reported here are statistically significant at 99% confidence levels, due to large sample sizes, limited statistical noise, and economically relevant level differences.

Because the PUMS database is itself a sample of the entire ACS universe, it's impossible to derive precise standard errors. We follow the convention of calculating these errors through simulation using the Successive Difference Replication (SDR) method suggested by the Census Bureau.

2 Opportunity-rich and inclusive neighborhoods

2.1 Ancestry

Individuals of Latin American descent are more likely than their non-Latino peers to identify with a single ancestry, with 67.1% of Latin American individuals doing so, compared to 48.5% of non-Latinos. Moreover, a significant number of migrants identify as belonging to this group, leading to a smaller percentage (73.5%) of Latin American individuals being born in the United States, unlike the 91.2% of non-Latinos. Among this demographic, 25.6% report being born in Latin America itself.

The bilingual or bicultural identity of Latino individuals is highlighted by their language practices at home. A substantial 56.6% report using a language other than English at home, which stands in sharp contrast to the 10.3% reported by their non-Latino counterparts. Conversely, only 35.3% of individuals from Latin American backgrounds speak solely English at home, significantly lower than the 85.3% among non-Latinos. Some respondents did not provide an answer to this question. Additionally, 12.6% of individuals from Latin American backgrounds have at least one parent who was born abroad, a notable contrast to the 2.5% among non-Latinos.

2.2 Racial diversity

While official surveys typically categorize most individuals of Hispanic or Latino origin as White, data from the Public Use Microdata Sample (PUMS) indicates that a considerable segment of this group does not align with this racial classification. Among those of Hispanic or Latino origin, 69% identify with a single race, which is in stark contrast to the 95% observed in the broader population. Within the Hispanic group, 62.4% (representing 43% of all participants surveyed) classify themselves as White. However, 32.9% (22.7% of all respondents) choose to identify with a single race other than White, Black/African American, Native American (referred to as "American Indian" or "Alaska Native"), Asian, or Pacific Islander (including individuals of Hawaiian descent). Conversely, among non-Hispanic individuals, 78% identify exclusively as White, with a mere 0.5% considering themselves as belonging to "some other race alone." Additionally, 31% of those with Hispanic or Latino heritage report identifying with two races, a figure significantly higher than the 5% seen among non-Hispanic individuals.

2.3 Citizenship

Many migrants, as part of their journey, eventually become naturalized U.S. citizens. Among the Latino population, 9.7% have achieved U.S. citizenship through naturalization, a rate nearly double that of non-Latinos, which stands at 4.5%. This pathway to citizenship is often intricate and burdensome, and not all migrants are eligible to become citizens, contributing to the fact that 15% of Latinos are non-citizens, compared to just 3% in the non-Latino population. The demographic dynamics within the Latino community also reflect higher migration rates among males; females constitute only 49.4% of the Latino population, slightly less than the 50.2% observed among the rest of respondents.

2.4 Language barriers

Among Latinos, 38.4% report speaking English "very well." This figure stands alone as nearly 90% of the broader population did not respond to this specific question, making direct comparisons challenging. However, this percentage can be regarded as a conservative estimate of the actual number of native or near-native English speakers within the Latino community.

2.5 Intra-family childcare

The younger average and median age among the Latinos (see figure 1) may contribute to their higher reported rate of childbirth within the last 12 months, with 1.7% of Latinas reporting recent childbirth compared to 1% among their non-Latina counterparts. Children born to Latino parents are also more likely to reside with their grandparents, with 3.2% of respondents indicating this living arrangement, as opposed to 1.9% in the broader population. Interpreting this data can be challenging due to the varied composition of the American Community Survey (ACS)

respondents, which includes individuals who may not necessarily fit into conventional definitions of grandparents or grandchildren.

Another perspective on the data reveals that 44.5% of Latino grandparents do not live with their grandchildren, in contrast to 65.5% among the rest of the population. Setting aside potential inaccuracies in reporting for a moment, this discrepancy suggests that 6.6% of Latino grandparents live with their grandchildren, compared to 2.8% of non-Latino grandparents. This difference underscores the potentially closer familial ties within Latino communities, as reflected in their living arrangements.

2.6 Transportation access

Figure 2 illustrates the preferences for transportation modes and commuting durations among both demographic groups. The primary mode of transportation is by car, truck, or van, with 37.9% of Hispanics and 35.4% of non-Hispanics utilizing these vehicles. Public transportation plays a minimal role in the commuting patterns of these populations, with bus travel being the most utilized form of public transport, yet constituting less than one percent of all responses for both groups.

