



The Gig Economy in San Francisco: Prevalence, Growth, and Implications

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Online Platforms and The Restructuring of Work

- Over the last forty years, the U.S. economy has been reorganized itself in ways that have dramatically changed work, careers, and earnings opportunities.
- Among the inter-linked economic changes are:
 - the decline of vertically-integrated large corporations, and the growth of subcontracting and networks of small businesses.
 - the growth of alternative work arrangements, including temporary work, on-call work, day laboring, and multiple part-time job holding.
 - the rise of independent contracting
- In this environment, over the past ten years, online platforms which blur the boundary between independent contractor and employee have found a market, and grown rapidly, by offering people an opportunity to find employment, or rent a capital asset they control, in new ways, creating new opportunities for income generation.
- This "Gig Economy" creates the potential to expand alternative work arrangements across the economy, magnifying the risks and opportunities, and creating new policy challenges.

The Debate Over the Gig Economy

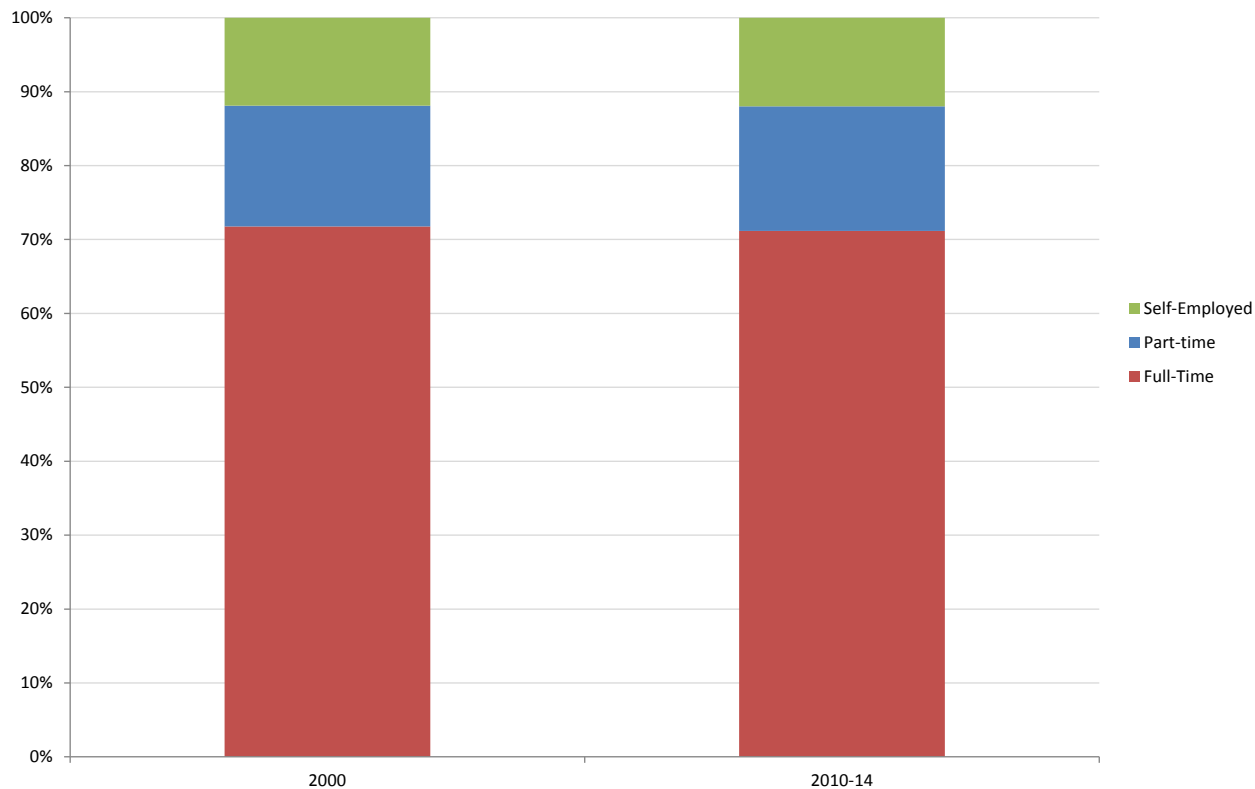
- Most of the debate concerning the Gig Economy deals with the perceived threat it poses to employment stability, earnings, rights, and power in the workplace.
- Much of the growth in alternative work arrangements has been driven by businesses seeking to reduce labor costs, in the face of intensified competition and deregulation. The ability of an employer to unilaterally select the most advantageous form of work places pressure on worker wages and contributes, it is argued, to the stagnation of wages seen across the U.S. economy for most of the past several decades.
- There is, however, some evidence that aspects of the Gig Economy create flexibility that at least some workers find desirable. Katz and Krueger, for example, found that most independent contractors – truly independent, self-employed workers who are essentially one-person businesses – prefer that status to full-time wage employment.
- On the other hand, this research, among others, found that most part-time and temporary workers would prefer full-time work to their current work status. Flexibility is often imposed, against the wishes and interests of full-time workers.
- In some cases, the flexibility of the new economy creates benefits, at least for some workers. In others, the benefits of flexibility seem to accrue to the employer, and employees have less control over their working lives. The research and debate around the Gig Economy centers on the magnitude of these two effects.

The Gig Economy in San Francisco: Key Questions

- To our knowledge, no study has been done before on the prevalence of alternative work arrangements in San Francisco.
- Many online platforms that facilitate alternative work arrangements are headquartered in the city, including Uber, Lyft, and Airbnb.
- By reputation, San Francisco has a highly dynamic, and entrepreneurial labor force that pioneers new styles of work. Is it fair to call San Francisco a leader in the Gig Economy?
- This report attempts to answer the following questions:
 - How significant are alternative work arrangements, such as part-time work, temporary work, and self-employment in San Francisco's workforce?
 - Are other forms of work growing more rapidly than full-time wage employment?
 - How does the city compare to other areas?
 - What types of jobs are most commonly held by full-time, part-time, and self-employed residents of the city?
 - What are the demographics associated with these different classes of work?
 - What implications does the class of work (part-time, full-time, or self-employed) have for worker earnings?
 - How does the prevalence of alternative work arrangements compare with findings on the use of online platforms in San Francisco?

Approximately 27% of Workers in San Francisco Are Either Self-Employed or Work Less than 35 Hours per Week

Distribution of Employed Residents of San Francisco, by Part-Time, Full-Time, and Self-Employed Status, 2000 and 2010-14



The Census Bureau publishes data on the employment status, usual hours worked, and self/wage employment status. An individual may be classified as self-employed or a wage employee, but not both.

