Gender, Race, and Online Platform Work in the U.S.: *An intersectional analysis*

Rachel Marie Brooks Atkins[1*], Quentin Brummet[2], and Katie Johnson[2]

PRELIMINARY DRAFT – PLEASE DO NOT CITE

Abstract

This study uses data from the Entrepreneurship in the Population Survey (EPOP) to measure the experiences of online platform work by race, gender, and their intersection. Our analysis reveals gender and racial disparities in prevalence of online platform work. Earnings data show significant disparities, with platform workers who are women or racial minorities being disproportionately concentrated in lower income categories. Motivations for platform work also vary. Women frequently cite flexibility and a desire to supplement pay. Black workers pursue platform work for their primary source of income and to fulfill their entrepreneurial ambitions, while Hispanic workers emphasize career transitions and autonomy. The analysis also investigates the intersectional nature of labor market participation in the gig economy revealing substantial variation in prevalence of, earnings from, and motivations for online platform work within race and gender categories.

[1] Tobin College of Business, St John's University
[*] Corresponding author: atkinsr1@stjohns.edu
[2] NORC at the University of Chicago

1 Introduction

Over the past decade, the digital gig economy has expanded rapidly creating potentially new forms of work arrangements due to online platform work. While these potential new forms of work have the potential to profoundly impact labor markets, researchers debate whether and how digital technologies will drive changes in labor market dynamics. For example, digital platforms grow their workforce in part by promising the kind of democratization and autonomy that could transform the economic well-being of more marginalized workers within societies (Sundararajan, 2016). However, research and public discourse on the gig economy suggests that platform work may instead reproduce labor market inequality by gender and race (Cook et al., 2021).

Understanding these impacts is complicated by difficulties in accurately measuring the size and scope of the online platform workforce. Many survey-based measures suffer from measurement challenges, while administrative data-based measures often lack the detailed demographic information needed to characterize this workforce. Moreover, many existing estimates predate the COVID-19 pandemic which arguably accelerated the use of online platforms globally. This paper attempts to provide new information on these underexplored dynamics by estimating the prevalence of online platform work along with earnings and motivations of digital platform workers by gender, race, and their intersection. We use data from the Entrepreneurship in the Population (EPOP) survey, which addresses many challenges in measuring digital platform work identified by prior research studies (Abraham et al. 2024). Notably, the survey includes a robust screening process along with direct information on platform name to provide an accurate measure of online platform work. In addition, the survey was designed to facilitate subgroup analysis by characteristics such as gender and race, making it ideal for exploring differences across these groups.

This preliminary study shows that the prevalence of online platform work varies by gender and race. Specifically, women participate in online platform work at higher rates than men. Black workers are also overrepresented in platform work. But we also show that White women have lower participation rates in platform work than Black and Hispanic men, highlighting the importance of intersectional analysis.

Our analysis also highlights differences in the household income of online platform workers. Women and racial minorities are overrepresented in lower income brackets, while White men are overrepresented in higher brackets. Our income analysis also reveals that while gender disparities are prevalent, the dynamic shifts when introducing racial categories. While White women had higher shares of workers in lower income categories than White men, they were less concentrated in these lower brackets than both men and women of color.

We then investigate gender and racial differences in the motivations underlying online platform work. As suggested by prior literature, women are motivated more than men by a

desire for flexibility and supplemental income. Black workers rely on platform work as their primary source of income more than other groups. In contrast, Hispanic workers were more motivated by career transitions and helping loved ones than other groups.

This analysis contributes to prior literature both by improving on previous estimates of the gender and racial composition of the online platform workforce and by providing new estimates on the household income and motivations of these workers. We also build on prior work by adding the complexities that arise from applying an intersectional lens, showing that gender differences take on new meaning when disaggregated by race.

This paper proceeds as follows: Section 2 reviews prior literature on the online platform workforce. Section 3 describes our data and measures, while section 4 presents our results. We conclude in section 5 by discussing the limitations of our study, its relevance for policy, and recommendations for future research.

2 Online Platform Work by Gender and Race

A robust literature has shown issues with measurements of independent contracting generally and, more specifically, online platform work (a subset of independent contracting mediated by online platforms) (e.g., Abraham et al 2024). Neither administrative data generated from tax filings nor large-scale national surveys were designed to identify and measure online platform work precisely. Given the differences in how the data are collected, the two sources often produce different and, at times, contradictory estimates of various kinds of self-employment and independent contracting, each with its shortcomings.

Administrative datasets generally combine various tax filings from different sources. They cannot provide important demographic information, such as the race or gender of the worker, unless combined with survey data. Large-scale surveys such as the American Community Survey (ACS) and Current Population Survey (CPS) were designed long before the rise of the online gig economy. Thus, their regularly fielded questionnaires do not directly ask about digital platform work. More recent iterations of the CPS – Contingent Worker Supplement included questions about online platform work, and a robust literature investigates the potential measurement challenges with these studies (Abraham & Houseman, 2022). Researchers have conducted several smaller shorter-term surveys to address the issues identified with the CWS (Robles & McGee, 2016; Katz & Krueger, 2019; Bracha and Burke, 2021).

Our analysis extends prior work by using data from one such survey, the Entrepreneurship in the Population Survey (EPOP). Its questions target online platform workers, directly addressing concerns in the CWS and improving on other surveys created to capture these workers (Atkins et al., 2024). The survey also covers 2022-2024, thereby presenting a picture of work in the post-COVID-19 era. It also provides robust demographic data, allowing for intersectional analysis.

Estimating the Prevalence of Online Platform Work by Gender and Race

The body of literature estimating the size of the online platform workforce is small, but those providing estimates on the demographic composition of online platform work are even smaller. Studies that provide some information on these workers' characteristics offer limited analysis of their gender or racial composition, finding different and sometimes contradictory results that may be partially explained by differing methods, data, and analytical approaches.

Robles and McGee (2016) estimate "on and offline income generating activities" from the Survey of Enterprising and Informal Work Activities conducted by the Federal Reserve Board in 2015. The survey found that 56% of gig workers are female, and 44% are male, suggesting a slight overrepresentation of women in online gig work relative to traditional labor market patterns. In terms of race, the EIWA data indicates that 64% of gig workers are White, while 12% are Black and 16% are Hispanic. These findings suggest that racial minorities comprise a share of the online workforce that is representative of their proportion in the U.S. population.