Working from home stands out as a significant alternative, embraced by 4.2% of Hispanics and 7.6% of non-Hispanics. Furthermore, the data show that the majority of individuals from both groups spend less than 60 minutes commuting to work, with similar travel time distributions across demographics.

3 High-quality education & preparation for college

Figure 3 presents the educational achievements of Arizona residents, differentiated by Hispanic origin and age groups. Across all age categories, Latino individuals lag behind their non-Latino counterparts by margins that are significant from an economic standpoint. Furthermore, the data suggest a lack of substantial educational advancement for Latinos when compared to other groups.

3.1 High school

For non-Latinos, the oldest cohort studied (ages 51-64) shows an 18.9% rate of attaining high school as their highest level of education. This percentage decreases to 14.6% among the 41-50 and 31-40 age groups, before increasing slightly to 21.4% among those aged 21-30. This rise could indicate that a number of adults pursue and obtain higher education degrees after reaching 30. Consequently, there's a visible trend of diminishing proportions of individuals whose highest educational achievement is a high school diploma over time among members of this demographic. Assuming mortality rates do not increase with educational level (i.e., suggesting that those with higher education degrees do not have shorter lifespans than those without), the percentage of individuals attaining only a high school diploma is expected to decrease as cohorts age and as older adults achieve receive additional degrees. For instance, by the time the current 41-50 age group reaches 51-64, we might anticipate seeing a maximum of 14.6% with only high school.

In contrast, the rates of high school completion among Latinos remain relatively consistent across different age groups: 22.3% for ages 51-64, 22.9% for 41-50, 24.5% for 31-40, and 30.8% for 21-30. This consistency suggests that some Latinos face an inter-generational barrier to educational advancement, unable to surpass the high school level at rates similar to their peers.

3.2 Bachelor's & master's degrees

The proportion of Latinos with Bachelor's degrees (BAs) is on an upward trend: 8.9% among those aged 51-64, 10.3% for the 41-50 age group, 12.7% for individuals aged 31-40, and 11.7% for the 21-30 cohort. Similarly, the share of non-Latinos holding BAs has increased: 21.3% for those aged 51-64, 24.6% for 41-50, 26.1% for 31-40, and 25.4% for 21-30. Although the percentage increase in BA attainment is greater among Latinos, due to the lower starting point, the actual numeric growth in both groups is comparable. However, this means the absolute gap in educational achievement remains significant. The disparity between Latinos and non-Latinos is 12.4% for the 51-64 age group, 14.3% for 41-50, 13.4% for 31-40, and 13.7% for 21-30. Therefore, despite progress in absolute rates of academic achievement, there's scant indication that the existing gaps in college completion rates will narrow if current trends continue. This conclusion holds even when considering the attainment of master's degrees.

3.3 Conclusion

We observe a promising decrease in the number of Latinos with very low educational attainment (levels below completing 12th grade), a relatively stable proportion of individuals who have earned a high school diploma, and significant increases in the acquisition of advanced educational degrees. Nevertheless, this positive trend is paralleled by similar progress among their non-Latino peers. Given the substantial initial gap in achieving these higher degrees, Latinos have not closed the disparity with their counterparts in terms of advanced educational attainment.

4 Rewarding work: Living wages, financial security, and opportunities for income and wealth building

4.1 Salary income and total income

Figure 4 illustrates the distribution of salary income among different age groups, segmented by Latino or Hispanic origin. For the age group of 51-64, the income distribution for Latinos skews towards the lower end compared to their peers, indicating a greater number of individuals within this demographic earning low to very low salaries, and a relative scarcity of those with high or very high incomes. This pattern becomes less pronounced among younger cohorts, suggesting a gradual salary convergence over time. However, substantial income disparities persist, particularly among those earning \$80,000 or more annually. It's important to note that Figure 4 only includes individuals with positive income to simplify the analysis.

Conversely, Figure 9 allows us to deduce the proportion of individuals within each group and cohort who have no income, revealing consistently higher rates of zero income among Hispanics, which aligns with a greater prevalence of non-salaried employment. This income gap tends to diminish among younger cohorts, with a mere 2% difference observed in the 21-30 age group. Intriguingly, the proportion of income-earning individuals in the oldest cohorts is almost identical at 64%, possibly reflecting limited retirement income streams among Latinos, compelling some to continue working into older age. This pattern persists in Figure 5 when considering total income, which encompasses various sources such as interest, earnings, rent, and public assistance.

4.2 Self-employment, interest, dividend, and rent income

The exploration of self-employment income (Figure 7) reveals that younger Latinos are tapping into new streams of revenue. Notably, within this youngest cohort, there is a clear trend towards parity with the non-Latino population in terms of self-employment income. However, despite this convergence, the income generated from self-employment is relatively modest both in dollar amounts and in the proportion of individuals benefiting from it. Specifically, fewer than 4% of those aged 21 to 30, and less than 8% of the 51-64 age group, report income from self-employment (Figure 9).