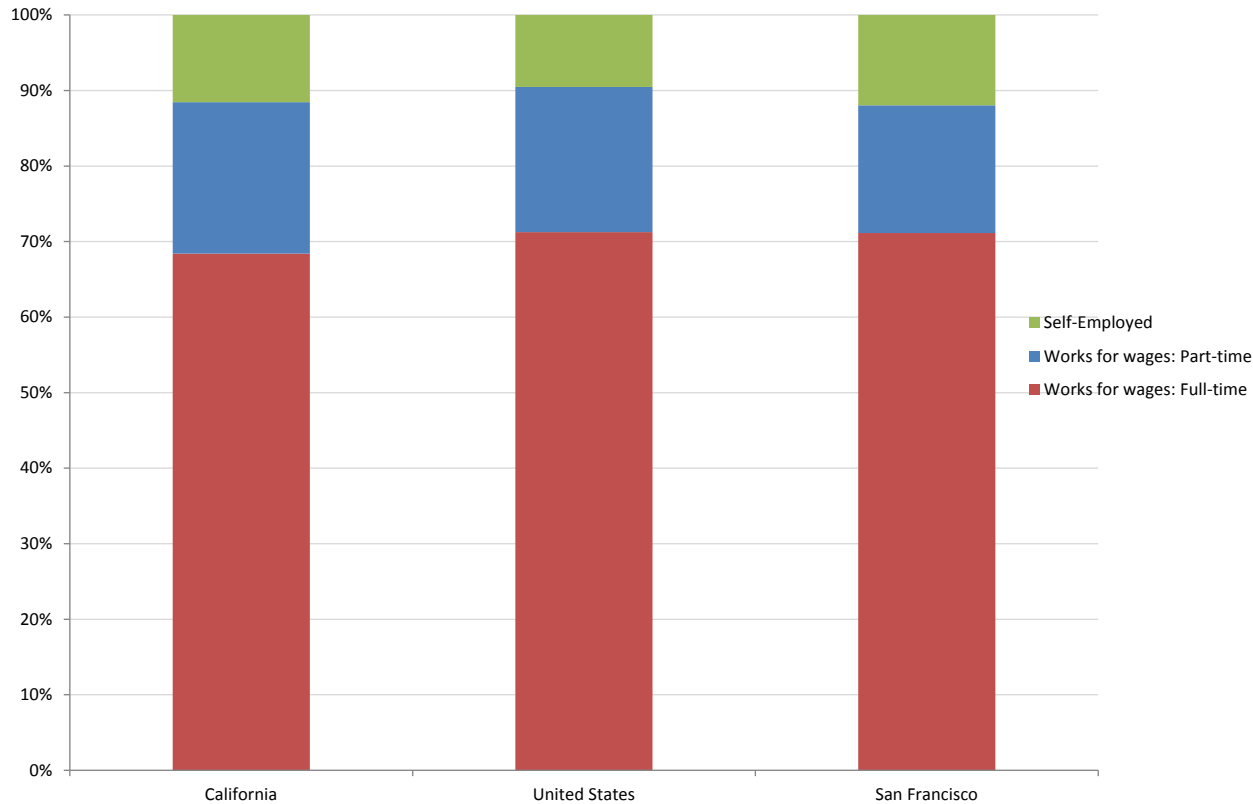
The chart to the left indicates the percentages of employed San Francisco residents who reported being full-time, part-time, or self-employed, in both the 2000 Census, and the 2010-14 5-year American Community Survey.

The data reveals that about 71% of employed San Franciscans work for wages full-time, 12% were self-employed, and 17% worked for wages less than 35 hours per week. There was virtually no change to the distribution during the 2000s.

In the chart, a part-time worker is defined as someone who reported working less than 35 hours a week. The Census does not capture the number of jobs held by an individual worker, so someone with multiple part-time positions would be considered full-time.

Compared to the State and Nation, San Francisco Has Fewer Resident Part-Time Employees, and More Full-Time and Self-Employed Residents

Distribution of Employees by Full-Time, Part-Time, and Self-Employed Status: San Francisco, California, and the U.S., 2010-14

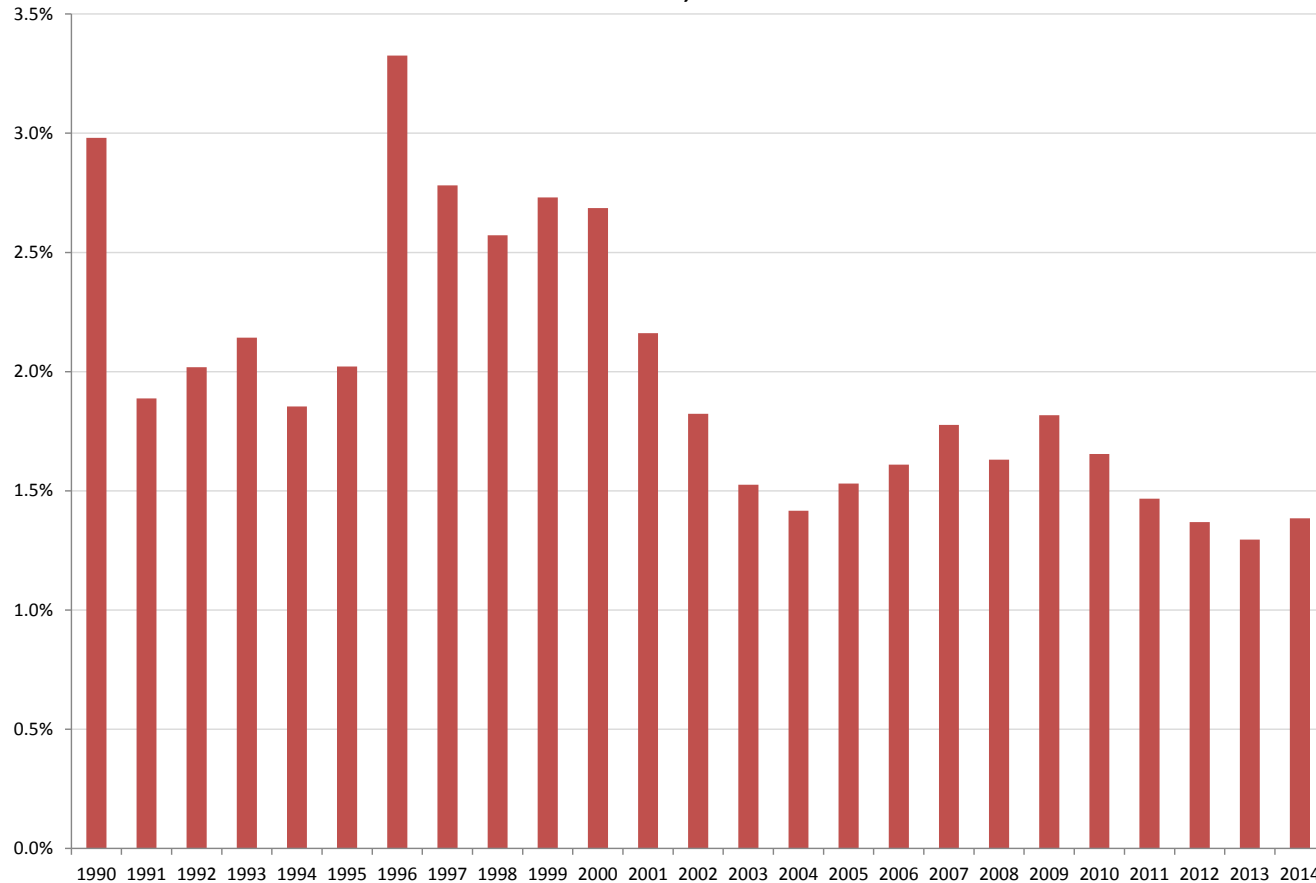


San Francisco's economy and socio-economic profile is significantly different from either the State of California or the United States, and this is reflected in the data on alternative work arrangements.