Abraham et al. (2019) utilized data from the Gallup Education Consumer Pulse Survey fielded in 2018 and 2019 to explore the prevalence of online platform work. Their study also reported work prevalence by gender and racial demographics. They find minimal gender differences, with 3.2% of men and 3.0% of women reporting engagement in online platform work. However, significant racial disparities were evident. While 2.8% of Whites and 2.6% of Asians reported performing gig work, the rates were higher for other racial minorities, with 4.6% of Blacks and 2.7% of Hispanics participating. These findings suggest that Black workers may be participating in online platform work at higher rates than other groups.

Abramowitz and Joung (2024) take a different approach using data from the Panel Study of Income Dynamics (PSID) from 2003 -to 2019. They utilized machine learning techniques on open-ended responses to identify online platform work and draw distinctions between online gig work as a primary and secondary job. They find that of workers who relied on online platform work as their primary source of income, 63.3% were men. Forty-one percent of workers were White, 22% were Black, and 25% were Hispanic. For those engaged in online work as a secondary source of income, the gender distribution remained skewed toward men (63.8%), but Whites constituted a more significant share (65.7%), with Blacks accounting for 22%. The authors did not report shares of Hispanic workers in this category. While their approach improved on prior work by illuminating heterogeneity in the characteristics of workers using online platforms for their primary versus secondary work, their estimates appear to be outliers in some cases. The gender gap and Black share of workers are much higher than other estimates, which may have resulted from how their LLMs were trained to identify gig work. For example, the overall results would be biased if the types of platforms it was taught to recognize skew more toward male and Black workers.

We add to this prior work through an expanded analysis of gender and race using data from the EPOP survey. Like Abramowitz and Joung, we report estimates for those who performed online platform work as a primary job in the prior week separately from those who engage in platform work less frequently. We then use the detailed screening process in the EPOP survey to disaggregate further by type of platform work, distinguishing platforms used for services from those used for selling. We further build on prior work by estimating the gender and race compositions of online workers and rates of online platform work within these demographic categories using the same data source. We also add to our understanding of prior estimates by investigating the intersection of gender and race to uncover heterogeneity within these groups.

Measuring Earnings from Online Platform Work by Race and Gender

Very few studies to date have investigated whether there are gender or racial differences in income for platform workers. For example, Abramowitz and Joung (2024) estimate a mean annual income of $26K for main job online platform workers using nationally representative PSID data but do not disaggregate their estimate by gender or racial subgroups.

Much of the existing literature on the earnings of platform workers by race and gender are derived from case studies of specific platforms or subsectors of the broader digital gig economy. One of the most cited studies examined the gender pay gap among online platform workers using data from Uber. Cook et al. (2021) document a pay gap of about 7% between men and women drivers on the ridesharing platform. The researchers attribute the gap to gender differences in experience on the platform, locations where drivers worked, and driving speed. Another study by Liang et al. (2018) uses data from an online platform that allows workers to bid on various jobs. Their analysis shows that female workers earned only 81.4 percent of the wages earned by male workers on the same platform. They attribute little less than half of the wage gap to factors including gender differences in bid timing and budget.

We contribute to this literature by providing estimates of household income earned by online platform workers from a nationally representative sample disaggregated by gender and race. Moreover, we analyze earnings at the intersection of gender and race to investigate whether there are differences between gender categories by race.

Motivations for Online Platform Work by Race, Gender, and their Intersection

Prior research has identified a range of reasons that individuals pursue gig work, with income and flexibility emerging as consistent themes. For example, Berger (2019) emphasizes the role of autonomy and flexibility, noting that platform work appeals to individuals seeking greater control over their schedules and work environments. By contrast, Allon et al. (2018) find that the primary motivation for many online platform workers is the opportunity to supplement or replace traditional income sources. Other studies examine gender differences in motivation. These include Doucette and Bradford

(2019), who explore motivations among workers on Amazon Mechanical Turk. They find that men are more motivated by the opportunity to earn additional income, while women frequently cite job insecurity and the need for a fallback option as primary drivers. Churchill and Craig (2019) corroborate the findings of other studies, confirming that both men and women are motivated to pursue online platform work for income and flexibility. They also further show that for women (unlike men), this type of work allows workers to fit income-generating activities into their lives alongside unpaid work, including family commitments.

Jackson's (2024) qualitative analysis of platform worker motivations likewise finds evidence that online platform workers are motivated to seek supplemental income. Still, this analysis uncovers substantial heterogeneity at the intersection of gender and class. Workers earning more than $48K viewed this work as a fun way to explore their communities. However, those earning less than $48K expressed different motivations that varied by gender. Men in this group often described their platform work negatively as helping their families while transitioning to a different career or as a stopgap after losing prior employment. Women expressed more positive motivations for seeking online platform work as it provided quick and relatively easy means of earning money to support their families. Interestingly, Jackson did not find differences in motivation by race.

Together, these findings highlight the complexity of motivations for gig work, emphasizing that gender and class play a significant role in shaping why individuals choose this form of labor. While income and flexibility are universal drivers, differences in employment, family concerns, and long-term expectations underscore the importance of considering demographic diversity in analyzing online platform work. Importantly this literature also highlights the value of intersectional analysis to deepen our understanding of the ways these characteristics shape platform work. Therefore, we build on prior literature using the EPOP survey data to investigate how gender, race, and their intersection shape online platform workers' motivations.

3 Data and Measurement

Entrepreneurship in the Population Survey

The EPOP Survey was designed and fielded by NORC at the University of Chicago in partnership with the Ewing Marrion Kauffman Foundation. The survey's goal is to understand the scope of entrepreneurial activities of adults 18 and older in the United States by capturing information on the behaviors, challenges, and resources available to individuals during the entrepreneurial process. In doing so, it collects respondents' experiences with other self-employment activities, including online platform work and freelancing.

The survey has been fielded in three waves annually between 2022 and 2024. Our preliminary analysis only includes data from the first year of the survey. Subsequent years will be added to the analysis in future versions of this study.