Moreover, there is a noticeable increase in the percentage of individuals earning substantial amounts from interest, dividends, and net rental income (Figure 8). However, as with self-employment income, Latinos participate in these income streams at significantly lower rates compared to their peers. Among the 21-30 age group, the gap is 2.1% (3.2% for Latinos vs 1.1% for non-Latinos), which widens to 9.3% among those aged 51-64 (13.6% for non-Latinos vs 4.3% for Latinos). This suggests that while Latinos who do receive income from interest, dividends, or rentals may perform comparably to their peers, the proportion of Latinos benefiting from these types of income is considerably smaller (Figure 9).

4.3 Public assistance income

When examining public assistance income (Figure 6), it appears that the majority of individuals, irrespective of ethnicity, earn less than \$6,000 annually through this channel, with an increase in percentages noted around the \$20,000 mark per year. The analysis does not reveal a significant disparity between Latinos and non-Latinos in Arizona, indicating that Latinos do not disproportionately benefit from public assistance programs. This lack of a distinct pattern suggests that public assistance income is relatively uniformly distributed across ethnic groups in the state.

4.4 Retirement Income

Among Latinos aged 59 and older, 26.4% report receiving some form of retirement income, which is significantly lower than the 41.5% reported among their non-Latino peers (Figure 10). This disparity becomes even more pronounced when considering

the amount of retirement income received. Latinos, even those who do receive retirement income, typically earn less than their counterparts, whether looking at total retirement income, social security income, or supplemental security income.

4.5 Job security

Latinos experience similar levels of job security compared to their non-Latino peers, with unemployment rates nearly identical: 3.1% of Latinos versus 3.3% of non-Latinos are available for work. This is closely mirrored in the percentages actively seeking employment, with 3% of Latinos versus 2.8% of non-Latinos looking for work.

5 Healthy environment & access to good healthcare

5.1 Disability

In terms of health-related challenges, Latinos report lower rates of disability compared to the general population. Specifically, 1.8% of Latinos report difficulties with self-care, compared to 2.7% of non-Latinos, and 2.3% of Latinos report hearing difficulties, versus 5% of non-Latinos. Vision impairment affects both groups similarly, with 2.4% of Latinos and 2.7% of non-Latinos reporting such difficulties. The data on independent living, ambulatory difficulties, and cognitive disabilities present a more complex picture. A smaller percentage of Latinos report these issues, but also a smaller percentage answer "no" to these questions. This apparent contradiction is attributed to a higher rate of non-responses among Latinos in the American Community Survey (ACS), making these findings more difficult to interpret.

5.2 Access to health services

Access to healthcare among Latinos demonstrates a complex landscape. Notably, a higher percentage of this community lacks any form of health insurance, with 18.5% being completely uninsured compared to only 8% of non-Latinos. When it comes to health insurance coverage, 49.9% of Latinos have access to private health insurance, and 37.6% are covered by public health insurance, indicating that individuals may be covered by both types.

In contrast, a larger share of non-Latinos benefits from private health insurance, at 68.6%, and 38.7% have public health insurance, suggesting that the average non-Latino is more likely to have multiple forms of insurance coverage.

Medicare appears to play a significant role for Latinos, with a higher percentage of this group (31%) benefiting from Medicare compared to 16.5% of their non-Latino counterparts. However, when expanding the focus to include Medicaid, medical assistance, or any other kind of government assistance plan for those with low incomes, the access rates between the groups are quite similar (17.6% for Latinos vs. 18.1% for non-Latinos). The relatively high proportion of Latinos with Medicare, despite the similar rates of access to broader low-income assistance, suggests that many Latino Medicare beneficiaries may not be classified as low-income individuals.

6 Conclusion

In Arizona, the disparity in income levels between Latinos and their non-Latino peers is a multifaceted issue, with educational attainment playing a crucial role. Latinos generally have lower levels of education, especially in higher education, which significantly affects their income potential. Despite noteworthy advancements in educational achievement among Latinos, the pace of progress is not sufficient to bridge the gap with the non-Latino population.

Language barriers may also contribute to these economic disparities. While the Public Use Microdata Sample (PUMS) data does not definitively confirm that Latinos face language barriers, it does offer some evidence suggesting that such obstacles could impact their employment opportunities and income levels.

Additionally, Latinos exhibit lower rates of disability, which could be attributed to their relatively younger average and median age compared to the non-Latino population. Despite this advantage, Latinos' access to healthcare and insurance is significantly inferior. This lack of access not only highlights disparities in health insurance coverage but also points to broader systemic issues that affect the well-being and economic stability of the Latino population in Arizona.