Compared to the larger areas, in 2014 a smaller percentage of San Franciscans work part-time (17% vs. 19% for the U.S. and 20% for California), and a higher percentage of San Franciscans reported being self-employed (12.0% vs. 11.6% for California and 9.5% for the U.S.).

Temporary Employment Has Declined as a Share of all San Francisco Employment Since 2000

Employees in the Employment Services Industry as a Percentage of All Wage Employment, San Francisco, 1990-2014

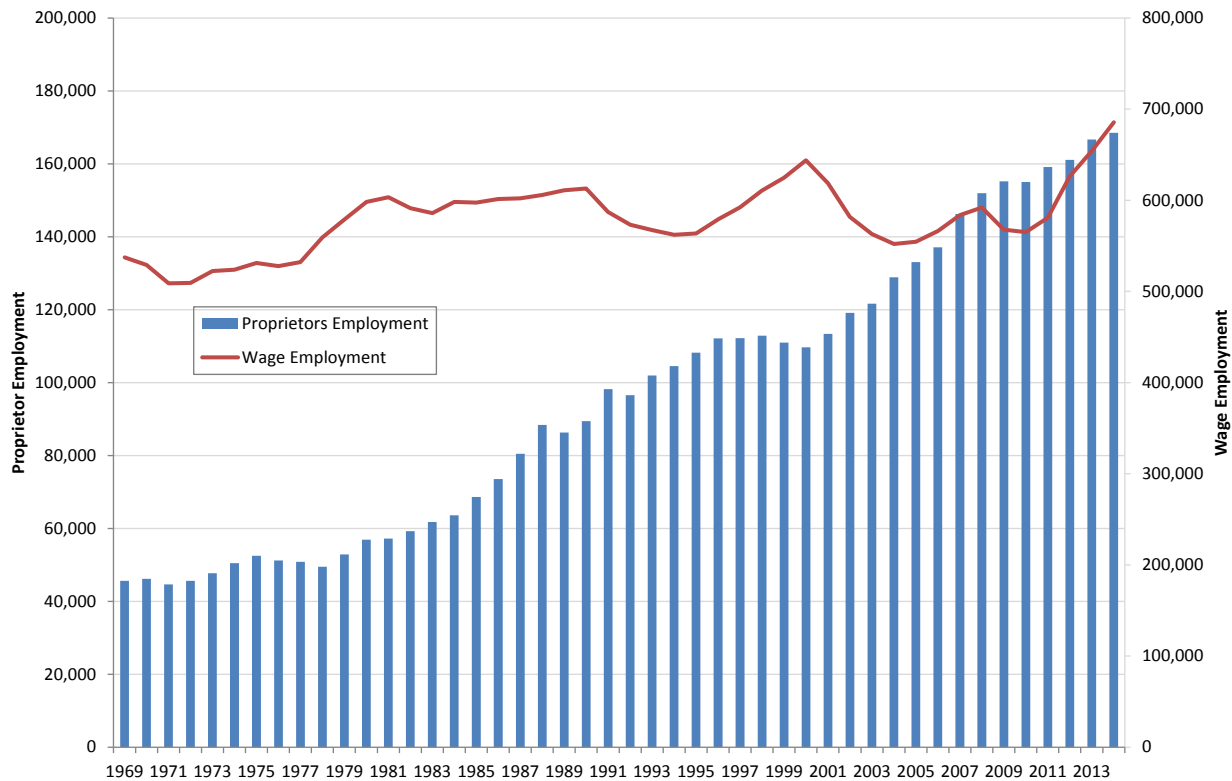


Unlike self- and part-time employment, which appear to be slightly growing as a share of all employment in San Francisco, temporary employment- where a worker is employed by an agency and sent to clients on a short-term basis – is clearly declining as a part of San Francisco's employment picture.

By 2014, these agencies accounts for less than 1.5% of all wage jobs in San Francisco, down from over 3% in the late 1990s. This data does not distinguish between full- and part-time work, either temporary or long-term.

Long-Term Wage- and Self-Employment Trends in San Francisco

Proprietors and Wage Employment in San Francisco, 1969-2014



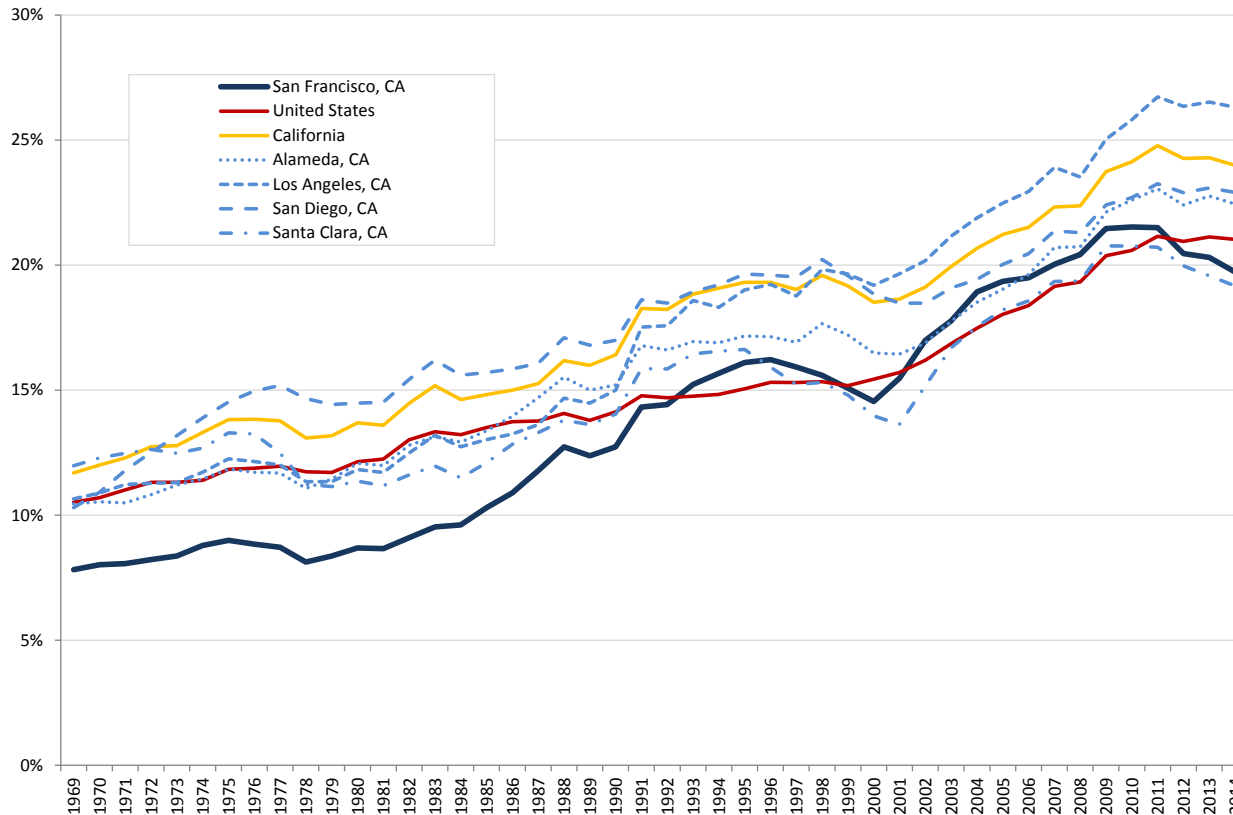
The Bureau of Economic Analysis publishes the longest time series data on the San Francisco economy. The BEA distinguishes between wage employment and "proprietors employment", which includes self-employed individuals, and general partners of partnerships, most of which are very small businesses.