Measuring digital platform workers and their characteristics

As noted above, the EPOP questionnaire addresses areas for improvement in prior surveys to more precisely capture online platform workers (Atkins et al., 2024). One common issue is that online platform workers often erroneously self-identify as employees in surveys. Before asking respondents to self-identify as online platform workers, the EPOP questionnaire prompts them using the following language to reduce confusion: *"Some people earn money through short, paid tasks or jobs online or in-person that are conducted through companies that coordinate payment for the service. This is sometimes referred to as 'gig work.'" R*espondents are also provided with examples of common online work platforms (e.g., Uber, Etsy, Fiverr). The survey also contains subsequent questions on whether the work activity uses an online app and asks for the name of the online platform.

Respondents are also asked whether platform work was performed as their primary or secondary job last week. Those who did not engage in online platform work in the prior week were asked about platform work over the past 6 months which is intended to capture more intermittent platform workers. Respondents answering yes to any platform work questions are asked a series of questions about the platform, which we use to disaggregate into subgroups of online service platforms, online selling platforms, and online survey platforms.

Of relevance to the analysis in this paper, the EPOP survey was explicitly designed to facilitate the study of workers by demographic categories, including race, gender, age, education, and geography down to the state and metropolitan statistical area.

4 Results

Labor Market Arrangements

Table 1 displays gender differences in work arrangements for respondents who indicated they worked in the week before completing the survey. Overall, most workers remain in traditional employer-employee work arrangements. More than 78 percent of both men and women work as employees. Online platform work comprises only a tiny share of the distribution of workers, just 2.4 percent of women and 2.1 percent of men. Larger shares of workers engage in the other types of non-traditional work arrangements. Nearly 10 percent of all workers, 9.9 percent of female and 9.5 percent of male workers, identified as freelancers or independent contractors. An additional 7.0 percent of female and 8.7 percent of male workers reported traditional self-employment activity, which we characterize as entrepreneurship or small business ownership. Gender disparities in the distribution across work arrangement categories were minimal.

Table 2 displays the distribution of workers across work categories by race. As with gender, the largest share of workers across all racial groups were in traditional employee arrangements, 78 percent of White workers and 77 percent of all Black and Hispanic workers. While online platform work comprises a minor share of workers in each racial category, we observe more considerable differences in the share of online platform workers when stratifying by race compared to gender. Among Black workers, 4.4 percent indicated they performed online platform work as their primary job in the prior week, compared with just 1.6 percent of White workers. The share of Hispanic workers was also higher than White workers, 2.8 percent. There was also variation by race in the share of more traditional self-employed workers. White workers had the highest share, 8.6 percent. Meanwhile, Black and Hispanic workers had 6.3 percent and 7.2 percent, respectively. Hispanic workers had the largest share in Freelancing/Independent Contracting, 10.9 percent of workers. The White worker share was 9.9 percent, and the Black worker share was 8.4 percent.

Next, we compare the shares of individuals engaged in online platform work as their primary job in the prior week to intermittent platform workers, those who worked on platforms in the last 6 months but not the preceding week. Shares by race within each gender category are displayed in Table 3. White men and White women had the smallest shares of individuals reporting online platform work as a primary job in the past week, 0.8 percent and 1.3 percent, respectively. The share among Black men was nearly 5 percent, the highest of all groups. For women across all racial groups, the share of intermittent online platform work was about twice as large as the share engaged in platform work as their primary job. Among Black women, 4.1 percent reported intermittent platform work, compared to 2.4 percent who had worked through platforms as their main job in the prior week. Shares for Hispanic women were very similar, with 2.1 percent engaging in the preceding week while 4.3 percent engaged more intermittently. Although the online platform work shares were smaller in both categories for White women, they also had higher shares working intermittently, 2.3 percent, than those working through platforms as a primary job.

There was considerably more variation among men from different racial groups. A smaller share of Black men worked through platforms on an infrequent basis, 4 percent, as compared with the share engaged in platform work as a primary job. Nevertheless, a larger share of Black men performed intermittent platform work than men of other races. Just 1.8 percent of Hispanic men and 2.7 percent of White men performed less frequent platform work. Thus, intermittent platform work was more common among White men, while larger shares of Black and Hispanic men worked through online platforms for their primary job.

We further investigate the characteristics of online platform workers by examining whether the type of platforms they work through varies by gender or race. Figure 1 shows the shares for each category. The majority of online platform work was service based for all race and gender categories; however, there is variation within these groups. Black platform workers

perform service-based work to a greater degree than other groups. For those relying on platform work as their primary job, the services share of Black workers was 82.7 percent, while 71.8 percent of White and 75 percent of Hispanic platform workers performed services. There was also a substantial gap by gender, with 81.2 percent of male platform workers performing services compared with 72.8 percent of female workers.

Selling and rental platforms, by contrast, saw less use overall but with substantial variation by race and gender. White workers engaged in selling at the highest rates, 24.7 percent, and 20.7 percent of Hispanic workers were also on selling platforms. By contrast, just 12.3 percent of Black platform workers reported engaging with selling or renting platforms. Gender differences were also significant, with more than a quarter of female platform workers utilizing selling platforms compared to only 13.3 percent of men. Survey work is much less common as a primary job, with just 2 percent of women and 5.7 percent of men utilizing survey platforms. Variation in survey-based work skewed higher for Black platform workers, of whom 5 percent used this type of platform. Just 3.5 percent of White and 4.3 percent of Hispanic platform workers relied on survey platforms for their primary jobs.

Different patterns emerge when examining intermittent online platform work. Though services still dominated for most groups, larger shares of workers engaged on selling or renting platforms among intermittent online platform workers. The exception was Hispanic workers, for whom the majority, 48 percent, reported work facilitated through selling platforms. Among Black workers, 24.1 percent used selling platforms, and a similar share of White workers used them, 24.5 percent. Here, too, larger shares of women engaged in selling than men, 37.1 percent and 17.5 percent, respectively.

For most groups, the share of workers performing services-based platform work was smaller for intermittent platform workers than for primary job workers. White workers were the exception since the distribution across platform types was nearly identical for primary job and non-primary job online platform workers. Among workers of other race or gender groups, the share of service-based platform workers was smaller for intermittent workers than for primary job online platform workers. Just 45 percent of Hispanic workers performed service-based work, compared with 73.9 percent of Black and 72.3 percent of White workers. The gender gap was even more prominent among these less frequent platform workers – 59.5 percent of females compared to 78.9 percent of male workers.

