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Self-Employment in California

Technical Appendix

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Introduction

This piece provides a thorough overview of California’s self-employed workers. This detailed analysis supports high-level facts presented in the accompanying fact sheet.

Using primarily data from the American Community Survey (ACS), we compare characteristics of the self-employed with their wage-and-salary counterparts. Within the self-employed, there are important differences depending on incorporation status so that is another important dimension included in this analysis. As we will see below, the self-employed are a highly heterogeneous group in terms of characteristics, motivations, and outcomes. By knowing the characteristics of the self-employed, policymakers will be better positioned to adequately support this segment of the workforce.

We divide this analysis into four main sections. In the first section, we provide key facts about California’s self-employed including their demographic, occupational, and regional makeup. In the second section, we talk briefly about the economic outcomes of the self-employed and how they are different for business owners (i.e., incorporated self-employed) and independent contractors (i.e., unincorporated self-employed). In the third section, we discuss the changes in self-employment as a result of the pandemic. In the fourth section, we offer concluding remarks and highlight areas where more research is needed.

Self-employment is an important source of work and economic activity in California. According to the American Community Survey, 11.6 percent of workers in the state reported being self-employed (about 2.2 million people) as their primary job in 2022. Self-employment includes a wide range of work, from independent contractors to gig workers to business owners, and as such includes Californians with a wide range of skills, pay, background, and the like.

As an indicator of the health of the economy, self-employment may reflect limited opportunity for wage and salary work or a response to unemployment (e.g., the “unemployment-push effect,” [Glocker and Steiner 2007](#)). Or, self-employment may reflect an innovative and inclusive economy that enables entrepreneurial spirit ([Fairlie and Fossen 2019](#)). And, as we show below, there are elements of both at play in California.

About one-third of the self-employed in California (35%) are incorporated or business owners. Hence, this report overlaps with a companion report on [California businesses](#); this report digs deeper on the socioeconomic characteristics of the business owners themselves. People who are self-employed typically incorporate their businesses in order to receive traditional benefits of the corporate structure, including limited liability, tax considerations, and enhanced opportunity to raise capital through the sale of stocks and bonds.

The other two-thirds of self-employed Californians do not report holding incorporation status and can be thought of as independent contractors or gig workers. This report examines the considerable heterogeneity that exists both within self-employment categories (business owners, independent contractors) and across these categories. Our intent is to provide a foundational understanding of these critical building blocks of California’s labor market.

Self-employment is hard to measure

A large group of workers use self-employment (particularly independent contracting, which includes gig workers) for supplemental income; unfortunately, we are not able to estimate this share for California because we lack reliable data. In general, the research literature consistently finds that independent contracting is roughly split between workers relying on it as their main job, for their main source of income, and those relying on it for supplemental earnings (Bernhardt and Thomason 2017; Manyika et al. 2016).

The employment data collected by the American Community Survey (the primary data source used in this report) is only reported for the respondent's primary and most recent job. This means that individuals who are self-employed but primarily work a wage and salary job are not represented in our analysis of self-employed workers, and there is no data in the ACS on whether those who are primarily self-employed work additional jobs concurrently. In addition, since data is collected on only the respondent's most recent job, the ACS provides no information on the length of this job or transitions in and out of self-employment.

The ACS data is nonetheless the best snapshot of California's self-employed. Recent studies have used federal and state administrative tax data to estimate the size of the independent contractor workforce and how it has grown, but those studies lack the rich demographic information that can be collected in household surveys (Bernhardt et al. 2022; Lim et al. 2019).

We supplement this report using data from the Current Population Survey (CPS). Though the sample is much smaller, the CPS includes some more detailed questions about work and business ownership (See the data and methods section at the end for more details).

Existing research suggests there is potential undercounting of self-employment in major household surveys, especially work as an independent contractor. The literature points to two separate measurement issues—miscoding of people as employees when in fact they are independent contractors and underreporting of self-employment work. There is considerable uncertainty, however, about the extent of these measurement problems. Abraham et al. 2023 find that a 9–11% of those who initially report being “employed by an employer” indicate, upon probing, that they are in a contract arrangement on at least one job held in the prior week.

Following the work of UC Berkely Labor Center, in this report we measure independent contractors using the worker-reported category of “unincorporated self-employed.” This is an imperfect measure but has the advantage of being a core question that has been consistently asked in government household surveys over time and is designed to differ from small business owners who are categorized as “incorporated self-employed” and who put themselves on payroll as an employee (Bernhardt and Thomason 2017). That is, we use unincorporated self-employed interchangeably with independent contractors and incorporated self-employed interchangeably with business owners.

Further details on the data and methodology and supplementary tables and figures can be found at the end of this report.

Key Facts About Self-Employment in California

2.2 million workers in the state report being self-employed, as of 2022. California’s self-employment rate—the proportion of total employment made up of the self-employed—is 11.6 percent, which ranks 8th in the nation.¹ Relative to other larger states, only Florida’s self-employment rate is higher.

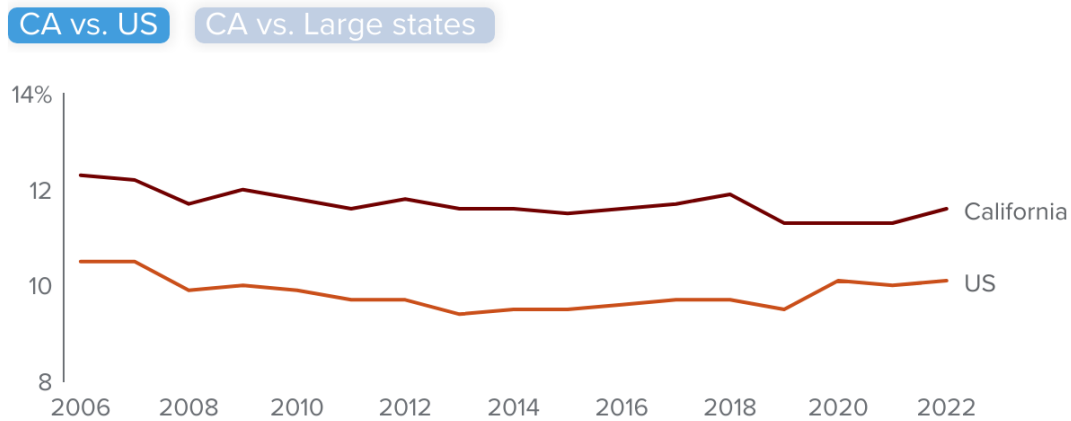
After nine years of very small changes (between -0.2 and 0.1 percentage points), the self-employment rate in California decreased 0.6 percentage points (from 11.9 percent to 11.3 percent) between 2018 and 2019. Despite an increase in 2022, the self-employment rate remains below levels seen in 2006 and 2007 (Figure 1). In contrast, nationwide, the share of self-employed workers has hovered at 10.1 percent since 2020, the highest it has been since 2009. Because of these trends, the gap in self-employment rates between California and the nation has narrowed from 2.2 percentage points in 2018 to 1.5 percentage points in 2022.

Even though self-employment rates have not changed much, the distribution of the self-employed between business owners (i.e., incorporated self-employed; see text box for definitions) and independent contractors (unincorporated self-employed) has. In the last 10 years, business owners increased from 28 percent of all self-employed Californians in 2013 to 35 percent in 2022. This growth was driven by a 39 percent increase in the number of business owners (the number of independent contractors remained practically the same). Self-employment overall increased 11 percent (compared to an increase of 9% among wage and salary workers in private companies and 16% among government employees). Despite these increases, California ranks 24th in the nation in the share of workers that are business owners.

FIGURE 1

Self-employment is more prevalent in California than in the nation

Share of workers that are self-employed, %



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

NOTES: Data for 2020 needs to be looked with caution due to data collection issues experienced during the pandemic.

