Chapter 9
Census Coverage of the Asian Population

Abstract In the 2010 Census, the net undercount for Asians Alone or in Combination was so small it rounds to zero compared to a net overcount of 0.8% for the Non-Hispanic White Alone population. Asians also had a relatively low omissions rate in the 2010 Census. The omissions rate for Asians Alone or in Combination (5.3%) was slightly higher than the rate for Non-Hispanic White Alone (3.8%). The Asian age/sex group with the highest net undercount rate was Asian Alone or in Combination males age 18–29 who had a net undercount rate of 2.2% in 2010.

9.1 Introduction

Studying the recent history of U.S. Census coverage of Asians is important because they are one of the fastest growing major race/ethnic groups in the country. Based on Census Bureau population estimates, the Asian Alone or in Combination population grew by 21% between 2010 and 2016 (from 17.3 million in 2010 to 20.9 million in 2016).

In reporting Census data on the Asian population, it is very important to be clear about how the group is defined. Starting in the 2000 Census, people were allowed to select more than one race in the Census questionnaire (U.S. Office of Management and Budget 1997) and race is often shown two different ways in Census Bureau reports. One category is the number of people who only select Asian (referred to as Asian Alone) and second a category is those in the first category plus those who select Asian along with at least one other race (referred to as Asian Alone or in Combination). In the 2016 American Community Survey conducted by the Census Bureau there were 17.6 million people who marked Asian Alone and 20.9 million who marked Asian Alone or Asian and some additional race. Asian Alone or in Combination is the primary population examined in this Chapter. This is the most inclusive definition and its use here is consistent with advice of the U.S. Office of Management and Budget (2001).

The Demographic Analysis method does not produce data on Census coverage for Asians, so all the data in this Chapter come from the Census Bureau’s Dual-Systems Estimates (DSE) method.
Table 9.1 Net coverage rates for Asian alone or in combination and Non-Hispanic White Alone populations in the 2010 census by age and sex

|                  | Asian alone or in combination | Non-Hispanic White Alone |
|------------------|------------------------------|--------------------------|
| Total            | 0.0                          | 0.8                      |
| Age 10–17        | 0.6                          | 1.8                      |
| Age 18–29 males  | −1.2                         | 1.5                      |
| Age 18–29 females| 0.8                          | 1.1                      |
| Age 30–49 males  | −2.2                         | −2.1                     |
| Age 30–49 females| 0.0                          | 0.7                      |
| Age 50+ males    | 1.1                          | 0.6                      |
| Age 50+ females  | 1.0                          | 2.2                      |

Source US Census Bureau (2012). 2010 Components of census coverage for Race groups and Hispanic origin by age, sex, and tenure in the United States. DSSD 2010 Census Coverage Measurement Memorandum Series #2010-E-51, US Census Bureau, Washington, DC. Table C

Note The directionality of undercounts and over counts have been reversed from the original publication in order to keep them consistent within this publication in other words, a negative sign implies an undercount.

Figures in BOLD are statistically significantly different from zero

9.2 2010 Census Coverage of Asians Alone or in Combination by Age and Sex

Table 9.1 shows net undercount rates from DSE for Asians Alone or in Combination and Non-Hispanic Whites Alone broken down by age and sex. Data for the youngest age group (0–9) are not presented in Table 9.1 because there is strong evidence that the coverage estimates of young children in the DSE in 2010 are problematic (O’Hare et al. 2016).

In the 2010 Census, the net undercount rate for all Asians Alone or in Combination was near zero (Table 9.1). By comparison, there was a statistically significant net overcount of Non-Hispanic White Alone population of 0.8%.

As with most racial and ethnic groups examined here, the net undercount rate for the total Asian Alone or in Combination population masks some important differences by age and sex. However, within the Asian population, the differences by age and sex are not as pronounced as they are for Black or Hispanic populations.

The highest net undercount rate in Table 9.1 is for males age 30–49. The net undercount rate for Asians Alone or in Combination males in this age range is 2.2% and this is the only net undercount estimate for Asian Alone or in Combination that is statistically significantly different than zero. The relatively high net undercount rate of Asian Alone or in Combination males age 30–49 is consistent with most other race and Hispanic groups, where males in this age group have high net undercount rates.
Table 9.2 Omissions rates for Asian Alone or in combination and Non-Hispanic White Alone populations in the 2010 census by age and sex

|                  | Asian Alone or in Combination | Non-Hispanic White Alone |
|------------------|------------------------------|--------------------------|
| Total            | 5.3                          | 3.8                      |
| Age 10–17        | 3.3                          | 3.1                      |
| Age 18–29 males  | 8.4                          | 6.6                      |
| Age 18–29 females| 8.4                          | 6.2                      |
| Age 30–49 males  | 7.8                          | 6.2                      |
| Age 30–49 females| 4.4                          | 3                        |
| Age 50+ males    | 3.7                          | 3.5                      |
| Age 50+ females  | 3.6                          | 1.7                      |

Source: U.S. Census Bureau (2012). DSSD 2010 CENSUS COVERAGE MEASURMENT MEMORANDUM SERIES #2010-E-51, Table C

9.3 Census 2010 Omissions Rates for Asians Alone or in Combination

Recall that the net Census undercount rate is a balance between people omitted and those included erroneously (mostly double counted). The omissions rate captures the share of a group missed in the Census. DSE is the only method that shows omissions rates.