These results indicate that there are important differences in the racial and gender characteristics of workers utilizing online platforms. Moreover, the patterns vary by the type and frequency of work. We now examine whether new patterns emerge when analyzing the data at the intersection of gender and race. Racial differences in online platform work by gender are shown in Figure 2. This intersectional analysis suggests that some of the patterns across racial groups shown in Figure 1 are driven more by one gender group than the other.

For example, while Black workers display the highest shares of service-based platform work for both primary and non-primary job workers, this appears to be driven by Black men more than Black women. More than 90 percent of Black male online platform workers use service-based platforms regardless of frequency, compared with 74.2 percent of Black women among primary job platform workers and just 62.5 percent of Black women who worth through online platforms intermittently.

Likewise, while Figure 1 shows that for Hispanic workers, selling platforms are utilized more than service platforms among less frequent platform workers, this is only true for Hispanic men. Among Hispanic intermittent online platform workers, 57.4 percent of men work through selling platforms, compared to only 45.1 percent of women. That is a smaller share than the 47.3 percent of Hispanic women who are intermittent platform workers using service-oriented platforms. Still, Hispanic women report selling on online platforms more than women of other racial groups, 34.5 percent of Black women and 34.3 percent of White women. By contrast, among primary job online platform workers, Hispanic women have the lowest shares of selling platform use, just 17.1 percent. By comparison, 31.2 percent of White women use selling platforms as a primary job, as do 25.9 percent of Black women.

Some of the observed gender or racial disparities in the prevalence of platform work may be explained by differences in other demographic characteristics of the populations. These may include differences in educational attainment, age distribution, or immigrant status. We explore the extent to which disparities in platform work prevalence can be explained by such characteristics using logit regression analysis. First, we show differences in demographic characteristics across all individuals in our data in Table 4. The age distributions of men and women were very similar, as were the racial compositions, with the exception that Black individuals comprised a smaller share of men than women. Men also tended to be more highly educated, were more likely to be married, and less likely to have children than women in the sample. White workers were more college-educated and skewed a bit older than other groups. They were also the most likely to be married and least likely to have children. Hispanic workers had the highest share of immigrant individuals in the sample.

We show the marginal effects on the probability of an individual being an online platform worker as their primary job in Table 5. Column 1 shows the marginal effect of gender and race on primary job platform work, controlling for other demographic characteristics. The only statistically significant difference is for Black individuals, who are 1.9 percentage points more likely than White individuals to be online platform workers. In column two, we allow the race variable to vary by gender. This analysis indicates that Black men were 4.0 percentage points more likely to be platform workers than White men and that Black women were 1.3 percentage points more likely to be online platform workers, controlling for other observable demographic characteristics. Differences between White men and other groups were not significantly different from zero.

Table 6 repeats this analysis for the probability of being an intermittent online platform worker, defined as those who worked through platforms in the prior 6 months but not the past week. Here, the only statistically significant differences are between Black and white workers in column 1. Black workers were 3.4 percentage points less likely to perform platform work than White workers in the past 6 months. Column 2 shows that there were some differences in the probability for Black men and women. Black men were 5.7 percentage points more likely than White men, and Black women were 2.3 percentage points more likely than White men to be platform workers during the 6 months prior. Thus, the differences between Black and White workers are driven in large part by Black men.

Earnings from Online Platform Work

Beyond the prevalence and type of platform there are also differences in household income by gender and race among online platform workers. Figure 3 shows the share of primary job online platform workers in each household income category by gender. Female and male workers have different income distributions with female workers more concentrated than their male counterparts in the lowest income categories and male workers with greater representation in the higher earnings categories. More than half of female online platform workers reported annual household income of less than $50K. Among male workers 46.0 percent reported earnings of less than $50k. At the other end of the distribution 21.8 percent of male workers reported earnings in excess of $100k as compared with only 14.5 percent of female workers. Female workers also had a larger share comprising the middle categories with 34.4 percent earning between $50K and $100K. The share of male workers in these categories was 27.7 percent.

When we look at earnings within these gender categories by race, we find even more variation. Figure 4 disaggregated household earnings among female platform workers by race. The finding that half of female online platform workers had household incomes less than $50K that year does not hold for White women. Just 41.5 percent of white female online platform workers fall into the lowest earnings categories while 55.9 percent of Hispanic female and 64.2 percent of Black female workers reported these lower earnings. Black women had the smallest share of workers with household earning between $50K and $100K, 28.2% as compared with 36.8 percent of Hispanic women and 37.5 percent of White women. White women had by far the largest share in the earnings categories of $100K or above. Approximately 21% of White women reported household income in these higher categories. Just 7.3 percent of Hispanic women and 2.7 percent of Black women reported this level of earnings.

Likewise, there are significant racial differences in earnings among male online platform workers. Figure 5 shows the earnings distribution for men by racial group. More than 60 percent of Hispanic male online platform workers had household earnings less than $50K. Among Black male workers 43.2 percent reported income in the lower categories as did 37.9 percent of White Male workers. While about 22 percent of all male platform workers earned $100K or more this was driven primarily by White men for whom 33.0 percent

reported earnings that high. Only 9.0 percent of Hispanic and 6.7 percent of Black male platform workers had incomes of $100K or above.

Motivations

The choice to pursue online platform work is motivated by a variety of factors. We explore whether their motivations vary by gender or racial group. Table 7 shows the share of primary job online platform workers from each gender or race category that reported the motivations listed. As may be expected among workers for whom online platform work is their primary job, more than half of all workers were motivated to earn their primary source of income. Black workers had the highest share reporting primary income as motivation, 58.1% compared with 50.3 percent of Hispanic and 52.2 percent of White workers. Similar shares of male and female workers were motivated to pursue their primary income through platform work, 54.5 percent and 55.4 percent respectively.

Supplemental income had the second most frequently reported motivation. Here also Black workers had the highest share reporting supplemental pay as a motivation, 57.6 percent of workers. Only 28.9 percent of White workers reported supplemental income motivations. The share of Hispanic workers was 44.3 percent. A larger share of female workers reported supplemental pay as motivation than male workers, 38.9 percent compared with 32.9 percent. Roughly a quarter of White workers and male workers indicate that they pursued platform work to supplement retirement. Only 12.4 percent of female workers, 13.5 percent of Black workers and 6.2 percent of Hispanic workers reported this motivation.