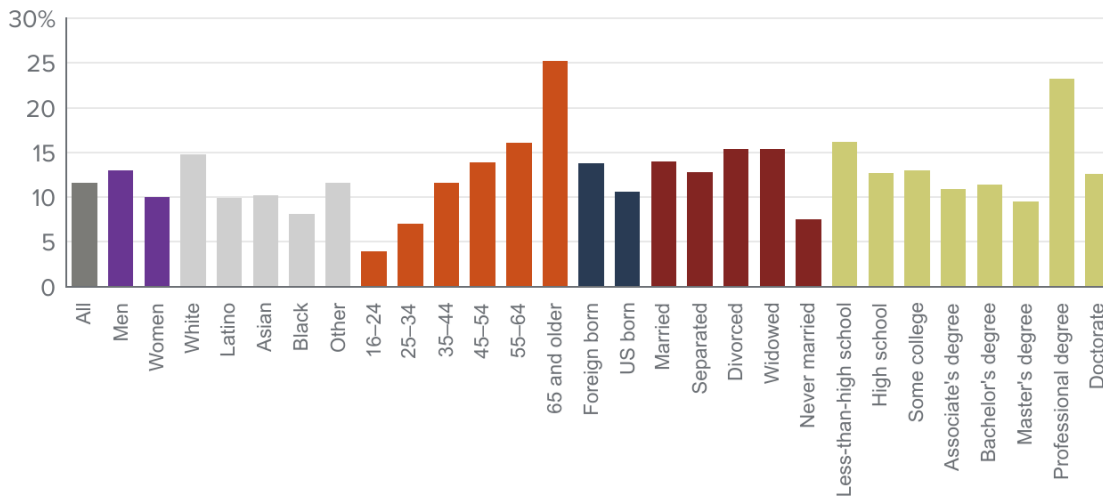
¹ For reference, wage and salary workers made up 74 percent of workers and government workers the remaining 14 percent.

Self-Employment Rates Vary Widely across Demographic Groups

As we can see in Figure 2, self-employment rates vary widely across demographic groups defined by age, gender, educational attainment, race, marital status, and nativity.

FIGURE 2

Self-employment rates vary widely by demographic groups



SOURCE: 2022 American Community Survey 1-Year Estimates, author's calculations.

NOTES: Figure shows the share of workers in each demographic group who are self-employed. The self-employment rates by educational attainment are calculated for those ages 25 and older.

Self-employment is much more common as workers age

The share of workers who are self-employed rises markedly with age. Seven percent of workers age 25 to 34 are self-employed as of 2022; the rate rises to 14 percent among those age 45 to 54 and peaks at 25 percent among those 65 and older. In addition, the age composition of self-employed workers contrasts sharply with the makeup of wage and salary workers: adults 55 and older account for 35 percent of the self-employed and 19 percent of private wage and salary workers (Figure A2, found at the end of this report).

A plausible reason for this finding is that many older workers have accumulated the capital and the managerial skills required to start a business, allowing them to transition from wage and salary work into self-employment (Weller et al. 2015). Research also suggests that older workers may see self-employment as a “bridge job,” allowing them to gradually reduce hours and earnings along the pathway to retirement (Ramnath, 2020).

The aging of the workforce as the baby boom cohort reaches retirement age will almost certainly influence the size and characteristics of the self-employed workforce. The fact that self-employment rates rise at older ages and that the population is aging suggests that, because of demographics alone, we could see an increase in the share of self-employed workers in the years to come.

Men are much more likely to be self-employed than women

There are also notable differences in self-employment across gender lines. In every single age group, men have higher self-employment rates than women. Overall, 13 percent of male workers in our state are self-employed in

2022 compared to 10 percent of female workers, leading to a 3 percentage point gender gap. However, the gender gap in self-employment rates widens with age. Among workers ages 25 to 34, the male/female gap in self-employment rates is only 1 percentage point while among workers 65 and older it is 7 percentage points.

There are several potential reasons why self-employment is more prevalent among men than women. Gender differences in self-employment rates can be partially attributed to sex-segregation in industries and occupations. Women are more likely to work in industries where self-employment is rare; men are more likely to work in those where self-employment is common. In 2022, one third of women who worked did so in just two industries: education and health services. Self-employment in these industries is modest, whether among men or women (see Table A1). Women, like men, had relatively high self-employment rates in real estate and rental and leasing services (29% vs. 31%), administrative and support services (19% vs. 23%), and professional, scientific, and technical services (15% vs. 18%). The distribution of employment in these three industries is not that different for men and women, 18 percent of men and 15 percent of women who work were employed in those three industries. However, construction (14% vs. 22%), and arts, entertainment, and recreation (18% vs. 24%) had also relatively high self-employment rates but in these sectors we see a more notable gap between the self-employment rates of women and men. Moreover, there are significantly more men working in construction than women (11% vs. 1.5%). In only one sector, other services, women have higher self-employment rates than men (36% vs. 23%).

By the same token, we observe that men are more likely to work in occupations that have large proportions of self-employed workers. We will talk more about the difference in self-employment rates across occupations later in this report.

The reasons for choosing self-employment also differ for women and men and seem to be linked to gender role expectations. For example, fathers emphasize employment opportunity, job control and high job satisfaction for choosing self-employment while mothers are more likely to indicate self-employment is a strategy for work-life balance (Lim 2019, Allen and Curington 2014).

Self-employment is more common for the least- and most-educated

There are also significant differences in self-employment rates among workers with different levels of educational attainment. Workers with very low or very high levels of educational attainment have higher self-employment rates. Indeed, 16 percent of workers aged 25 years and older with less than a high school diploma and 23 percent of workers with a professional degree are self-employed. For the other educational attainment groupings self-employment rates ranged between 11 and 13 percent. Self-employment rates were lowest among those with a master's degree. Men are significantly overrepresented among workers with less than a high school diploma, which is consistent with the higher participation of men in self-employment.

White workers are by far the most likely to be self-employed

Self-employment rates also differ substantially across racial and ethnic groups. White workers have the highest rate, almost double the rate for Black workers (15% vs. 8%). Racial differences in age, asset levels, educational attainment and the probability of having a self-employed father provide an important contribution to the black/white and Latino/white gaps in the entry rate into self-employment (Fairlie, 1999, Hout and Rosen 2020). Asian and Latino workers have very similar self-employment rates.

Married people are much more likely to be self-employed

There are also substantial differences in self-employment rates by marital status. Married people are significantly more likely to be self-employed than those who have never been married (14% vs. 8%, respectively).² This could suggest that individuals are more willing to incur the greater risk of self-employment and potentially lower hours and earnings if the household has another earner. However, it is also the case that divorced and widowed individuals have even higher self-employment rates. Workers 55 years and older are overrepresented among those divorced and widowed, which helps to explain their high rates.³

Foreign-born workers are more likely to be self-employed than US-born workers

Finally, foreign-born workers participate in self-employment at a higher rate than US-born workers (14% vs. 11%). Indeed, immigrants of all races are more likely to be self-employed compared to their US-born counterparts. In 2022, immigrants made up a substantial share (40%) of the 2.2 million self-employed workers in the state (for context: foreign-born individuals make up around 32% of the state's labor force and are generally more likely to be employed than US-born ones).

Foreign-born workers are 3 percentage points more likely to be self-employed than US-born workers. But the gap varies by race. Foreign-born multiracial and Latino workers are 8 and 7 percentage points more likely to be self-employed than their US-born counterparts (respectively). For Asians the gap is similar to overall, and for Blacks there is no gap by nativity.

In 2022, 26 percent of self-employed foreign born worked in just five occupations: maids and housekeepers (6.7%), landscaping and groundskeeping (5.3%), construction (4.9%), driver/sales and truck drivers (4.8%) and other managers (3.9%). In contrast, the top five occupations for self-employed US born are other managers (5.5%), real estate brokers and sales agents (4.2%), chief executives and legislators (3.8), lawyers, and judges, magistrates, and other judicial workers (3.1%), and hairdressers (3%).

Overall, we find that men, white, older, those ever married, foreign-born, and workers at the extremes of the educational attainment spectrum are more likely to be self-employed.

Incorporation Rates Also Vary across Demographic Groups

As we mentioned earlier, about one-third of all self-employed workers in our state have incorporated their business. However, this share masks wide variation. As we can see in Figure 3 below, some groups are significantly more likely to incorporate their business than others. Highly educated self-employed workers, especially those with a professional degree, are more likely to incorporate their business than less educated self-employed. Indeed, 43 percent of self-employed with at least a bachelor's degree incorporated their business (49% among those with a professional degree) compared to 27 percent of self-employed with a high school diploma or less. Consistently, Asian workers—who tend to be highly educated—have higher incorporation rates than whites (46% vs. 38%), even though whites have higher self-employment rates (15% vs. 10%, Figure 2). Latinos have the lowest incorporation rates at 27 percent and the lowest levels of educational attainment of all self-employed in our state.⁴ Interestingly, older workers who tend to have higher self-employment rates are as likely to incorporate as their younger counterparts. Married self-employed workers are another group with higher rates of incorporation.

² However, the size of the gap varies with gender and age. The gap is larger among those 16-24 and those 65 and older and larger for men than women (see Figure A8 at the end of the report).