In many ways the omissions rate is a more meaningful statistic because in the net undercount calculation, omissions can be cancelled out by erroneous inclusions or double counting. A net undercount of zero could be the result of no one missed and no one double counted, or, for example, 10% missed, and 10% double counted.

Examination of omissions rates are particularly important for the Asian Alone or in Combination population because the net undercount of zero could leave people with the impression that no Asians were missed in the 2010 census. The data below show that is not the case.

Table 9.2 shows omissions rates for Asians Alone or in Combination and Non-Hispanic White Alone. The omissions rate for Asians Alone or in Combination (5.3%) is higher than the Non-Hispanic White Alone population (3.8%). Omissions rates vary by age and sex but in each age/sex group Asians Alone or in Combination have higher omissions rates than Non-Hispanic Whites Alone. To a large extent the omissions rates by age and sex among Asians Alone or in Combination reflect the same demographic pattern as the net undercount rates.

Like the results for net undercount rates, Asian Alone or in Combination males age 18–49 had relatively high omissions rates. The omissions rate for both Asians Alone or in Combination males and females age 18–29 was 8.4%. The omissions rate for Asian males age 30–49 (7.8%) is relatively high but the rate for Asian Alone or in Combination females in this age range is only 4.4%. The omissions rates for older Asians Alone or in Combination (age 50 and over) are relatively low.
Table 9.3 2010 census net undercount rates and omissions rates for Asian Alone or in combination and Non-Hispanic White Alone by tenure

|                                          | Asian Alone or in combination | Non-Hispanic White Alone |
|-----------------------------------------|-------------------------------|--------------------------|
| Percent undercount                      |                               |                          |
| Population living in owner-occupied     | 0.0                           | **0.8**                  |
| housing units                          |                               |                          |
| Population living in renter-occupied    | 0.0                           | 0.9                      |
| housing units                          |                               |                          |
| Percent omissions                       |                               |                          |
| Population living in owner-occupied     | 4.1                           | 3.0                      |
| housing units                          |                               |                          |
| Population living in renter-occupied    | 7.4                           | 6.4                      |
| housing units                          |                               |                          |

Source US Census Bureau (2012). 2010 components of census coverage for Race Groups and Hispanic origin by age, sex, and tenure in the United States. DSSD 2010 Census Coverage Measurement Memorandum Series #2010-E-51, US Census Bureau, Washington, DC. Table B

A negative sign reflects a net undercount. The signs here are reversed from the source report in order to keep directionality consistent within this publication.

Figures in **BOLD** are statistically significantly different from zero.

9.4 Differential Undercounts of Asians by Tenure

Table 9.3 shows net undercount rates and omissions rates from the 2010 Census DSE analysis for the population in owner-occupied housing units and for the population in renter-occupied housing units among Asians Alone or in Combination and Non-Hispanic White Alone. The net undercount rates for Asians Alone or in Combination was virtually identical (zero) for both the population living in owner-occupied housing units and those living rental housing units. Interestingly, the net undercount rates for renters and owners are nearly identical for the Non-Hispanic White Alone population as well. This is one of the few places where tenure doesn’t seem to make a difference in net undercount rates.

Omissions rates are somewhat higher for Asian Alone or in Combination renters than for homeowners. For both owners and renters, the omissions rates for Asians Alone or in Combination are about one percentage point higher than those of Non-Hispanic White Alone.
Table 9.4  Net undercount rates for Non-Hispanic Asian Alone and Non-Hispanic White Alone; 1990, 2000, 2010

|               | 2010 | 2000 | 1990 |
|---------------|------|------|------|
| US Total      | 0.0  | 0.5  | −1.6 |
| Non-Hispanic White | 0.8  | 1.1  | −0.7 |
| Non-Hispanic Asian | −0.1 | 0.8  | −2.4 |

Source: US Census Bureau (2012). 2010 census coverage measurement estimation report: summary of estimates of coverage for persons in the United States. DSSD 2010 Census Coverage Measurement Memorandum Series #2010-G-01, US Census Bureau, Washington, DC. Table 7

A negative sign reflects a net undercount. The signs here are reversed from the source report in order to keep directionality consistent within this publication.