White workers were less likely than others to be motivated by helping family or friends. Only 16.1% listed this as a motivation compared with 41.5 percent of Hispanic workers and 32 percent of Black workers. Women were more likely than men to select this motivation category, 27.1 percent, while a smaller 22.2 percent of men did likewise. There were also large race and gender differences in who entered online platform work to ultimately start a business. 36.6 percent of Black workers were motivated by their entrepreneurial intentions as compared with just 11.4 percent of Hispanic workers and 10.5 percent of White workers. Men were more likely to be motivated by starting a business than women, 19.6 percent and 14.1 percent respectively.

Career transition was a common motivation for Hispanic workers, 42.4 percent, while only 20.2 percent of Black and 12.9 percent of White workers viewed online platform work as a vehicle for career transition. Smaller shares of workers entered online platform work either to maintain or build new skill though Black workers were more likely to select these motivations. Black workers were also more likely to be motivated by a desire for autonomy with 29.2 percent of workers indicating that they wanted to work for themselves. Only 7.5 percent of Hispanic workers and 11 percent of White workers did so. Men were also more likely to select autonomy as motivation, 19.5 percent, versus only 8.9 percent of women. However, women were more likely to be motivated by the flexibility of online platform work. More than 44.7 percent of women selected flexibility. A smaller share of men did so as

well, 34.5 percent. Flexibility was also valued across racial categories – 46.1 percent of Black workers, 37.4 percent of Hispanic workers and 41.9 percent of White workers reported flexibility as a motivation.

Nearly 28.2 percent of Black workers were motivated by opportunities for networking, a higher percentage than other groups (only 5.7 percent of Hispanic workers and 3.8 percent of White workers). There were also disparities in who was motivated to pursue online platform work for fun. Women were more likely to do so than men 23.2 percent and 17.5 percent respectively. Only 11.2 percent of Black workers selected fun as a motivation. More than a quarter of White workers and 21 percent of Hispanic workers cited fun as a motivation for online platform work.

Motivations for pursuing online work vary not only by gender and race but also by whether it is their main job performed in the prior week. Table 8 displays selected motivations for intermittent online platform workers who did not perform online platform work in the last week but did so in the last 6 months. As may be expected, these workers were less likely to report pursuing online platform work as a primary source of income though responses varied by gender and race. Women were more likely to indicate that their less frequent online platform work was a primary income source. More than 22.6 percent of female workers selected primary income as compared with 18.6 percent of male workers. More than 33 percent of Black workers also selected primary income while about a quarter of Hispanic workers and 17.2 percent of White workers did so. Supplemental income was a much more common motivation across all groups of less frequent online platform workers. There was little difference by gender though Black and Hispanic workers were somewhat more likely to select supplemental pay as motivation (70 percent) than their white counterparts (63.5 percent).

There were also different patterns by gender and race of workers seeking to supplement retirement when comparing less frequent online platform workers to those who pursued it as a primary job. While a quarter of White primary job platform workers were motivated to supplement their retirement, only 13.9 percent of less frequent White platform workers were likewise motivated. By contrast, only 6 percent of Hispanic primary job platform workers were motivated to supplement retirement as compared with 34 percent of Hispanic intermittent platform workers. While it was more common for male than female platform workers to report retirement supplement as a motivation regardless of the frequency of their work, women who were less frequent platform workers were more likely to report retirement savings as a motivation than those who performed platform work as a primary job.

Among most gender and racial groups intermittent platform workers were less likely to site starting a business as motivation. Hispanic workers were the exception as 35.7 percent of these workers were motivated by a desire to start a business compared to 11.4 percent of Hispanic primary job workers. Similarly Hispanic workers were more likely to report working for themselves as motivation if they were intermittent platform workers by nearly

30 percentage points more than primary job workers. They were less likely to be motivated by career transition plans as compared with primary job workers for all gender and race categories. But when asked about acquiring or maintaining skills, Hispanic individuals who performed platform work less frequently cited this motivation more often than Hispanic primary job platform workers by 25 to 30 percentage points. Women were also more likely to cite skills as motivation more often if they were less frequent platform workers but by 5 to 10 percentage points more than female primary job platform workers.

Workers from most gender and racial groups were less likely to be motivated by flexibility if they were intermittent platform workers. Most groups were more likely to be motivated by fun if they performed online platform work less frequently.

5 Conclusion

This study uses data from the Entrepreneurship in the Population Survey to analyze the prevalence of, earnings from, and motivations behind online platform work by gender and race using an intersectional lens. We show that while the digital gig economy is growing, online platform work comprises a small share of work arrangements in the US. Moreover, there are notable variations in online platform work by gender, race, and their intersection. Men and women participate in platform work at similar rates; however, when we disaggregate by race and gender, differences emerge. Black individuals perform online platform work at higher rates than other groups, driven primarily by participation among Black men, especially when looking at primary job platform workers.

Female and racialized minority platform workers are disproportionately in lower household income brackets, while larger shares of White and male workers comprise the higher income categories. However, when we look at the intersection of gender and race, we observe variation by race within each gender category. The magnitude of the household income gap is substantially larger for Black and Hispanic Women than for White women. We also show that larger shares of Black and Hispanic men had household earnings in the lowest categories than both White men and White women. These findings highlight the value of bringing an intersectional lens to this type of descriptive analysis to more clearly ascertain the nature of gender and racial disparities.

Our analysis of the motivations behind the decision to perform online platform work further illuminates the complexities of how race and gender shape work in the digital gig economy. Income and flexibility motivate online platform workers across gender and race categories; however, differences emerge when examining other drivers. Women were more likely than men to seek platform work as a primary job for supplemental income. Higher rates of female workers were driven to platform work in search of flexibility. This finding is consistent with prior research suggesting that female workers may be more inclined to pursue non-traditional work arrangements given the time spent and timing of their disproportionately high care responsibilities relative to men (Milkman et al., 2021).

Black workers appear to rely on platform work as their primary income source to a greater degree than other groups, suggesting that they may be pushed into necessity platform work more than other groups. Future research should further investigate this hypothesis. Black workers were also more likely to pursue platform work as a pathway to entrepreneurship, a fact consistent with prior research showing higher rates of nascent entrepreneurship among Black workers (Köllinger & Minniti, 2006; Edelman et al., 2010).