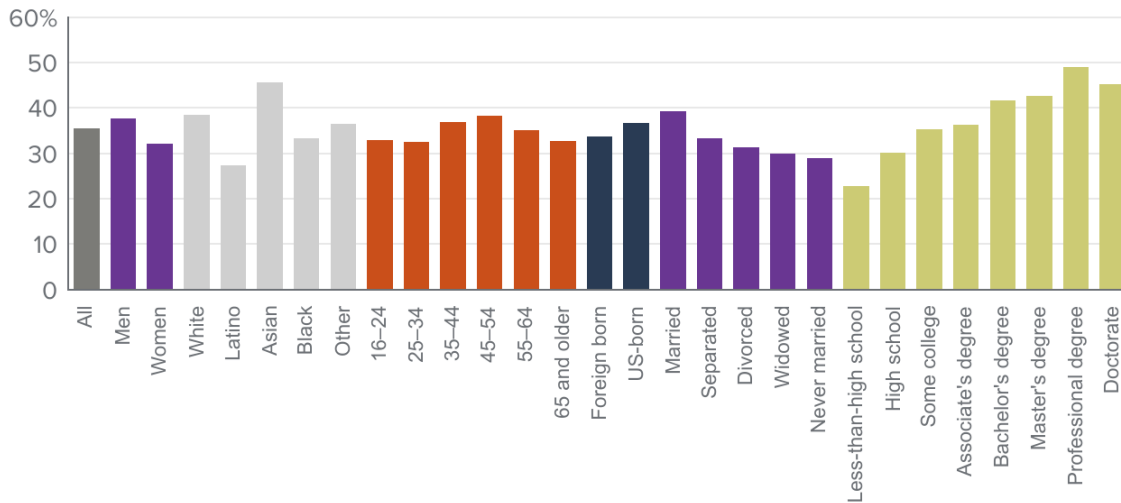
³ In 2022, 75 percent of widowed workers and 42 percent of divorced are 55 years and older.

⁴ 54 percent of Asian self-employed had at least a bachelor's degree compared to 14 percent of Latino self-employed.

Finally, while foreign-born workers are more likely to be self-employed, US-born self-employed are more likely to incorporate their business.

FIGURE 3

Incorporation rates also vary widely by demographic groups



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

NOTES: Figure shows the share of self-employed Californians with incorporated businesses in each demographic group. The rates by educational attainment are calculated for those ages 25 and older.

There are notable differences in the demographic makeup of self-employed workers not only relative to private wage and salary workers and government employees but also by incorporation status (Figures A1 to A6 at the end of this piece). Business owners (i.e., incorporated self-employed) are more likely to be white or Asian than independent contractors (unincorporated self-employed). In general, the self-employed are more likely to be men, but there is a marked gender difference in business ownership versus independent contracting. While 64 percent of those with incorporated businesses are men, 59 percent of independent contractors are. Likewise, 66 percent of individuals with an incorporated business are married compared to 56 percent of independent contractors. Perhaps the biggest difference by incorporation status happens across educational lines. While 48 percent of those with an incorporated business have at least a bachelor’s degree, 35 percent of the unincorporated do so.

The Self-Employed Are Found in a Mix of Low-Wage and High-Wage Occupations

Table 1 below shows occupations where self-employment is common (at least 25 percent of workers are self-employed and the number of self-employed is also high). Three in ten self-employed work in these 15 occupations. In the top three we have very distinct occupations: hairdressers, hairstylists, and cosmetologists; real estate brokers and sales agents; and farmers, ranchers, and other agricultural managers. But these 3 occupations have in common that more than 50 percent of their workers are self-employed. The occupations in Table 1 differ significantly in terms of their demographic makeup and in terms of their incorporation status. For example, there are only three women-dominated occupations in this list. In five of the occupations at least half of the workers have a bachelor’s degree or more and in four occupations less than a tenth do. Also, in four of these occupations

half of the workers are foreign born while in six occupations less than a quarter are. In 5 of the 15 occupations, 40 percent or more of the self-employed are incorporated while in 7 occupations at most 20 percent are. This table showcases how heterogenous the self-employed are.

Table 1
The self-employed are found in a wide range of occupations

Occupation	Self-employment rate (%)	% self-employed	% with a BA or more	% male	% foreign-born	% incorporated
Hairdressers, hairstylists, and cosmetologists	61.3	2.5	6.1	12.4	32.8	15.2
Real estate brokers and sales agents	58.3	3.5	54.8	46.3	24.4	37.8
Farmers, ranchers, and other agricultural managers	52.5	0.9	31.0	80.7	29.4	35.3
Artists and related workers	43.0	1.3	56.7	61.5	20.8	12.5
Taxi drivers	42.6	1.3	25.0	87.0	61.2	19.4
Maids and housekeeping cleaners	41.0	3.2	4.9	13.4	75.8	10.7
Childcare workers	35.6	2.1	17.7	7.5	40.5	6.1
Landscaping and groundskeeping workers	35.3	2.8	5.3	94.8	63.7	10.1
Construction managers	33.6	1.9	34.3	90.9	23.8	43.0
Chief executives and legislators	33.0	3.3	70.1	70.6	25.9	80.8
Management analysts	30.6	1.6	81.9	55.5	24.3	41.8
Painters and paperhangers	30.0	1.0	4.3	96.3	60.2	13.7
Lawyers, and judges, magistrates, and other judicial workers	29.1	2.2	98.6	57.3	13.8	37.0
Food service managers	27.6	1.4	24.6	51.2	39.1	55.2
Property, real estate, and community association managers	25.4	1.0	47.7	43.6	22.0	41.7
All	11.6	30.0	39.5	54.0	32.6	35.5

SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

There are also notable differences in earnings across these occupations.⁵ Workers in 4 of the occupations in the list (lawyers, and judges, magistrates, and other judicial workers, chief executives and legislators, construction managers, and management analysts) have median annual earnings above \$95,000 while workers in 5 occupations (child care workers, taxi drivers, maids and housekeeping cleaners, landscaping and groundskeeping workers, and beauty workers) have median annual earnings of \$30,000 or below.

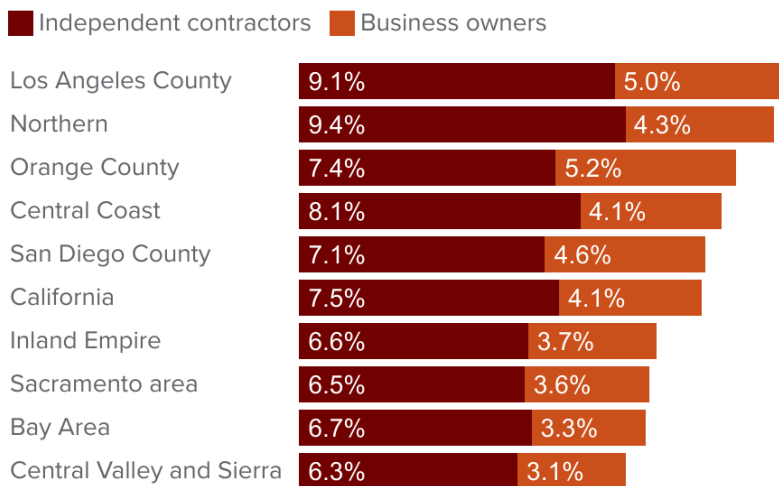
The Prevalence of Self-Employment Varies Widely across the State

Self-employment rates are highest in Los Angeles County (14.1%), and the Northern region (13.7%). In contrast, the Central Valley/Sierra (9.5%) have the lowest self-employment rate in the state (Figure 4).

FIGURE 4

Self-employment is higher in Los Angeles and the Northern region

Percent



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

NOTES: See Table A3 for the regions definitions.

As reflected throughout this report, there are important differences depending on if we are looking at business owners or independent contractors. For example, even though Los Angeles has the largest share of self-employed workers, Orange County has the largest share of business owners (5.2%).

As described earlier, incorporation rates (i.e., the share of incorporated self-employed among all self-employed) have increased significantly. In the last 17 years, the share of workers that incorporated their business increased 8.8 percentage points from 26.7 percent in 2006 to 35.5 percent in 2022. However, the Northern and Sacramento regions saw two-digit increases, 17.3 and 9.5 percentage points respectively.

Not only do self-employment rates vary across regions but also the occupations of self-employed workers vary across regions. Largely, these differences mirror how occupations vary across regions in the workforce overall (see Table A2).

⁵ This is based on earning of all workers in the occupation, excluding unincorporated self-employed.

For example, the occupational distribution of self-employment in the Northern region looks very different from the occupational distribution of self-employment in Los Angeles region. In the Northern region, self-employed workers are more likely to work as farmers, other managers, and hairdressers. Meanwhile, in the Los Angeles region they are more likely to work as maids and housekeepers, construction managers, and landscapers.

The Northern region has the second highest self-employment rate in the state mainly because self-employment is very high in some of the occupations where an important portion of individuals in the region work.⁶ Altogether 68 percent of all workers in the top 5 occupations were self-employed and self-employed workers in those occupations represent 20 percent of all self-employed in the region.⁷ In contrast, in the Inland Empire—the region with the lowest self-employment rate in the state—42 percent of all workers in the top 5 occupations were self-employed and 14 percent of all self-employed worked in those occupations.