7 Figures

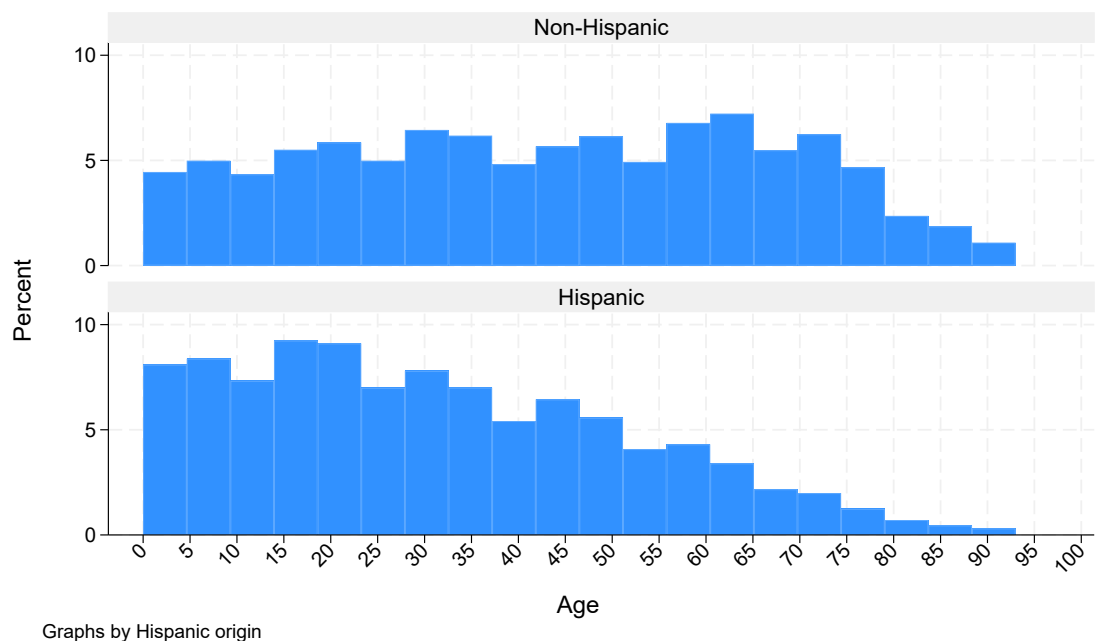
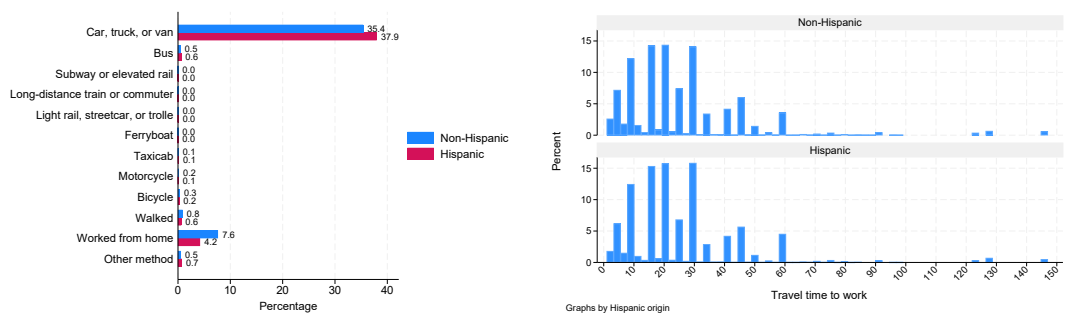
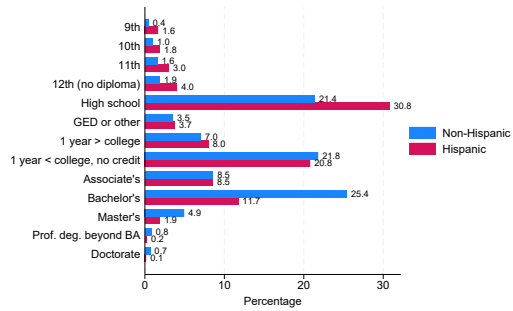