Note: in this table the race categories are race alone, not race alone or in combination. The data are presented this way to make the 2010 categories consistent with the 1990 categories.

Figures in **BOLD** are statistically significantly different than zero.

### 9.5 Trend Data from 1990 to 2010

Table 9.4 shows net undercount rates for 1990, 2000 and 2010 Censuses for Asians Alone and Non-Hispanic Whites Alone based on the Census Bureau’s DSE method. Asian Alone is the category used here because that is the only one available in 1990.

Trends in the net undercount rates for both Asians Alone and Non-Hispanic Whites Alone have been inconsistent from 1990 to 2010. For Asians, there was a relatively high net undercount rate in 1990 (2.4%) but in the 2000 Census the net undercount rate for Asians (0.8%) was not statistically significantly different than zero. In 2010, there was a net undercount of 0.1% for Asians Alone compared to an overcount of 0.8 for Non-Asian White Alone population.

The undercount differential between Asians Alone and Non-Hispanic White Alone population fell a little between 1990 and 2000 but increased slightly between 2000 and 2010.

### 9.6 Census Coverage of Asian Subgroups

In the Census coverage calculations done by the Census Bureau, Asians are treated as a single population. But there are several distinctions that should be made in the Asian population with respect to the probability of being missed in the Census.

There are a great variety of languages, religions, and customs among Asian subgroups (U.S. Census Bureau 2012). Among the Asians counted in the Census Bureau’s 2016 American Community Survey there were 4 million Chinese, 3.8 million Asian Indians, 2.8 million Filipinos, 1.8 million Vietnamese, 1.4 million Koreans, and millions of Asians from other countries or ethnic backgrounds. The social, economic, and cultural differences among these subgroups of Asians suggest
that they may differ in the levels of Census coverage. O’Hare (2017) shows how undercount-related socioeconomic measures vary for Asian subgroups in California.

Part of the diversity among Asians is linked to the large number of immigrants in this population. The 2016 American Community Survey indicates 66% of the Asian population in the U.S. is foreign-born. In recent years, the number of immigrants from some Asian countries has been higher than any other nation. In 2016, the number of immigrants from India (175,100) and China/Hong Kong (160,400) outnumbered those from Mexico (150,400) (Zong et al. 2018). Consequently, a large and growing segment of the Asian population in the U.S. have many of the characteristics that make recent immigrants difficult to enumerate in the Census (Massey 2014). According to Jensen et al. (2015, p. 1) “The foreign-born, especially recent immigrants, are believed to be a hard-to-count group which increases the likelihood of coverage error for this population.” It is also important to note that censuses in some other countries are not always viewed positively and immigrants may bring their negative views about census-taking with them when they move to the U.S.

Given the fact that a substantial portion of the Asian population in the U.S. are recent immigrants from many different Asian counties, they fall into the category of cultural and linguistic minorities. Harkness et al. (2014, p. 245) state, “Cultural and linguistic minorities can be hard to survey, either as the target population or as a subpopulation of a general population survey.” The U.S. General Accountability Office (2018, p. 5) also recognizes Cultural and Linguistic minorities as a hard-to-count group in the Census.

A substantial number of Asian immigrants are undocumented immigrants. One estimate indicates there are 1.5 million undocumented immigrants from Asian in the U.S. (Pew Research Center 2017). Evidence suggests the undocumented populations have higher net undercount rates than other immigrants (Warren and Warren 2013; Van Hook et al. 2014).

Given the large number of recent immigrants and undocumented immigrants in the Asian population, the last-minute addition of a question on citizenship to the 2020 Census is likely to have implications for the count of Asians in the 2020 Census (Ross 2018; Barabba and Flynn 2018; Meyers and Goerman 2018, U.S. Census Bureau 2017a, b). See Chap. 15 for more information on this issue.

There are no direct estimates of Census coverage rates for subgroups of Asians produced by the Census Bureau, but the heterogeneity noted above suggests there are likely to be substantial differences in census coverage among Asian subgroups. At least in part, this heterogeneity is why some observers fear Asians may be undercounted in the 2020 Census (Fuchs 2017; The Leadership Conference Education Fund 2107; Kang 1990; Horikoshi and Minnis 2018).
9.7 Summary

While the net undercount for Asian Alone or in Combination is very low in the 2010 Census, there was an omissions rate of 5.3% for Asians Alone or in Combination, some age/sex groups within the Asian population experienced high net undercounts and omissions rates. In addition, it is likely that the Census coverage rates for some Asian subgroups are different than the Census coverage for all Asians.

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