Real estate brokers and sales agents is the occupation category with the highest or second highest self-employment rate in eight of the nine regions in the state, but its relative contribution to each region's self-employment numbers varies. For example, in the Sacramento region 4.5 percent of self-employed work in this occupation and 64 percent of all real estate workers are self-employed. Meanwhile, in Los Angeles 2.7 percent of self-employed work in this occupation and 54 percent of all real estate workers are self-employed.

Another example: landscaping and groundskeeping self-employed workers represent 2.9 percent of total employment in Los Angeles and Inland Empire regions, however 48 percent of workers in this occupation are self-employed in Los Angeles region while only 26 percent are in the Inland Empire.

The Self-Employed Are an Important Source of Job Creation

About one in five self-employed workers in California said they usually have at least one paid employee, slightly fewer than the rest of the US (18% vs. 23% as of 2023).⁸ Altogether, jobs created by the self-employed in California account for 21 percent of total employment, a bit lower than in the rest of the US (22% of total employment).⁹

Business owners in California that have employees on their payroll are typically owners of small firms (Figure 5). Over half have four or fewer employees, and the most common is to have one employee (21%) or two employees (17%). There are a sizeable number of business owners with 10 employees and with 20 or more. Because there are some very large firms created by self-employed business owners, the median number of paid employees was 4 in 2023 and the average was 9, a bit higher than the average in the rest of the US (8). Some research suggests that California's job creation from the self-employed could get a boost from the larger share of immigrants living in California and their connection to the economic engine of Silicon Valley ([Brown et al. 2019](#); [Hart et al. 2009](#); [Acs 2011](#)).

⁶ Research show that workers in rural areas are more likely to be self-employed than workers in urban areas, although engaging in self-employment in rural areas is associated with significantly lower monthly incomes ([Belloc et al. 2022](#)).

⁷ For this analysis, we focus on occupations where at least 2 percent of all self-employed in the region and with a self-employment rate of at least 25 percent.

⁸ This analysis uses data from the Current Population Survey and follows the methodology of Kochhar, 2021. Specifically, our estimates cover January-November 2023. See the methodology section at the end of this report for more details.

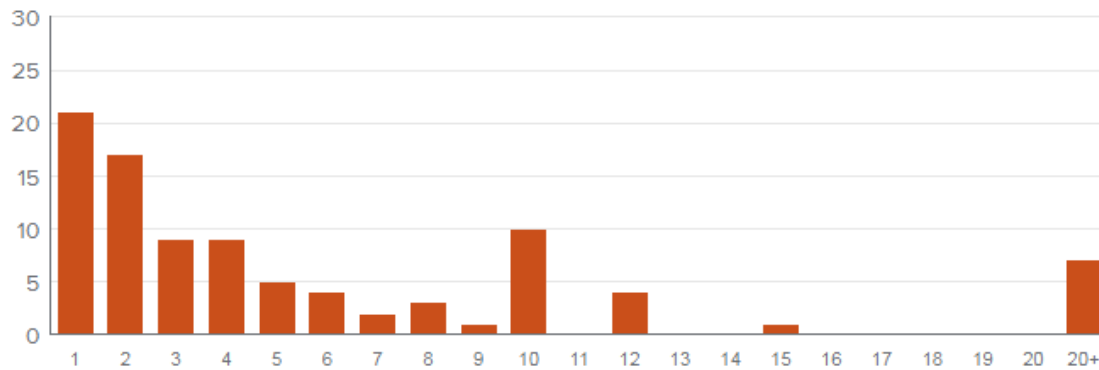
⁹ This count of jobs does not include the self-employed person (business owner) themselves. Both incorporated and unincorporated self-employed persons hire workers, but most job creation by the self-employed is from those with incorporated businesses. California self-employed with incorporated businesses were four times more likely to employ others for pay than self-employed unincorporated individuals in 2023, by 38 percent to 9 percent. (Kochhar, 2015).

Jobs created by the self-employed also differ by gender and occupation. In 2023, we estimate that self-employed men in California have 2.7 times more workers on their payroll than self-employed women do (2.5 million vs. 0.9 million).¹⁰

FIGURE 5

Most self-employed business owner has relatively few employees

Percent



SOURCE: IPUMS 2023 CPS Monthly Data.

NOTES: Chart shows the distribution of number of paid employees (horizontal axis), among self-employed Californians with employees.

What Are the Economic Outcomes of the Self-Employed?

In this section, we look at how hours worked, remote work, and earnings for the self-employed compare to their wage and salary counterparts. As described above, the circumstances of the self-employed vary dramatically, contributing to significant differences in economic outcomes.

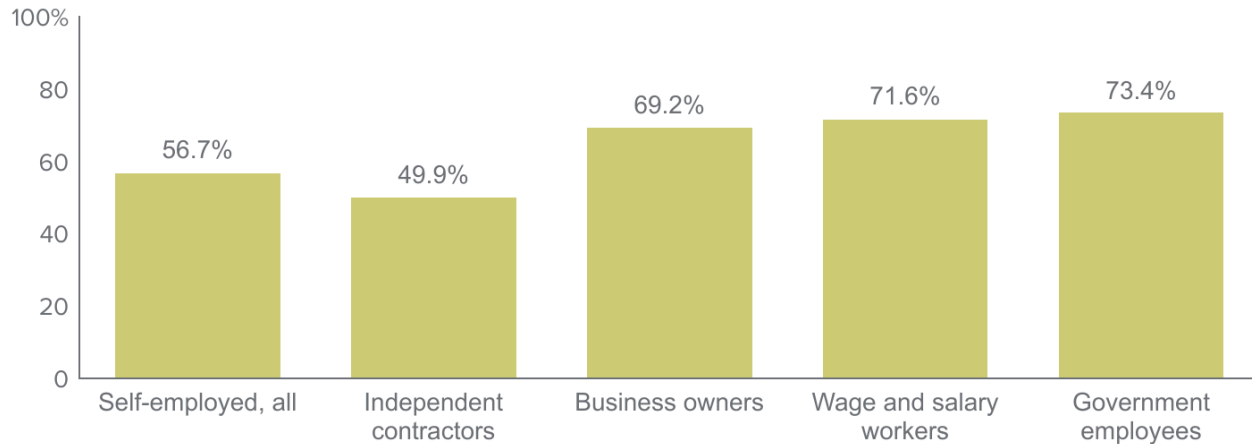
Independent Contractors Are Significantly Less Likely to Work Full Time, Year-Round

Self-employed workers are less likely than their wage and salary counterparts to work full-time, year-round. But when we disaggregate the self-employed into business owners and independent contractors it becomes apparent that it is the latter group who brings the share down. While 69 percent of business owners work full-time year-round, only 50 percent of independent contractors do so (Figure 6).

¹⁰ This is consistent with the literature, which finds that female-owned non-employer firms have lower annual probabilities of hiring their first employee than male-owned firms (Fairlie and Miranda, 2016).

FIGURE 6

The self-employed are less likely to work full-time, year-round



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

NOTES: Workers 16 and older. We define full-time, year-round workers as those who usually worked at least 35 hours per week for 50 to 52 weeks in the reference period.

Among those working part-time or full-time for part of the year, 23 percent of wage and salary workers were attending school compared to only 6 percent of self-employed. This is consistent with the fact that more than half (52%) of wage and salary workers were 34 years or younger compared to 20 percent of self-employed. Interestingly, we find that a similar share of self-employed and wage and salary workers were working part-time in 2022 because they could not find a full-time job (7% and 6%, respectively) which is probably related to the tight labor market that characterized 2022. Pre-pandemic about 12 percent of self-employed and 8.5 percent of wage and salary workers reported that they were working part-time because they could find full-time work.