Figure 1: Age distribution

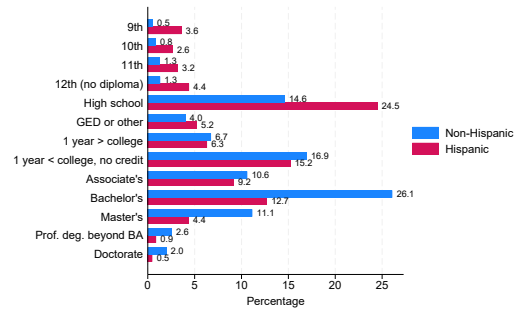


(a) Means of transportation (b) Commuting times

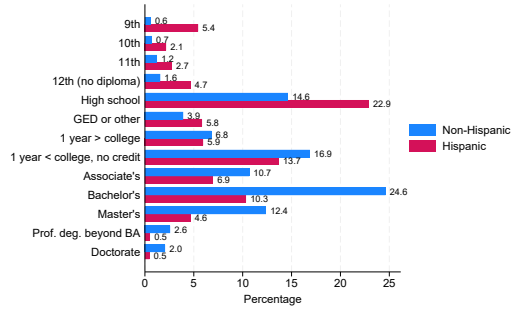
Figure 2: Means of transportation and commuting times



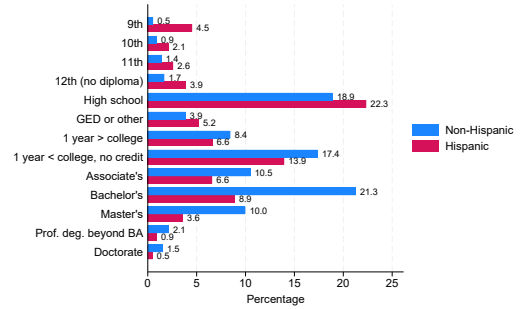
(a) 21-30



(b) 31-40

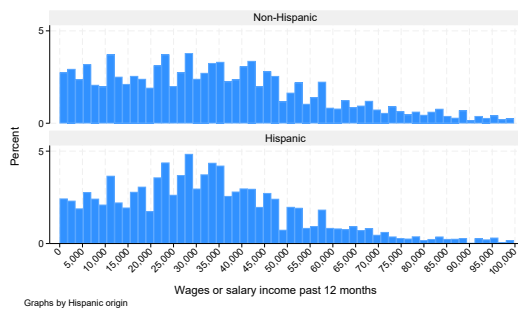


(c) 41-50

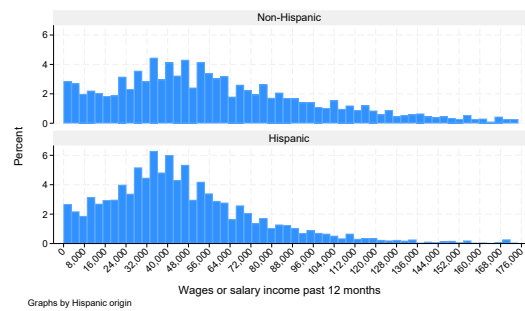


(d) 51-64

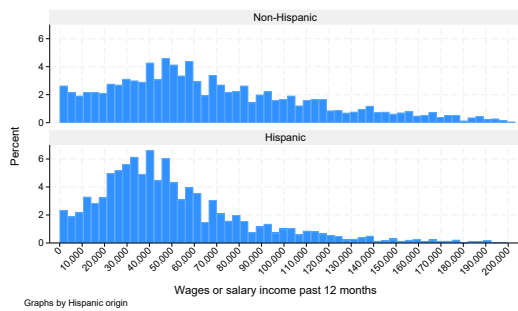
Figure 3: Educational attainment by age bracket



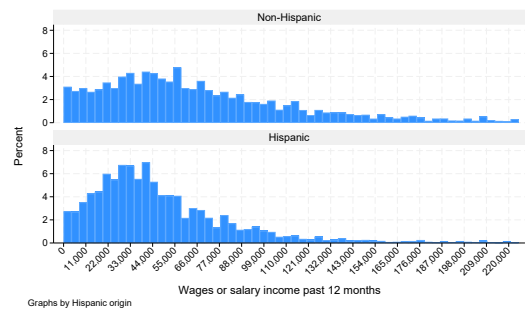
(a) 21-30



(b) 31-40

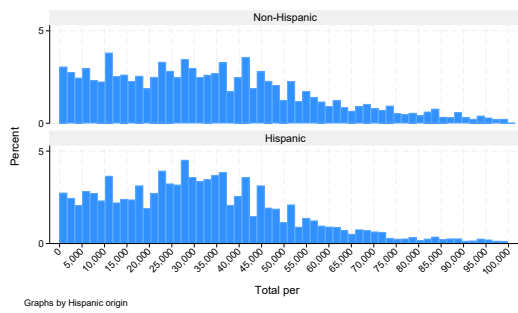


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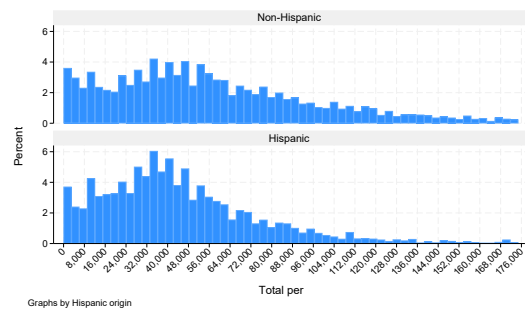