The data shows that proprietors employment in San Francisco has grown consistently since the 1980s, when alternative work arrangements became more prominent across the country. From 2010 to 2014, however, wage employment has grown more rapidly in the city.

This data is based on the tax returns of businesses based on San Francisco, whose principals may or may not be city residents. It also double-counts individuals who operate more than one business.

Proprietors Employment Trends: San Francisco, California, and the United States

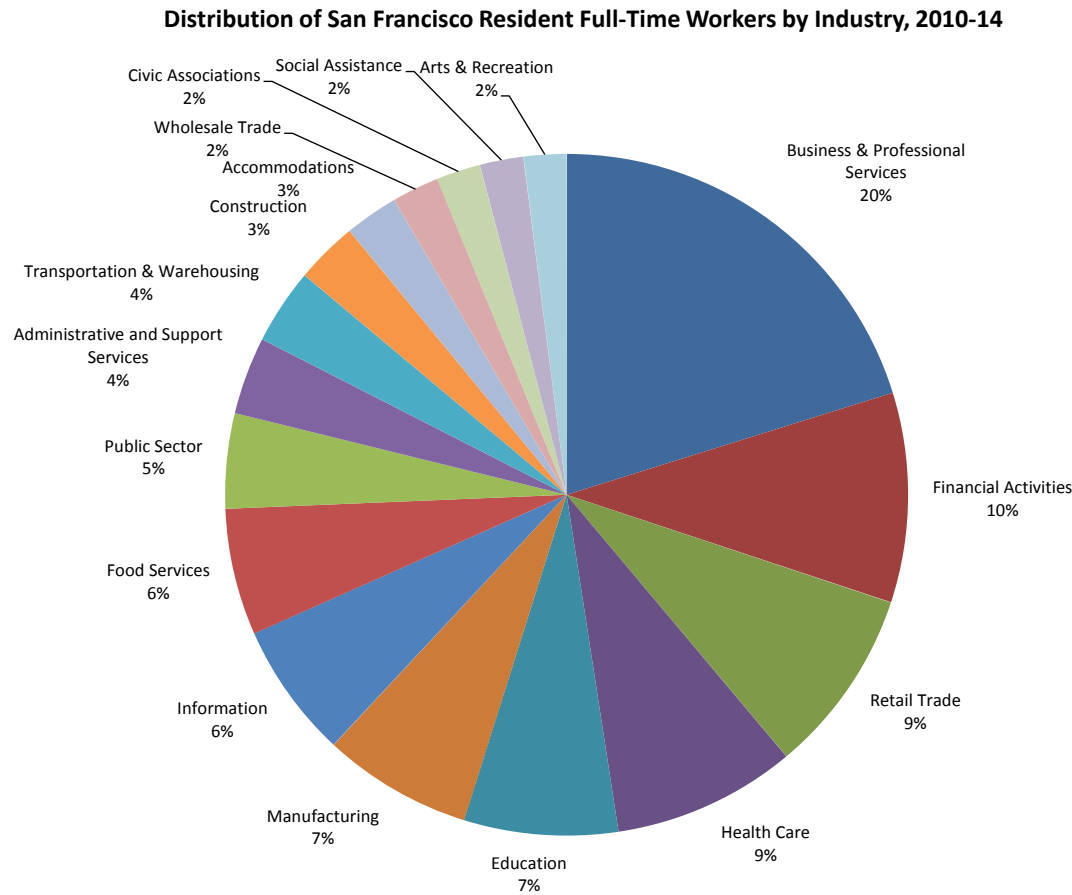
**Non-Farm Proprietors Employment as a Percentage of Total Employment,
San Francisco, Four California Counties, California, and the U.S., 1969-2014**



The growth of proprietors employment has not been unique to San Francisco. The chart to the left illustrates proprietors' share of total employment in San Francisco, four other large counties in California, the State as a whole, and the U.S. as a whole, over the 1969-2014 time period.

It is interesting that two areas with the strongest concentration of technology employment—San Francisco and Santa Clara counties—have lower rates of self-employment than California or the U.S. as a whole. This is probably due to both areas strong growth in wage employment, particularly during this decade, but also to the diversity of economic activities that attract self-employment. We turn to this issue on the next slides.

Full-Time Employment Patterns are More Reflective of the Overall City Economy



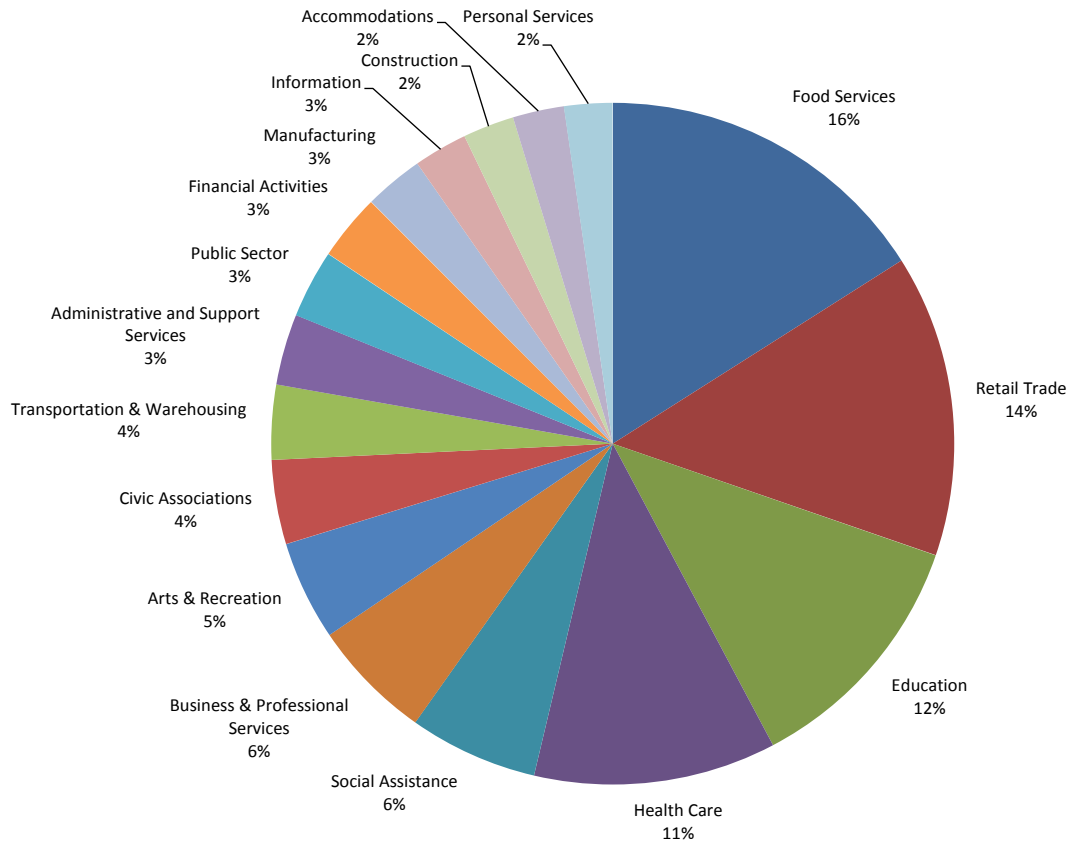
The industries of the 73% of employed San Franciscans who work for wages more than 35 hours per week are reflective of the city's overall economy, as might be expected.