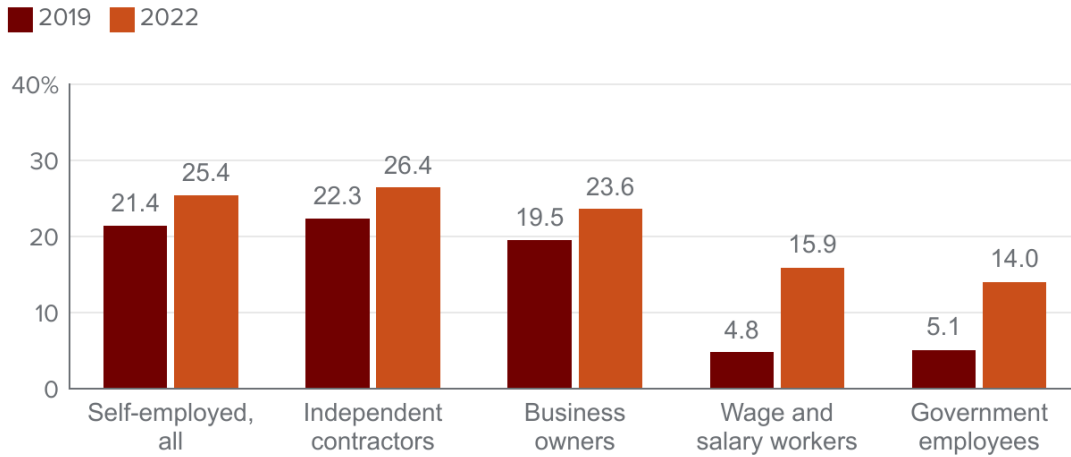
Remote Work Continues to Be More Prevalent among the Self-Employed

Even prior to the pandemic, self-employed workers were more likely to work from home compared to wage and salary workers. In 2022, 25 percent of self-employed worked from home, up from 21 percent in 2019. Meanwhile, 16 percent of wage and salary workers worked from home in 2022, which is more than 3 times higher than the share who did in 2019 (see Figure 7).

Consistently, a [recent survey of U.S. workers from PEW Research Center](#) found that 47 percent of self-employed workers say their job can mostly be done from home, compared with 38 percent of those who are not self-employed. Moreover, 60 percent of self-employed workers with jobs that can be done from home say they work from home all of the time, compared with 32 percent of those who are not self-employed.

FIGURE 7

Self-employed workers continue to be more likely to work from home



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

Business Owners Earn, on Average, More than Wage and Salary Workers

While earnings data for self-employed are complicated to measure¹¹, research suggests that on average business owners earn more than wage and salary workers (Levine and Rubinstein 2017). But independent contractors earn less.¹²

Among men, the typical full-time year-round business owner earned \$87,300 (median) in 2022, 36 percent more than the median wage and salary worker (\$64,300). However, men who were independent contractors earned substantially less (\$50,200). The same pattern holds for women, with smaller gaps.

Of course, as we mentioned before, only 57 percent of the self-employed work full-time year-round. Figure 8 also shows that even when we include those who work less, business owners earn more than wage and salary workers (by a slightly larger margin).

Among full-time year-round workers, the male/female earnings gap is larger among business owners (29%) and independent contractors (27%) than among wage and salary workers (18%). When we look at the entire civilian population, we find that the gender gaps are larger (55%, 48% and 30%, respectively).

¹¹ Self-employment income can come from the profits of a business, from a contractual arrangement, or from gig work – all with varying requirements and incentives to report. In this section, we utilize self-reported income from earnings, business, and other sources, as recorded in the ACS. All ACS respondents are asked about their individual and household income, regardless of whether they work for themselves or are employed for wages and salary. This self-reported income data is measured before taxes and transfers and does not include non-monetary compensation (like health insurance or retirement savings). We note that different sources of income are subject to varying tax policy, so at the end of the day, the economic standing of workers according to the categories in this section could vary even if self-reported income looks similar.

¹² According to Levine and Rubinstein 2017, much of the earnings gap between incorporated business owners and wage and salary workers reflects person-specific influences. Nonetheless, there is a large, additional boost in earnings when individuals switch into incorporated self-employment. For example, the mean residual annual earnings of an individual who switches from a salaried job to become an incorporated business owner rise by 18 percent (relative to salaried workers) after accounting for individual effects.

FIGURE 8

Business owners earn, on average, more than wage and salary workers

Median earnings in the past 12 months (In 2022 inflation-adjusted dollars)

	Men (full-time, year-round)	Women (full-time, year-round)	Men (all workers)	Women (all workers)
All	67.7K	59.7K	54.1K	42.1K
Independent contractors	50.2K	39.4K	36.8K	24.9K
Business owners	87.3K	67.6K	79.2K	51K
Private for-profit wage and salary workers	64.3K	54.4K	52.1K	40.1K
Private not-for-profit wage and salary workers	70.9K	66K	60K	52.3K
Local government workers	84.6K	70.7K	75.1K	55.3K
State government workers	83.3K	68.1K	69.5K	53.5K
Federal government workers	82.1K	66.8K	77.2K	61.4K

SOURCE: 2022 American Community Survey 1-Year Estimates. Tables S2418 and S2419.

NOTES: Civilian employed population 16 years and over.

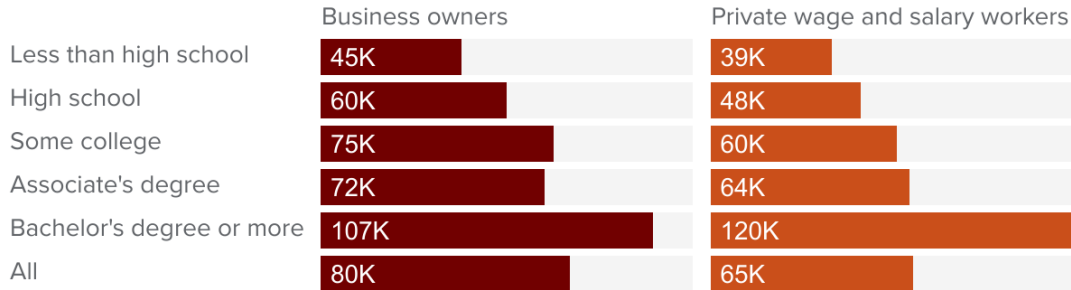
Earnings vary in surprising ways across gender and educational attainment lines. For men without college degrees, the typical business owner earns *more* than the typical wage and salary worker (Figure 9). The opposite is true for men with college degrees (earn 11 percent *less* than wage and salary workers). For women, the differences are less pronounced. However, the disadvantage for college educated business owners is similar for women as for men. It is worth noting that the gender earnings gap is more pronounced among business owners than among wage and salary workers.

FIGURE 9

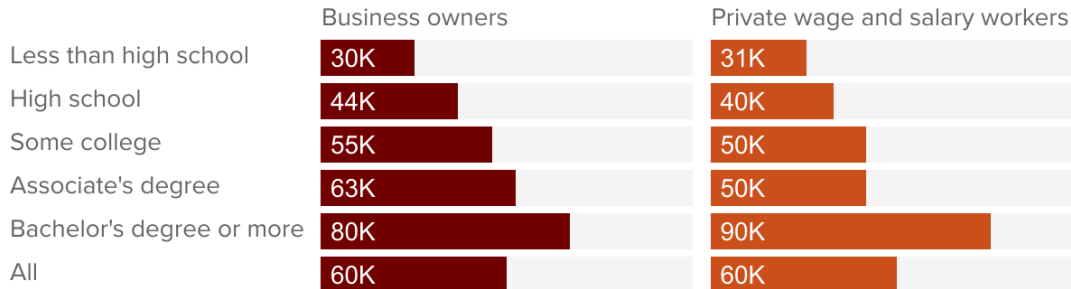
Self-employed workers without a college degree earn more than private wage and salary workers

Median annual wage earnings, \$

Men



Women



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

NOTES: Restricted to full time, year-round workers.

What Happened with Self-Employment During the Pandemic?

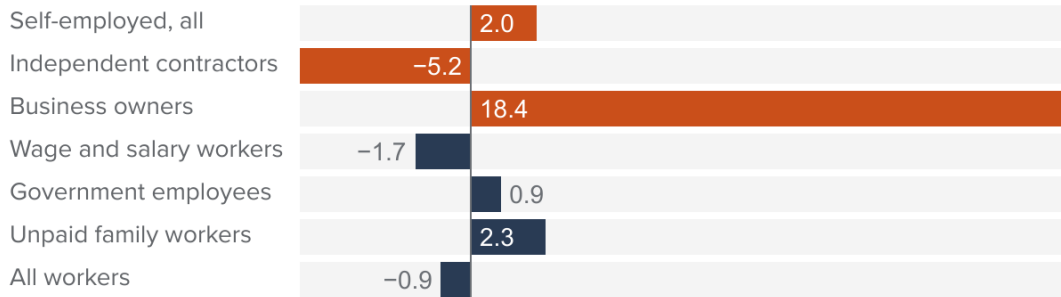
In 2022, overall employment in California was down 0.9 percent from pre-pandemic levels, but self-employment was up by 2 percent. However, patterns diverged for business owners versus independent contractors: the number of business owners was 18 percent higher in 2022 than it was in 2019 but the number of independent contractors was 5 percent below pre-pandemic levels (Figure 9).¹³ Consequently, the share of business owners increased from 3.5 percent in 2019 to 4.1 percent in 2022.

¹³ Refer to Figure A7 to see annual changes relative to pre-pandemic 2019.

FIGURE 10

Two very different trends in self-employment by incorporation status

Percent change in employment 2019–22



SOURCE: 2019 and 2022 American Community Survey 1-Year Estimates.