(d) 51-64

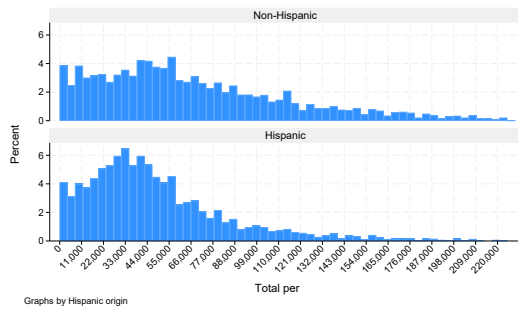
Figure 4: Wages or salary income (past 12 months, adjusted)



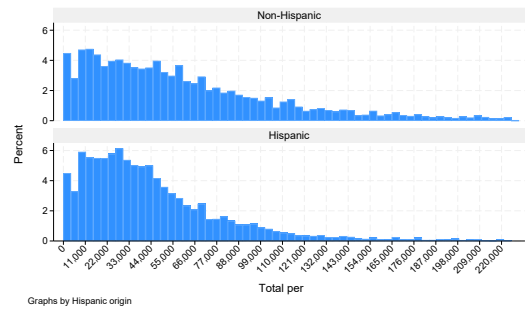
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(b) 31-40

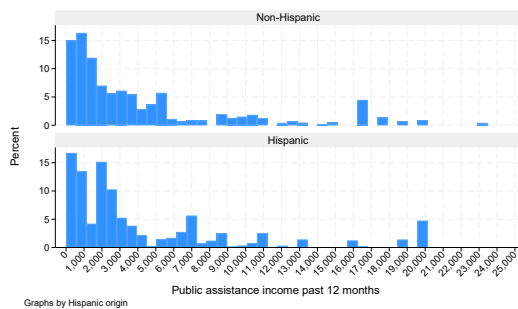


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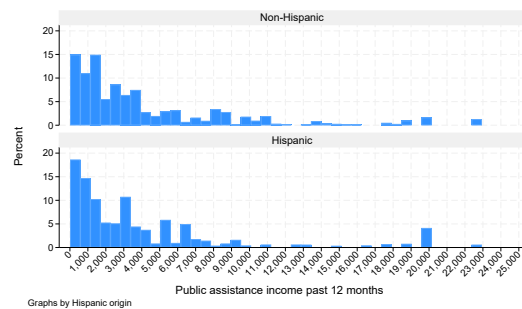


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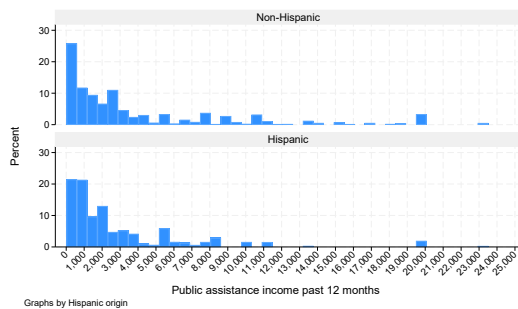
Figure 5: Total person's income (past 12 months, adjusted)



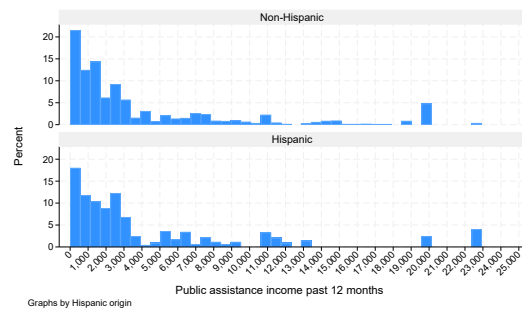
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(b) 31-40