Hispanic workers were more likely than others to be motivated by career transition and helping family or friends. However, the analysis of their motivations varied based on whether we were examining primary jobs versus less frequent platform workers. Hispanic workers who utilized platforms in the prior six months were driven more by factors such as skill development or retention and networking than Hispanic workers who used platforms for their primary job. These findings further highlight the fact that primary job and less frequent platform workers are indeed different types of workers with different motivations. These differences have implications for our understanding of the role race and gender play in the online platform work picture.

Together, the results of our study contribute to the broader literature on the digital gig economy by presenting a comprehensive picture of how gender and race shape the composition of digital platform work. Much of the prior work on this topic utilizes case studies or subsets of the gig economy using specific online platforms or categories of work, such as ride-shared services or care work platforms, to measure participation by gender and race or document the experiences of workers from these groups. In this study, we used nationally representative survey data to measure the size and scope of online platform work in the digital economy, illuminating the role of gender and race. Our analysis is preliminary and was conducted only using the first year of EPOP data and in future analysis we will add years 2 and 3 of the EPOP survey data to enhance and expand our analysis. Additionally, our analysis should be interpreted as providing rich descriptions of gender and racial characteristics of online platform workers rather than the causal effect of gender or race on online platform workforce outcomes.

Despite these limitations, our analysis has important implications for policy and provides guidance for future research. Given the disparities in prevalence and income, policymakers should continue to evaluate the efficacy of regulations governing work arrangements for digital platform workers. Another area of research ripe for investigation is the extent to which social norms governing the way these platforms were developed lend themselves more to some groups than others which could lead to structural differences in outcomes such as compensation.

Given the motivations of female workers specifically, future research can also investigate the relationship between digital platform work and policies that guarantee paid family leave for caretakers. If more traditional work arrangements afford women the flexibility necessary to meet their care obligations, they may be less reliant on lower wages and less stable work facilitated by digital platforms.

As the online platform economy grows, the research and analysis of this important sector within the US economy must grow as well. Our study provides an important foundation on which to build future work.

References

Abraham, K. G., Hershbein, B., Houseman, S. N., & Truesdale, B. C. (2024). The Independent Contractor Workforce: New Evidence on Its Size and Composition and Ways to Improve Its Measurement in Household Surveys. *ILR Review*, *77*(3), 336–365. https://doi.org/10.1177/00197939241226945

Abraham, K. G., Haltiwanger, J. C., Hou, C., Sandusky, K., & Spletzer, J. R. (2021). Reconciling Survey and Administrative Measures of Self-Employment. *Journal of Labor Economics*, *39*(4), 825–860. https://doi.org/10.1086/712187

Abraham, K. G., Hershbein, B., & Houseman, S. (2019). *Independent Contract, Informal, and Online Intermediary Work: Preliminary Evidence on Developing Better Measures in Household Surveys*.

Abraham, K., & Houseman, S. (2022). Contingent and Alternative Employment: Lessons From the Contingent Worker Supplement, 1995–2017. *Reports*. https://research.upjohn.org/reports/270

Abramowitz, J., & Joung, A. (2024). *Opening the Black Box of Self-Employment: Identifying Alternative Work Arrangements in the United States* (SSRN Scholarly Paper 4807546). Social Science Research Network. https://doi.org/10.2139/ssrn.4807546

Allon, G., Cohen, M. C., & Sinchaisri, W. P. (2018). *The Impact of Behavioral and Economic Drivers on Gig Economy Workers* (SSRN Scholarly Paper 3274628). https://doi.org/10.2139/ssrn.3274628

Atkins, R. M. B., Brummet, Q., & Johnson, K., (2024) Understanding the Online Platform Based "Gig" Workforce in the U.S.: Evidence from the Entrepreneurship in the Population Survey.

Berger, T., Frey, C. B., Levin, G., & Danda, S. R. (2019). Uber happy? Work and well-being in the 'Gig Economy.' *Economic Policy*, *34*(99), 429–477. https://doi.org/10.1093/epolic/eiz007

Bracha, A. and Burke, M.A., 2021. How big is the gig? The extensive margin, the intensive margin, and the hidden margin. *Labour Economics*, *69*, p.101974. https://doi.org/10.1016/j.labeco.2021.101974

Churchill, B., & Craig, L. (2019). Gender in the gig economy: Men and women using digital platforms to secure work in Australia. *Journal of Sociology*, *55*(4), 741–761. https://doi.org/10.1177/1440783319894060

Cook, C., Diamond, R., Hall, J. V., List, J. A., & Oyer, P. (2021). The Gender Earnings Gap in the Gig Economy: Evidence from over a Million Rideshare Drivers. *Review of Economic Studies*, *88*(5), 2210–2238. https://doi.org/10.1093/restud/rdaa081

Doucette, M. H., & Bradford, W. D. (2019). Dual Job Holding and the Gig Economy: Allocation of Effort across Primary and Gig Jobs. *Southern Economic Journal*, *85*(4), 1217–1242. https://doi.org/10.1002/soej.12338

Edelman, L. F., Brush, C. G., Manolova, T. S., & Greene, P. G. (2010). Start-up Motivations and Growth Intentions of Minority Nascent Entrepreneurs. *Journal of Small Business Management*, *48*(2), 174–196. https://doi.org/10.1111/j.1540-627X.2010.00291.x

Jackson, B. A. (2024). Motivated by Money? Class, Gender, Race, and Workers' Accounts of Platform-Based Gig Work Participation. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, *10*(4), 191–206. https://doi.org/10.7758/RSF.2024.10.4.09

Katz, L. F., & Krueger, A. B. (2019). The Rise and Nature of Alternative Work Arrangements in the United States, 1995–2015. *ILR Review*, *72*(2), 382–416. https://doi.org/10.1177/0019793918820008

Köllinger, P., & Minniti, M. (2006). Not for Lack of Trying: American Entrepreneurship in Black and White. *Small Business Economics*, *27*(1), 59–79. https://doi.org/10.1007/s11187-006-0019-6

Liang, C., Hong, Y., Gu, B., & Peng, J. (2018). Gender Wage Gap in Online Gig Economy and Gender Differences in Job Preferences. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3266249