Business and Professional Services and Financial Activities (including Real Estate) together account for 30% of full-time employment, and other major industries such as Retail Trade and Health Care

This data is based on the industry of workers who live in San Francisco, and differs somewhat from the distribution of jobs that are located here. Industries with significant numbers of in-commuters, such as Construction, Information, and the public sector, are under-represented here, while industries such as retail trade and manufacturing are over-represented, relatively to their share of total San Francisco employment.

Part-Time Employment is Most Prevalent in Low-Wage Industries Such As Food Services and Retail Trade

Distribution of San Francisco Resident Part-Time Workers by Industry, 2010-14



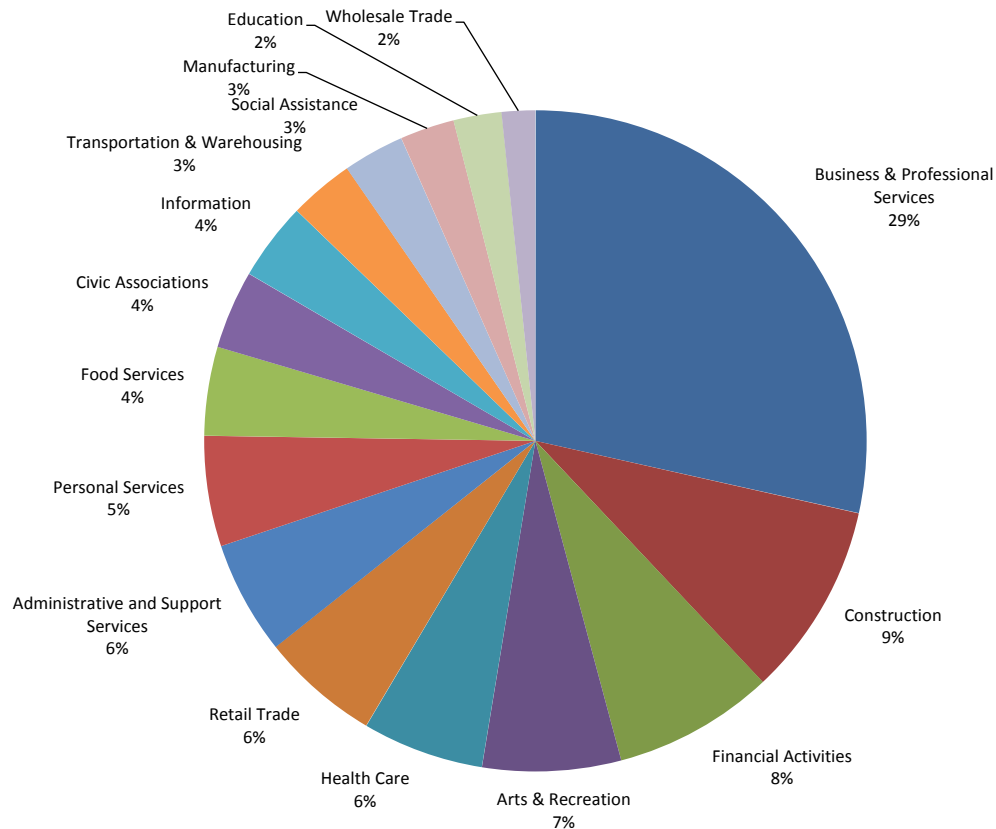
The pie chart to the left indicates the industry sectors where San Francisco resident part-time employees worked, during the 2010-14 time period. This report classifies a worker as part-time if he or she usually works less than 35 hours in a week.

Most part-time workers in the city are concentrated in low-wage industries, including food services, retail trade, and social assistance. While education and health care are not necessarily low-paying industries, they do have significant numbers of low-paying jobs, which could be reflected in this chart.

Large and well-paying industry sectors, such as Business & Professional Services, Information, and Financial Activities, employ relatively small numbers of part-time workers.

Self-Employed San Franciscans Are Concentrated in Business & Professional Services, Construction, Finance/Real Estate, and the Arts

Distribution of San Francisco Resident Self-Employed Workers by Industry, 2010-14

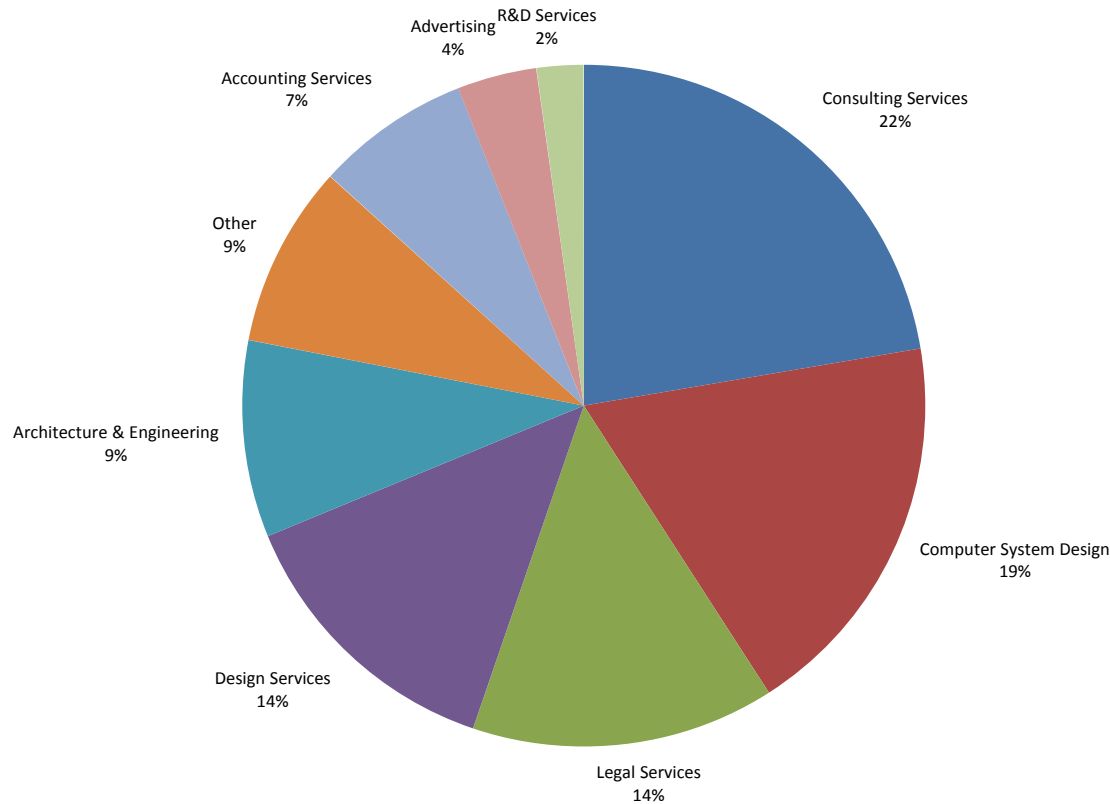


Self-employed San Francisco residents are disproportionately concentrated in industries such as Business & Professional Services, but also lower-wage industries such as Construction, Arts & Recreation, and Personal Services.