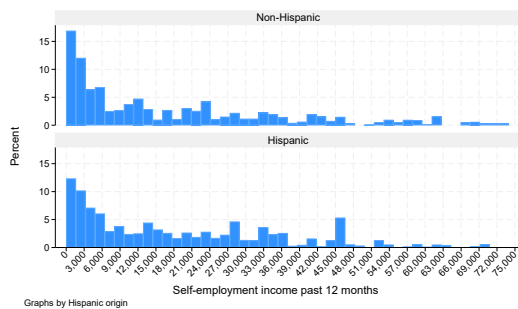


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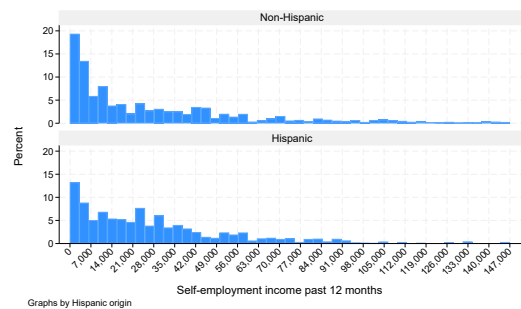


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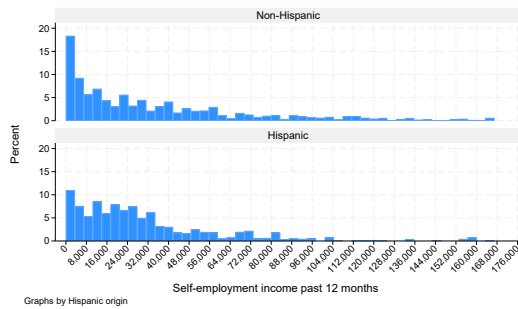
Figure 6: Public assistance income (past 12 months, adjusted)



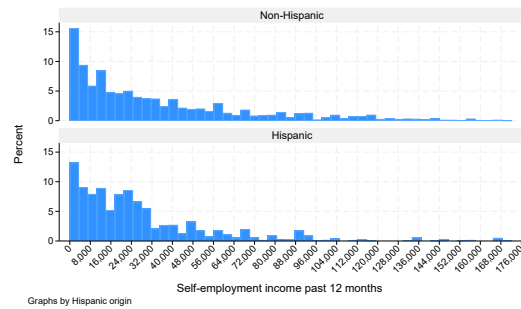
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(b) 31-40

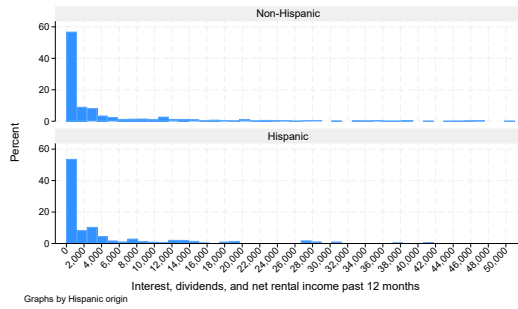


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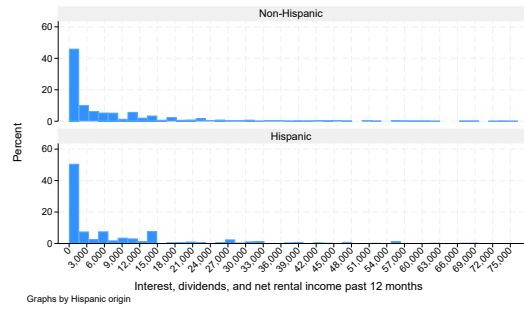


(d) 51-64

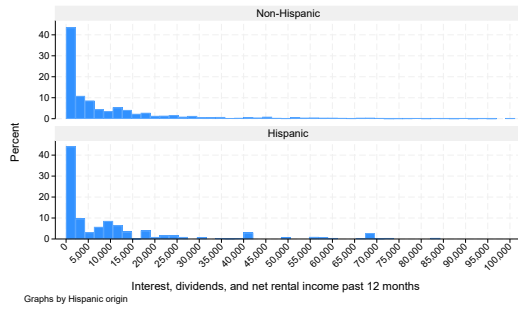
Figure 7: Self-employment income (past 12 months, adjusted)



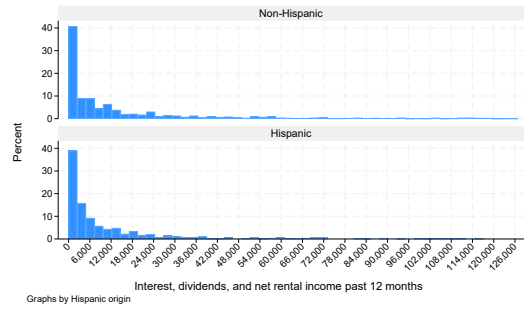
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(b) 31-40