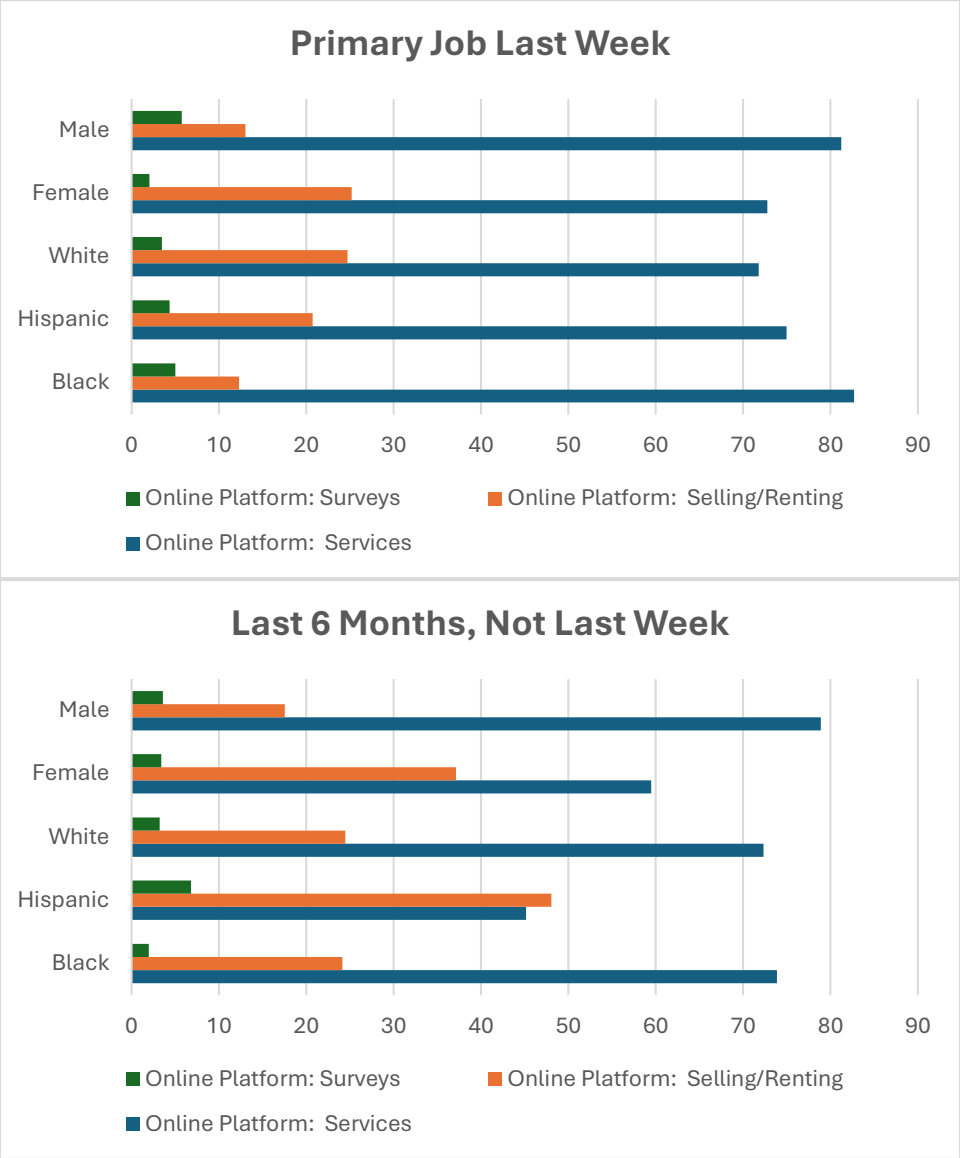
Milkman, R., Elliott-Negri, L., Griesbach, K., & Reich, A. (2021). Gender, Class, and the Gig Economy: The Case of Platform-Based Food Delivery. *Critical Sociology*, *47*(3), 357–372. https://doi.org/10.1177/0896920520949631

Robles, B., & McGee, M. (2016). Exploring Online and Offline Informal Work: Findings from the Enterprising and Informal Work Activities (EIWA) Survey. *Finance and Economics Discussion Series*, *2016.0*(89). https://doi.org/10.17016/feds.2016.089

Sundararajan, A. (2017). *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. MIT Press.

Figures

Figure 1: Gender and Race Differences in Online Platform Work by Type of Platform



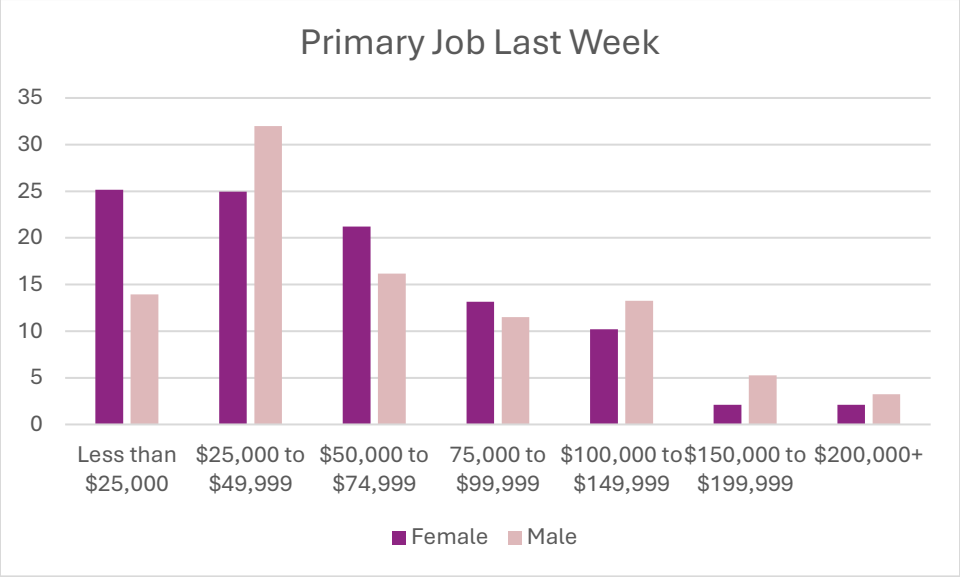
Notes: YR1EPOP data using probability samples and weights