Real estate brokers and agents, who are often considered self-employed, are classified under Financial Activities.

Within Professional Services, Self-Employed Workers are Concentrated in Creative Industries

Detailed Industry Distribution of San Francisco Resident Self-Employed in Professional Services, 2010-14



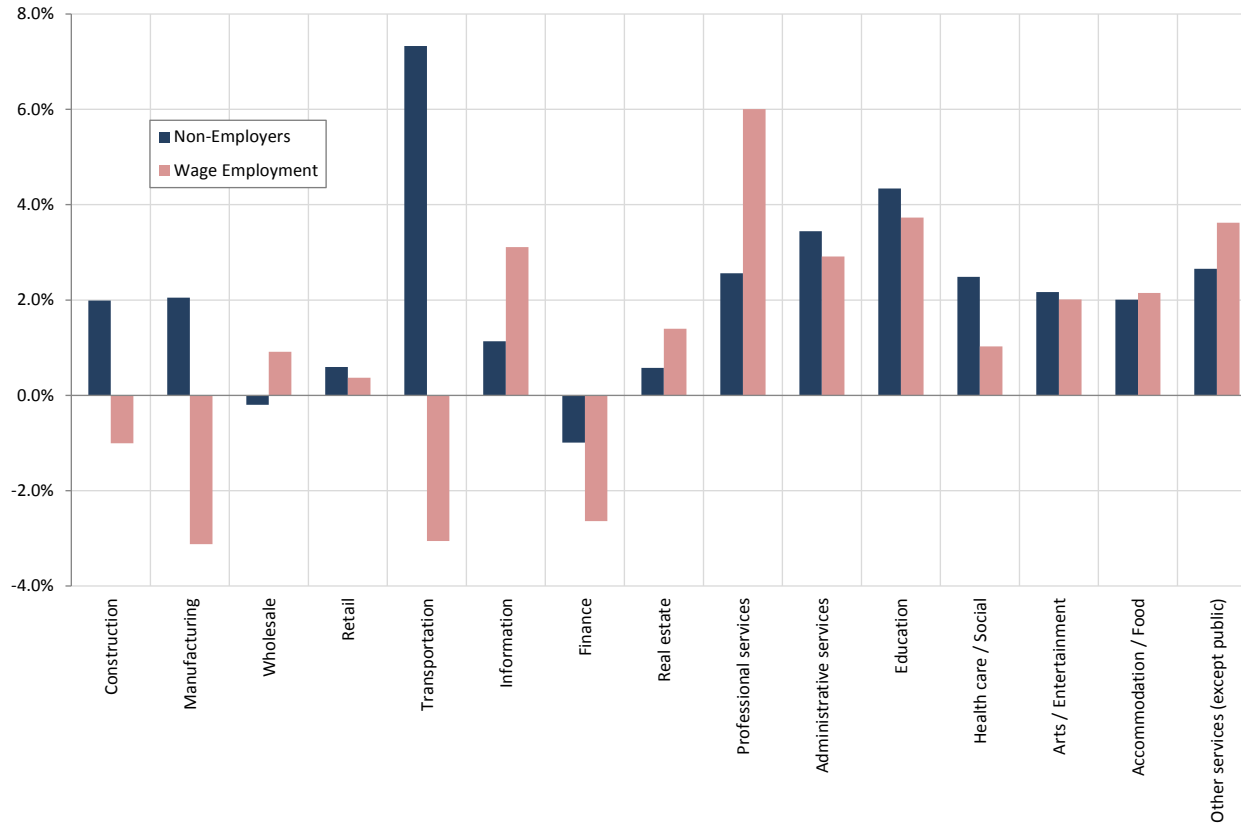
Most self-employed San Francisco residents within the Professional Services sector work as solo consultants, software developers, lawyers, designers, architects.

In general these are activities characterized by high levels of skill, creativity, and, in many cases, a capacity for solo or small group work.

Much like artistic work, these activities can be conducive to self-employment, when a worker has established a reputation or brand that allows them to generate business on their own.

Self-Employment in Transportation and Manufacturing Has Grown More Quickly than Wage Employment Over the Past Ten Years

Annual Growth in Non-Employers and Wage Employment By Industry, San Francisco, 2004-13



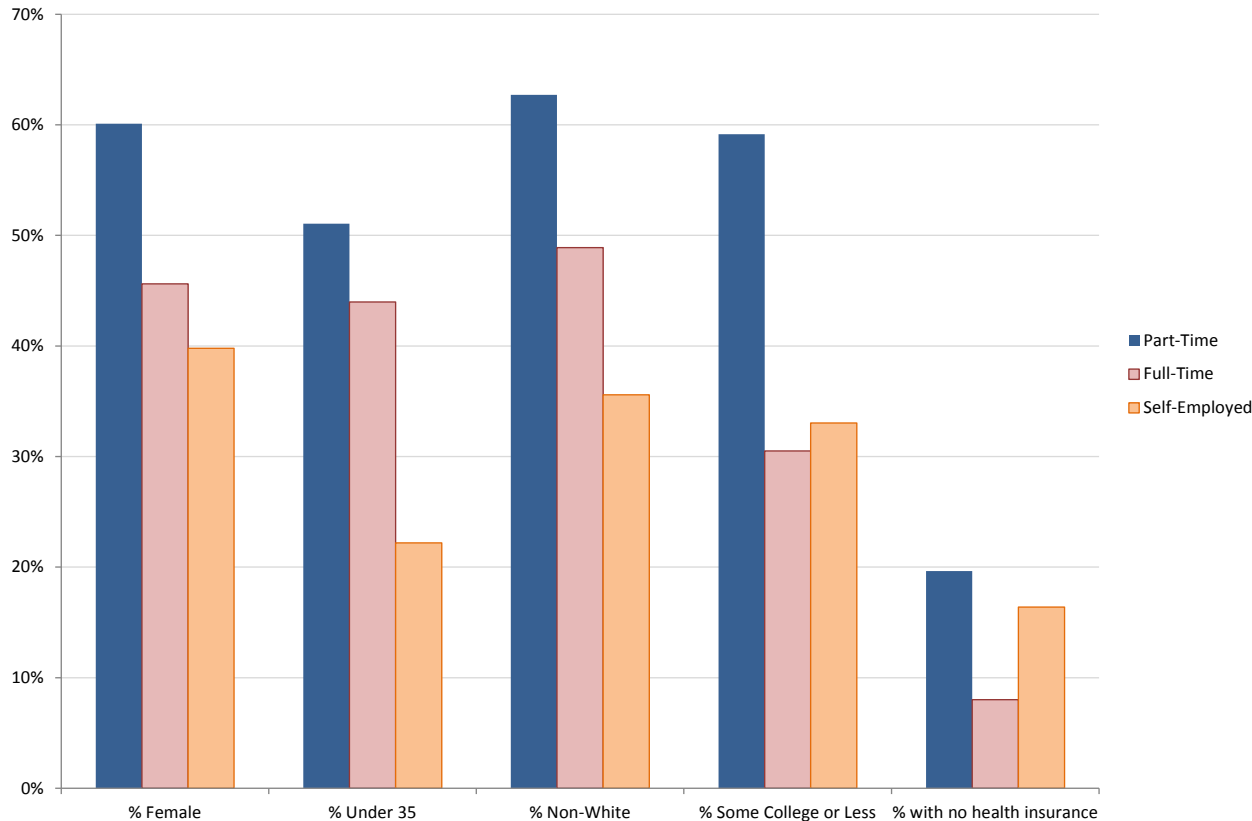
Source: Census Bureau; BLS. Note: Because of reclassification issues, wage employment growth for health care and other services is for the 2004-12 period.