Who drove this increase in business ownership? Between 2019 and 2022, more women, especially non-white women, became business owners. Business ownership as primary employment among women increased 24 percent compared to 15.5 percent among men. The number of Latino and Black business owner women increased 53 percent and 77 percent, respectively, while the number of white self-employed women increased 5 percent. While this still left the business ownership likelihood among Latino (2.3%) and Black (1.9%) women well below the figure for whites (4.2%) and Asians (3.8%), this is a substantial gain in a relatively short period.

This positive trend in incorporated self-employment among women seems to be tied to having children at home. Women with children saw an increase of 27 percent while those without kids registered a 22 percent increase. Many women may have turned to self-employment seeking more flexible work arrangements, which were furthered with the shift to remote work during the pandemic.

Another noteworthy pattern is that the increase in business ownership was driven by people with less education. Between 2019 and 2022, the number of self-employed with less than a high school diploma increased 43 percent, 23 percent among those with a high school diploma, and 14 percent among college graduates.

In terms of age, total self-employment grew 28 percent among the youngest age group (16–24), driven by a 55 percent increase in business owners and a 17 percent increase in independent contractors. With this increase, the self-employment rate for this age group increased from 3.1 percent to 3.9 percent. In 2022, 33 percent of all self-employed age 16 to 24 years were business owners.

The youngest and less-educated workers were more likely to see increases in business ownership as primary employment. Given that business ownership confers higher earnings typically for less-educated, recent shifts may be a positive development. However, if this discourages younger workers from entering educational or career pathways, it could impede their mobility over the longer run. As self-employment grows among women and people of color it will be important to better understand the specific barriers and challenges that these groups face to building long-term success.

Conclusion

Self-employment in California is a key building block of the state's labor force and economy. However, self-employment takes a variety of forms, with varying outcomes. Self-employed Californians who are business owners tend to earn more but they are also more likely to be men, white, highly educated, and US-born. Those who are independent contractors earn less and are less likely to be working year-round, but this form of self-employment may provide an income source to a wider range of Californians, demographically speaking. When addressing challenges of the economy for workers who are not in standard wage/salary arrangements, it is critical to understand these distinctions among the self-employed across background and for business owners versus independent contractors.

Independent contractors have been in the forefront of recent legislation (Assembly Bills 5 and 2257, both in 2020) and voter proposition (Prop 22, in 2020), concerning their status as contractors versus employees and concerns around fairness of how they are treated in the labor market. This debate is especially focused on app-based gig workers, which are not fully captured in this report since most gig workers are doing that work to supplement their main job but this report focuses on the latter (Bannon and Wolf 2021). Going forward it will be important to consider the impacts of any policy on other self-employed Californians, who indeed make up a large share of the labor market and represent much of the innovation and vitality of the state's economy. In all, effective policymaking requires a clear understanding of which groups will benefit the most from self-employment – or what could make it so – and what actions could open up all routes to financial prosperity across the board.

Data and Methods

Measuring Jobs Created by Self-Employed Californians

This analysis uses data from the Current Population Survey. For a quarter of the sample every month, the CPS records the number of employees hired by the self-employed. Self-employed in this context and section of the report is defined as persons who work for profit or fees in their own business, shop, office, farm, etc. (US Census Bureau 2015). The CPS defines those as self-employed incorporated as those who work for an incorporated business (corporation) that they own (US Census Bureau 2015). This gives us a better understanding of the jobs being created and the economic opportunities created by the self-employed.

Due to the small sample size of the number of employees hired by the self-employed (See Appendix Table A4), we follow Kochhar (2021) in combining multiple months of the CPS monthly data. For 2023, we utilize January to November (most recent available as of December 2023). This also has the benefit of reducing the effect of seasonal variation in hiring, by averaging across the year. Estimates of workers usually hired by the self-employed is dependent on a sample of self-employed workers that includes those who were absent from work. Samples include employed workers ages 16 and older, working full time or part time and not seasonally adjusted.

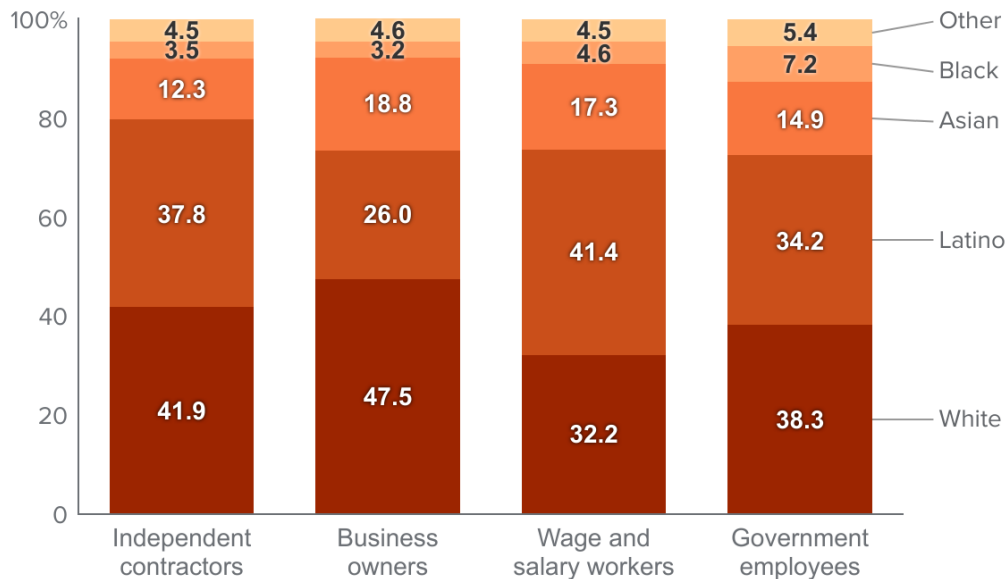
Most of the literature on job creation looks specifically at entrepreneurs and or small or medium sized firms, but little work is done on job creation and self-employment in general. Haltiwanger et al. 2010 interestingly find that after controlling for firm age, there was no systematic inverse relationship between net job creation growth rates and firm size. Fairlie and Miranda 2016 look at entrepreneurship, specifically the determinants of taking the leap from a non-employer to employer firm among startups, and find that Asian-owned and Hispanic-owned startups

have higher rates of hiring their first employee than white-owned startups. Burke, Fitzroy and Nolan (2001) is one of few papers that aim to look at what self-employment characteristics are more likely to create jobs. Using British data, they find that there is an apparent positive link between higher qualifications and job creation is chiefly present for males relative to females (Burke et al. 2001). Interestingly, they also find that only for females does not being full-time self-employed have a significant negative effect on job creation (Burke et al. 2001). In general, employment is important for overall economic growth, and although measuring the economic affect and economic multipliers of job creation by the self-employed is hard, we hope to shed some light on job creation dynamics by the self-employed in California.

Additional Figures and Tables

FIGURE A1

Self-employed workers are more likely to be white than their wage and salary counterparts