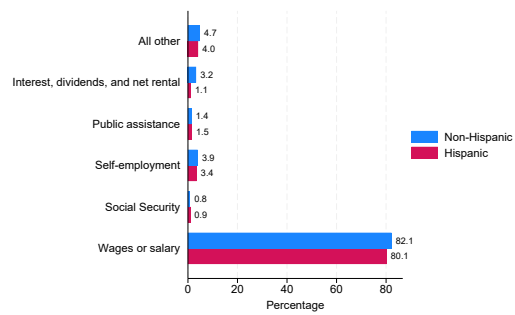


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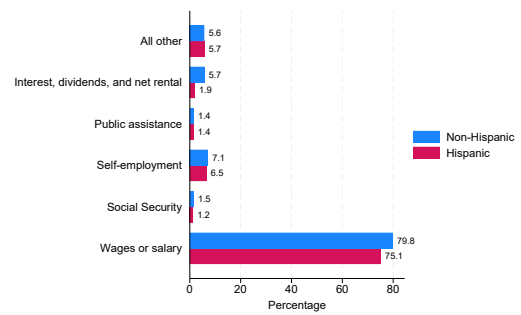


(d) 51-64

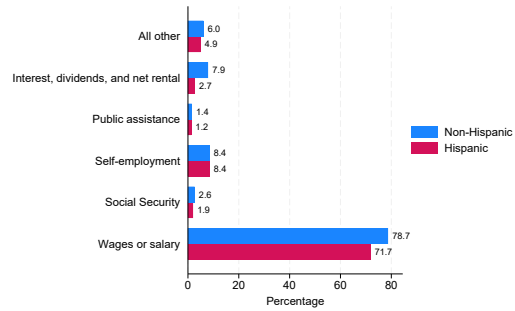
Figure 8: Interest, dividends, and net rental income (past 12 months, adjusted)



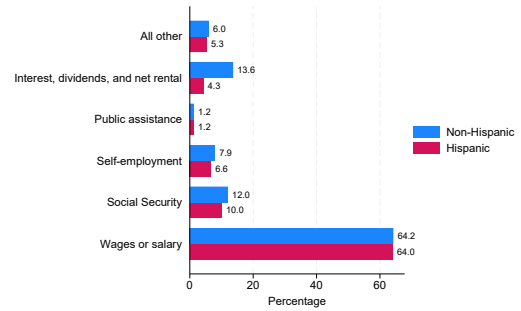
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(b) 31-40

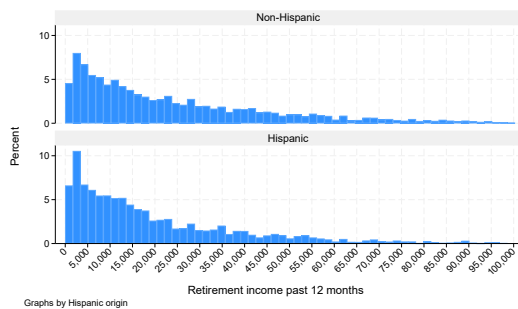


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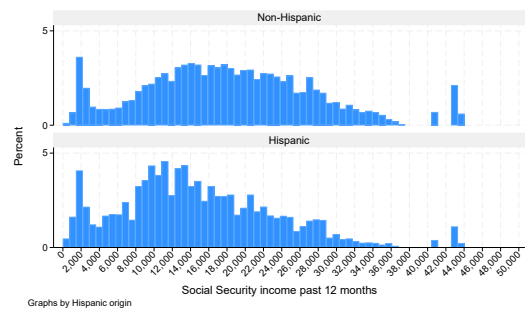


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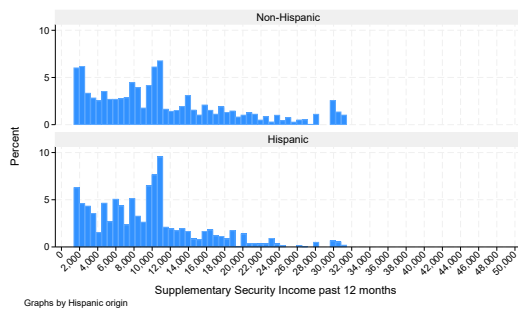
Figure 9: Percentage of group with positive income (past 12 months)



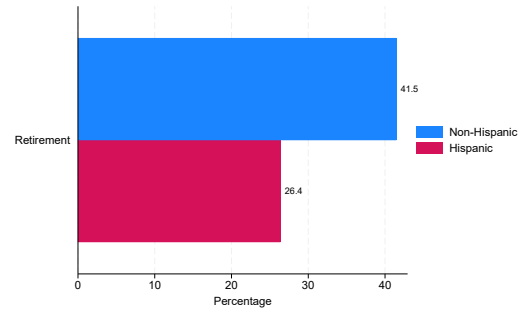
(a) Retirement income



(b) Social security income



(c) Supplementary security income



(d) Positive retirement income

Figure 10: Retirement income among 59+ (past 12 months, adjusted)



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