We can obtain a longer-term view of the dynamics of self-employment across the city's economy by using a different data source, the Non-Employer business statistics published by the Census Bureau. These include businesses that are known to the Census through tax filings and other administrative records

Even though the plurality of self-employed San Francisco residents work in Professional Services, self-employment in that industry has actually been growing more slowly than wage employment in that industry. Conversely, self-employment seems to be emerging in restructuring industries within the city's economy such as Transportation and Manufacturing. Although we do not have direct data on the use of online platforms in the city, the growth of Transportation Network Companies and platforms that support sales by artisan manufacturers likely contribute to the growth of self-employment in those industries.

Demographics of Workers by Employment Status

**Selected Socio-Economic Characteristics of San Francisco Residents,
By Class of Work, 2010/14**



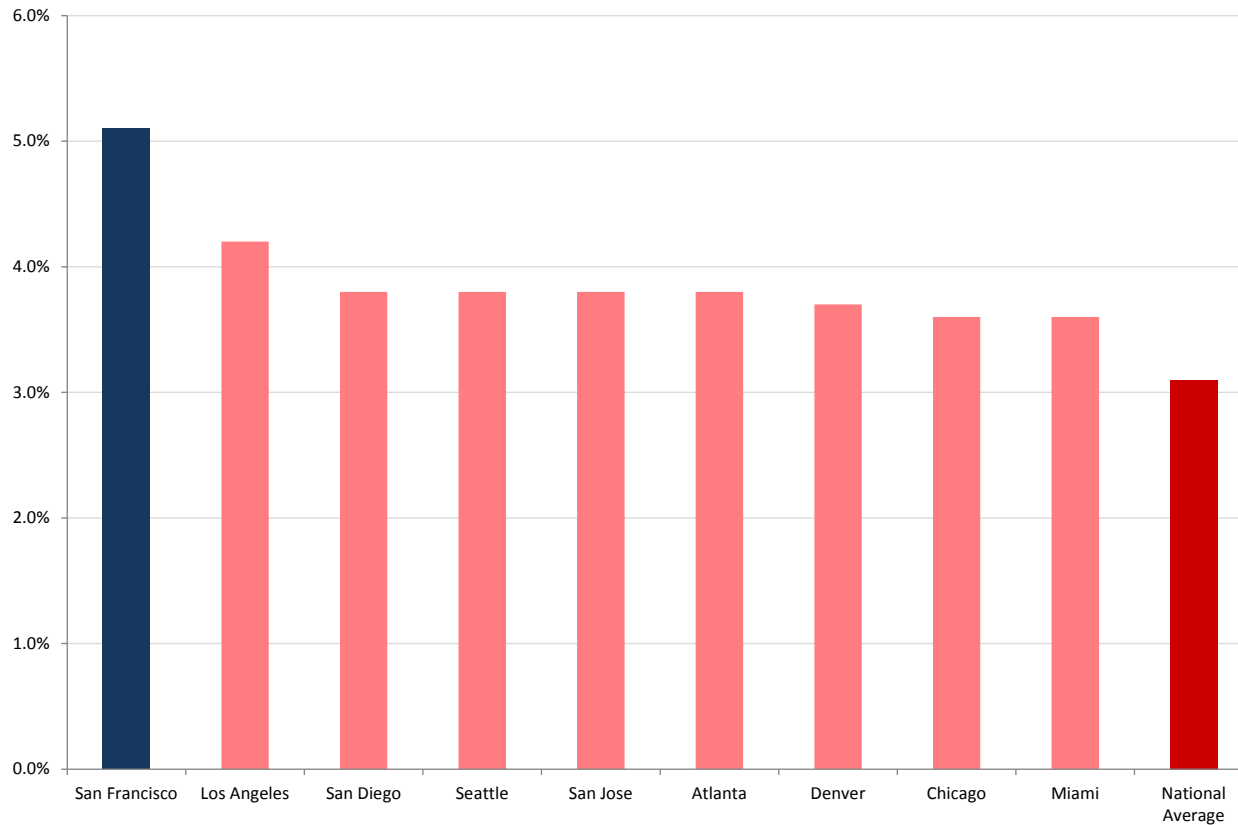
The Census data also allows us to cross-tabulate worker's self-identified status as self-employed, full-time, or part-time wage worker, by other socio-economic and demographic characteristics.

In general, the data reveals what might be expected from the industry distributions of self-employment, full-time, and part-time workers. Self-employed workers are disproportionately in higher-wage industries like professional and financial services; these workers are also more likely to be men, older, white, and more highly educated.

Conversely, workers typically working less than 35 hours a week, disproportionately in low-wage industries, are more likely to be women, young, people of color, and have less than a 4-year degree. Part-time workers in San Francisco are even less likely to have health insurance than self-employed residents of the city.

New Research That Directly Measures Income from Online Platforms Suggest San Francisco Leads Other Regions and the U.S.

Percentage of Adults Who Earned Income from Online Platforms in the Past Twelve Months, San Francisco, Other Metropolitan Areas, and the U.S., As of September 2015



The JP Morgan Chase Institute (JPMCI) has access to financial data from its affiliated bank, and has recently studied income flowing from selected online platforms to its checking customers across the U.S.