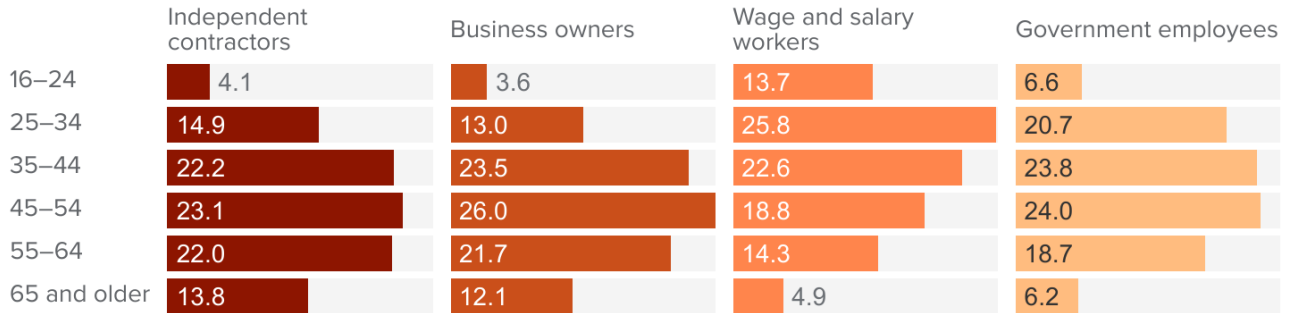


SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

FIGURE A2

Self-employed workers tend to be older

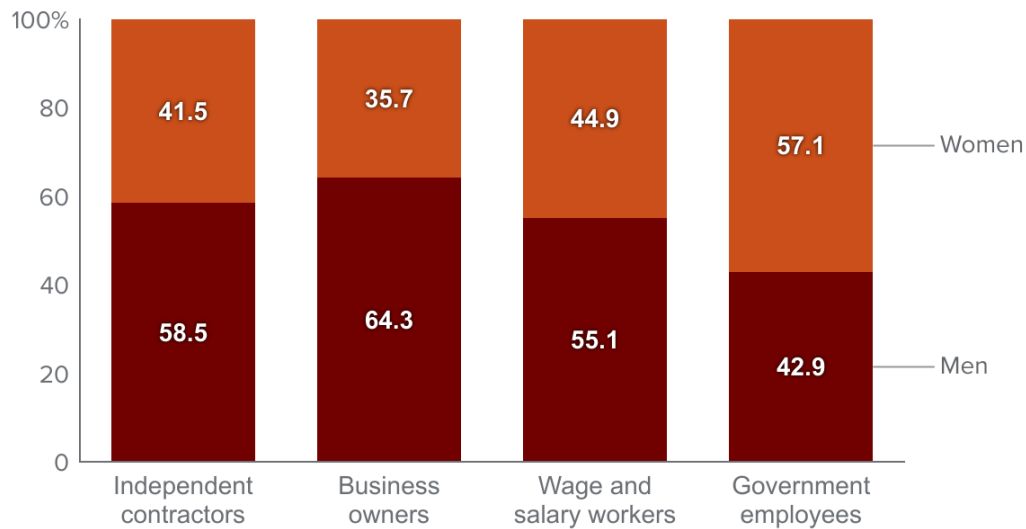
Percent



SOURCE: 2022 American Community Survey 1-Year Estimates, author's calculations.

FIGURE A3

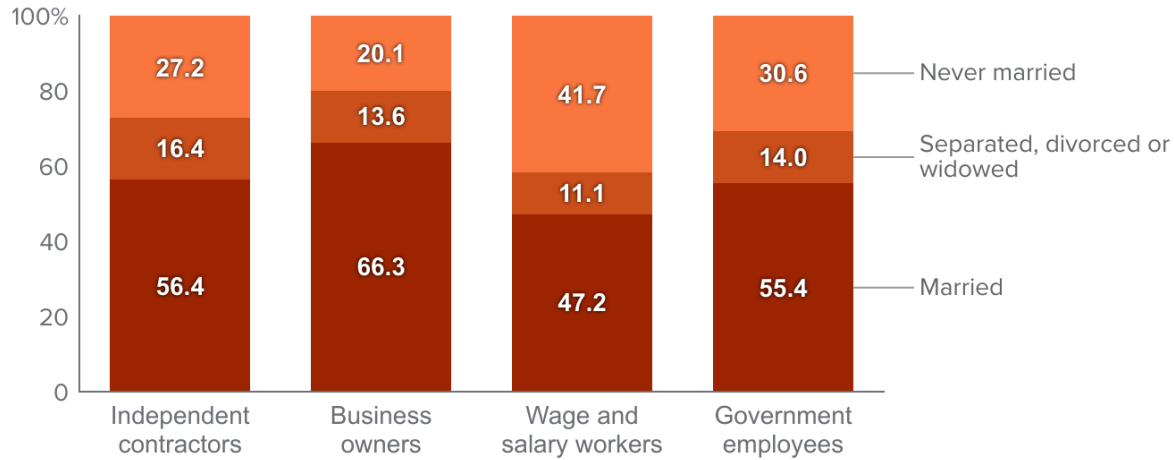
The self-employed, especially if incorporated, are more likely to be male



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

FIGURE A4

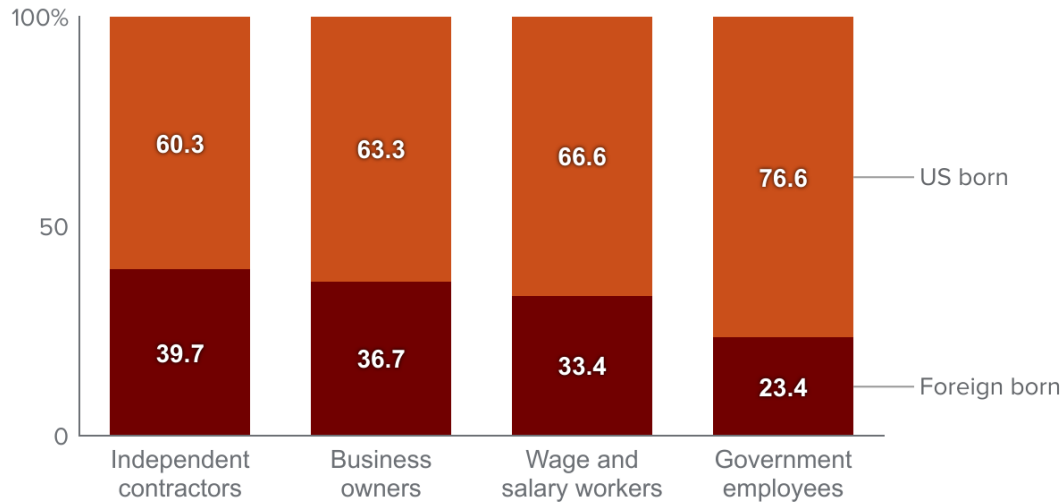
Two-thirds of incorporated self-employed are married, which is significantly higher than their wage counterparts



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

FIGURE A5

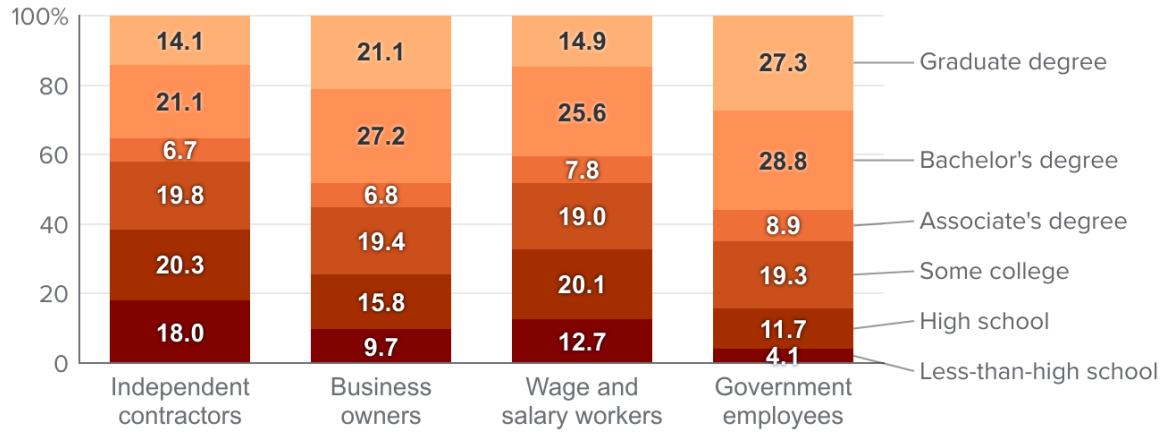
Independent contractors are more likely to be foreign born



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

FIGURE A6

Big differences in educational attainment within the self-employed by incorporation status



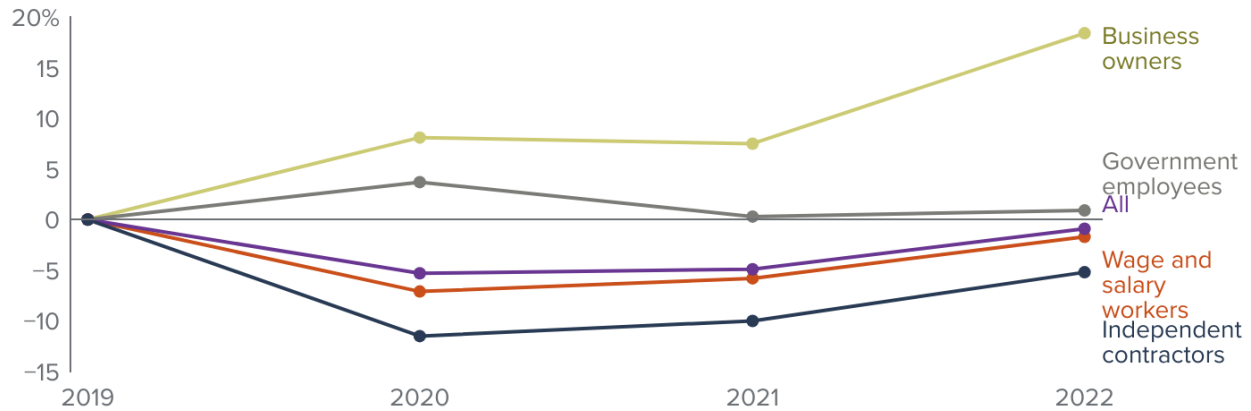
SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

NOTES: Workers 25 and older.