Breaking this data down by the metropolitan area of the recipient, its researchers estimate that 5.1% of adults in the San Francisco area receive at least some income

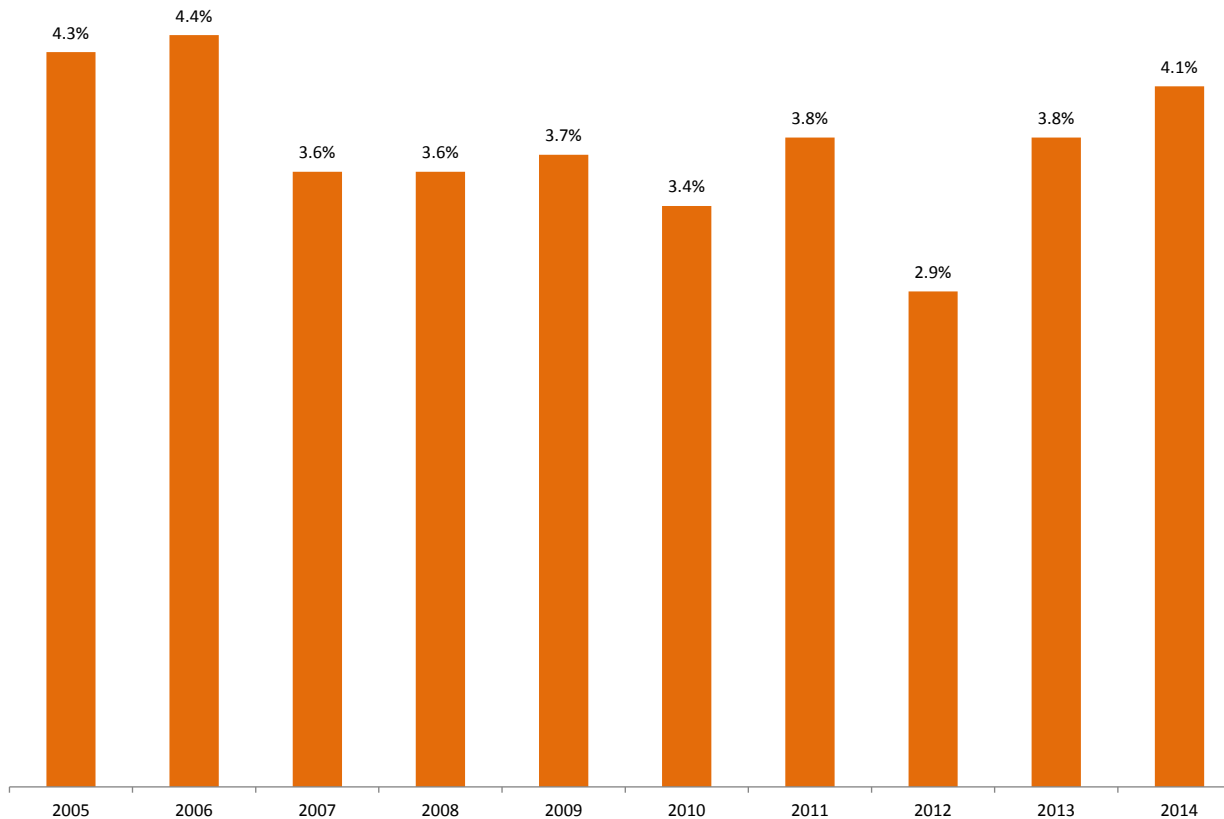
Because this data comes from a private source, it is not possible to cross-reference it by the Census information already discussed. However, the Institute also reported that, across the U.S., platforms accounted for between 10% and 30% of income, depending on the type of platform and the income of the user. This suggests that in many cases online platforms supplement, rather than replace, existing sources of income, such as wages.

Self Employment and Online Platforms in San Francisco

- There are indications that the use of online platforms in San Francisco is growing rapidly. For example, the ride-sharing company Lyft reports a 450% growth in the number of San Francisco residents applying to drive for the company, between the end of 2013 and June 2016.
- Nevertheless, the JPMCI numbers for San Francisco suggest that the percentage of people generating income from online platforms (5%) is significantly smaller than the percentage of workers in San Francisco who are self-employed.
- This suggests that the online platforms may be capturing an increasing share of people who are already self-employed, and not yet expanding the total number of self-employed. For the most part, with the exception of Transportation, online platforms do not seem to be driving the growth of self-employment.
- For this reason, we may conclude that, to this point, online platforms have had relatively little role in shifting people from full or part-time work into self-employment, and are not enabling a wholesale shift from wage work to a "1099 economy".
- Instead, we may detect the influence of these platforms in the way they allow workers to supplement their incomes. Because the ACS asks about multiple sources of income for wage workers and the self-employed, we can examine whether or not an increasing number of people are generating both wage income *and* business income in San Francisco.

A Small But Increasing Percentage of San Franciscans Earn Both Wage and Business Income

Percentage of All Employed San Francisco Residents Earning Both Wage and Business Income, 2005-2014



In the American Community Survey, a worker can be self-employed or wage-employed but not both. However, they are asked about, and can report, both wage and business income.

If online platforms were creating opportunities for supplemental income for wage employees, rather than permitting them to transition to full self-employment, then that would be reflected in the Census data through an increased percentage of San Francisco resident workers who earned both forms of income.

The chart to the left indicates the percentage of San Francisco resident workers who indicated receiving non-zero amounts of both wage and business income in a given year. While there has been a sharp increase since 2012, which could reflect the new influence of online platforms, over a longer period of time the pattern seems to reflect the economic cycle. A higher percentage of residents earned both wage and business income in 2006 than in 2014.

Conclusions

- The substantial percentage of self-employed San Francisco workers reflect broad changes in the economy, and in the regulation of work, that began in the 1980s. By 2013, approximately 30% of employed San Francisco residents work part-time, or are self-employed.
- These trends pre-date, and have not been not caused by, the influence of online platforms that facilitate self-employment, and which have emerged during the past ten years. In fact, in the most recent economic cycle, wage employment in the city has grown more rapidly than self-employment.
- Moreover, while the number of San Francisco residents earning both wages and business income has increased during the current period of economic expansion, the pattern is cyclical and was no higher in 2014 than it was in the mid-2000s.
- Self-employment is most common in higher-wage industries, though industries like construction and increasingly transportation and manufacturing feature it as well. Part-time employees are most often found in lower-wage industries such as retail trade and food services.
- The demographics of self-employment, full-time employment, and part-time employment reflect a pattern in which, on average, self-employed workers are more advantaged, and part-time workers are less advantaged, than full-time workers.

Current Data Limitations, and Potential Directions for Future Research

- Conclusions about the impact of online platforms on the prevalence of alternative work arrangements are limited by the fact that the latest available government data dates to 2013 or 2014. There is significant evidence that the use of many platforms has increased rapidly since then.
- Data from the JP Morgan Chase Institute, from 2015, suggest that 5% of workers in the San Francisco area derive income from online platforms. If it was still accurate today, it would still represent a small fraction of the self-employed and part-time workers in the city.
- Because of these data limitations, there is still much we don't know about the potential impact of online platforms, particularly on struggling or disadvantaged workers. Does working through a platform increase the earnings of workers? Are there barriers to adoption? Are workers choosing flexible work through platforms in lieu of full-time employment? If so, why?
- The answers to questions like should shape public policy responses to the Gig Economy. However, they cannot be answered with the data that this report has relied on. Further research that explores the cost and benefits of platform use by workers can identify ways to use policies to improve economic outcomes.

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