FIGURE A7

The number of incorporated self-employed has grown since the start of the pandemic

Percent change relative to pre-pandemic employment levels

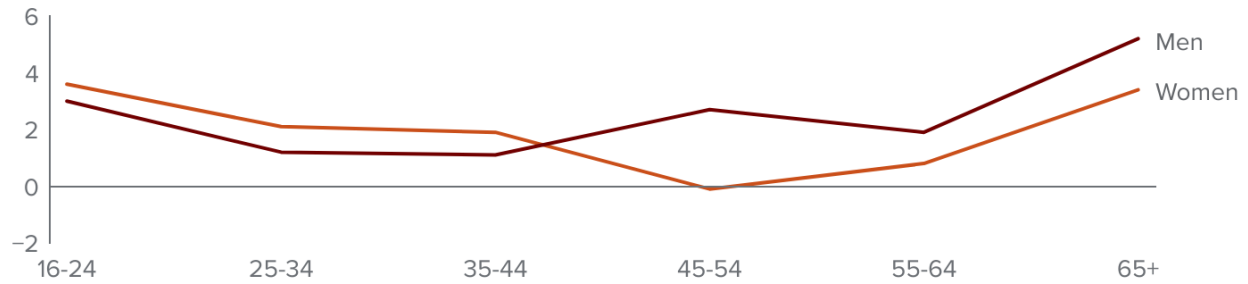


SOURCE: 2019 to 2022 American Community Survey 1-Year Estimates, authors' calculations.

FIGURE A8

Married people are much more likely to be self-employed than those never married but the size of the gap varies with gender and age

Percentage point difference in self-employment rates between married and never married workers



SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

Table A1

Employment distribution and self-employment rates by gender and industry

Percent

	Employment distribution - Men	Employment distribution - Women	Employment distribution - All	Self- employment rates - Men	Self- employment rates - Women	Self- employment rates - All
Agriculture, forestry, fishing, and hunting	2.4	1.3	1.9	10.9	9.7	10.6
Mining, quarrying, and oil and gas extraction	0.2	0.0	0.1	0.9	0.0	0.8
Utilities	1.0	0.4	0.8	1.3	0.0	1.0
Construction	11.3	1.5	6.8	21.7	14.3	20.9
Manufacturing	11.2	6.1	8.9	5.4	5.2	5.3
Wholesale trade	3.0	1.7	2.4	12.3	10.8	11.8
Retail trade	10.2	10.6	10.4	8.3	7.4	7.8
Transportation and warehousing	7.3	2.9	5.3	15.3	8.8	13.6
Information	3.5	2.5	3.0	11.6	10.1	11.1
Finance and insurance	3.2	4.3	3.7	13.1	6.4	9.6
Real estate and rental and leasing	1.9	2.2	2.1	31.0	28.8	29.9
Professional, scientific, and technical	10.3	9.3	9.8	18.0	15.0	16.7
Management of companies and enterprises	0.1	0.1	0.1	2.9	1.5	2.2
Administrative and support and waste management	5.4	3.5	4.5	22.7	19.0	21.4
Educational services	5.2	12.0	8.3	3.6	2.8	3.1
Health care and social assistance	6.2	20.6	12.8	10.3	7.5	8.2
Arts, entertainment, and recreation	2.7	2.4	2.6	23.6	18.4	21.4
Accommodation and food services	6.4	7.8	7.1	7.4	5.6	6.4
Other services, except public administration	4.1	5.8	4.9	22.9	36.2	30.2
Public administration	4.4	4.9	4.6	0.0	0.0	0.0
Total	100	100	100	13	10	12

SOURCE: American Community Survey 1-Year Estimates, authors' calculations.

TABLE A2

Top 5 occupations in terms of self-employment in each region

Northern Region (23.7%)	Los Angeles County (16.0%)	Orange County (22.2%)	Central Coast Region (16.0%)	Bay Area (15.9%)	Sacramento region (16.6%)	San Diego County (17.6%)	Central Valley (15.9%)	Inland Empire (18.7%)
Farmers, ranchers, and other agricultural managers (72%, 6.2%)	Maids and housekeeping cleaners (49%, 4.2%)	Other managers (25%, 6.6%)	Real estate brokers and sales agents (71%, 3.7%)	Real estate brokers and sales agents (58%, 4.3%)	Real estate brokers and sales agents (64%, 4.5%)	Chief executives and legislators (4.3%, 5.2%)	Hairdressers, hairstylists, and cosmetologists (70%, 3.7%)	Other managers (26%, 4.7%)
Other managers (30%, 5.7%)	Construction managers (31%, 3.5%)	Chief executives and legislators (33%, 5.1%)	Chief executives and legislators (41%, 3.6%)	Landscaping and groundskeeping workers (38%, 3.2%)	Chief executives and legislators (43%, 3.3%)	Real estate brokers and sales agents (55%, 3.6%)	Real estate brokers and sales agents (59%, 3.3%)	Chief executives and legislators (38%, 3.4%)
Hairdressers, hairstylists, and cosmetologists (85%, 5.2%)	Landscaping and groundskeeping workers (48%, 2.9%)	Maids and housekeeping cleaners (46%, 14.0%)	Landscaping and groundskeeping workers (32%, 3.4%)	Lawyers (27%, 3.2%)	Maids and housekeeping cleaners (52%, 3.1%)	Maids and housekeeping cleaners (44%, 3.3%)	Landscaping and groundskeeping workers (27%, 3.1%)	Real estate brokers and sales agents (53%, 3.3%)
Real estate brokers and sales agents (79%, 3.6%)	Real estate brokers and sales agents (54%, 2.7%)	Real estate brokers and sales agents (65%, 3.9%)	Construction managers (45%, 2.8%)	Management analysts (29%, 2.6%)	Childcare workers (38%, 3.0%)	Hairdressers, hairstylists, and cosmetologists (60%, 2.8%)	Farmers, ranchers, and other agricultural managers (50%, 3.1%)	Landscaping and groundskeeping workers (26%, 2.9%)
Construction managers (53%, 3.0%)	Chief executives and legislators (34%, 2.6%)	Hairdressers, hairstylists, and cosmetologists (53%, 2.6%)	Lawyers (37%, 2.3%)	Hairdressers, hairstylists, and cosmetologists (65%, 2.6%)	Construction managers (30%, 2.7%)	Lawyers (30%, 2.7%)	Chief executives and legislators (38%, 2.8%)	Maids and housekeeping cleaners (32%, 2.8%)

SOURCE: 2022 American Community Survey 1-Year Estimates, authors' calculations.

NOTES: For this ranking we only consider occupations with self-employment levels of at least 2 percent of total self-employment in the region and with self-employment rates of at least 25 percent. The first number in parenthesis (in green) is the self-employment rate of the occupation in the region and the second number (in orange) is the proportion of all self-employed workers in the region in that occupation.

Table A3

California regions used in this report

Region	Number of counties	Counties
Northern region	18	Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Sutter, Yuba
Sacramento region	4	El Dorado, Placer, Sacramento, Yolo
Bay Area	10	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma
San Joaquin Valley and Sierra	15	Alpine, Amador, Calaveras, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Mono, San Joaquin, Stanislaus, Tulare, Tuolumne
Central Coast	4	Monterey/San Benito, San Luis Obispo, Santa Barbara, Ventura
Inland Empire	3	Imperial, Riverside, San Bernardino
Los Angeles	1	Los Angeles county
Orange	1	Orange county
San Diego	1	San Diego county

Table A4

Hiring of other workers by the self-employed

Total Paid Employees	California-Frequency	California - Percent	Rest of US - Frequency	Rest of US - Percent
1	79,905	21	687,695	21
2	63,054	17	531,964	16
3	33,393	9	372,285	11
4	34,693	9	275,889	8
5	18,788	5	263,038	8
6	16,085	4	130,817	4
7	8,885	2	83,155	2
8	9,913	3	126,719	4
9	4,951	1	61,331	2
10	36,231	10	144,076	4
11	5,976	2	27,713	1
12	14,580	4	73,633	2
13	2,855	1	36,029	1
14	6,975	2	28,592	1
15	2,831	1	87,903	3
16	1,571	0	22,216	1
17	0	0	7,223	0
18	1,419	0	28,222	1
19	0	0	6,468	0
20	8,806	2	69,344	2
20+	26,862	7	283,838	8
Total	377,773	100	3,348,150	100

SOURCE: 2023 IPUMS CPS Monthly Data.

NOTES: Total paid employees' column is dependent on having at least one paid employee. Samples include employed workers ages 16 and older, working full time or part time and not seasonally adjusted. Estimates refer to 11 month averages for 2023 from January to November (latest available data).

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