Figure 2: Racial differences in type and frequency of gig work by gender



Notes: YR1data using probability samples and weights

Figure 3: Income for Online Platform Workers by Gender



Notes: YR1data using probability samples and weights

Figure 4: Income for Female Online Platform Workers by Race

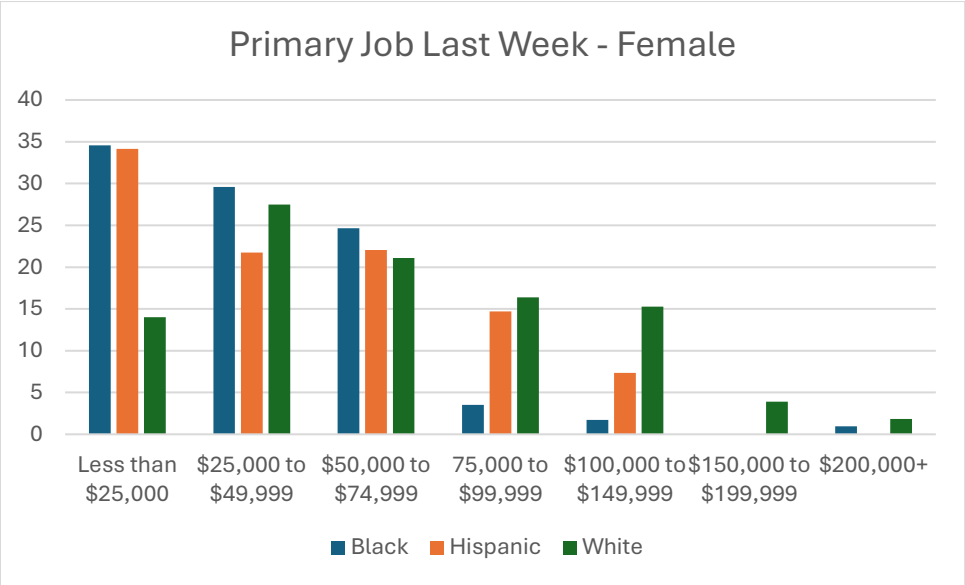
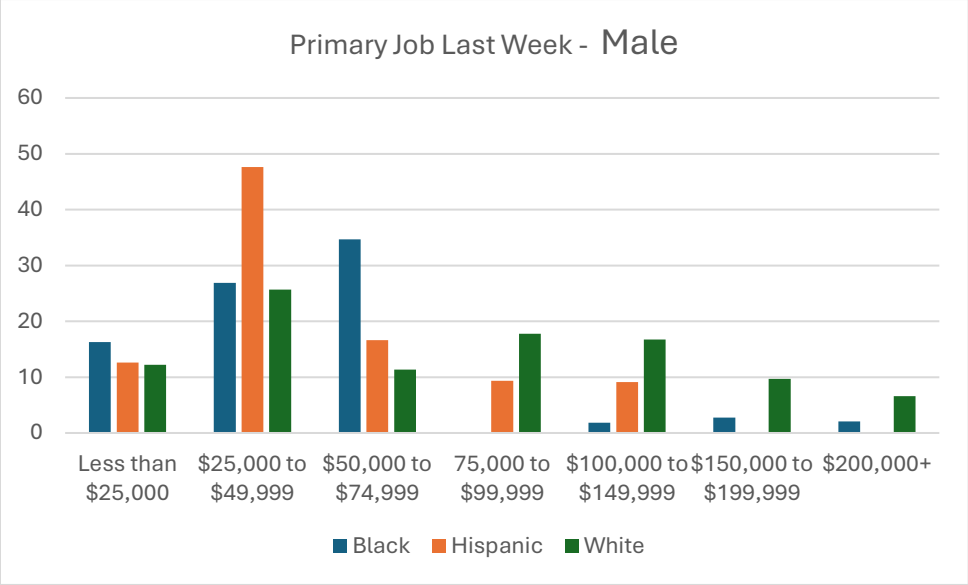


Figure 5: Income for Male Online Platform Workers by Race



Tables

Table 1: Gender differences in labor market arrangements

	Female	Male	Female - Male
Work as Employee	78.81	78.43	0.38
Traditional Self-Employed	6.96	8.69	-1.73
Freelancer/Independent Contractor	9.92	9.46	0.46
Online Platform	2.41	2.06	0.35
Missing	1.9	1.36	54%
Total	100%	100%	
N	4346	3128	1218

Notes: YR1 data using probability samples and weights; looking at primary job type among those who reported working last week

Table 2: Racial differences in labor market arrangements

	Black	Hispanic	White	Black - White	Hispanic - White
Work as Employee	77.33	77.2	78.66	-1.33	-1.46
Traditional Self-Employed	6.37	7.16	8.63	-2.26	-1.47
Freelancer/Independent Contractor	8.41	10.85	9.86	-1.45	0.99
Online platform	4.41	2.76	1.56	2.85	1.2
Missing	3.47	2.02	1.28	2.19	0.74
Total	100%	100%	100%		
N	1053	946	4771		

Notes: YR1 data using probability samples and weights; looking at primary job type among those who reported working last week

Table 3: Prevalence of Online Platform Work by Race Within Gender

	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Primary Job Last Week	2.39	2.14	1.26	4.94	2.27	0.77
Last 6 Months, Not Last Week	4.12	4.29	2.25	4.24	1.83	2.71
N	1011	762	4270	448	462	3260

Notes: YR1 data using probability samples and weights; values indicate percentage of all adults

Table 4: Descriptive statistics

Variable	Black	Hispanic	White	Female	Male
Female	65.29	57.76	51.14	100	0
Black	100	0	0	14.3	8.83
White	0	0	100	60.02	66.62
Hispanic	0	100	0	17.76	15.09
HS Diploma or Less	33.95	32.84	21.49	26.6	21.4
Some College	29.69	35.62	29.76	30.65	29.44
BA+	28.32	25.37	47.74	39.59	44.73
Age 18-29	13.49	25.81	11.65	15.26	15.16
Age 30-49	37.21	42.48	31.69	36.44	34.36
Age 50-64	29.22	21.19	27.45	26.45	25.46
Age 65+	20.03	10.45	29.17	21.83	25.01
Immigrant	7.85	24.33	3.65	9.64	10.27
Married	32.33	44.09	60.37	49.64	57.52
Has Children	31.8	41.1	26.34	32.9	26.74
N	1459	1227	7545	6566	4583

Notes: YR1 EPOP data using probability samples and weights

Table 5: Marginal effects on the probability of online platform work as primary job

	Online Platform Work	Online Platform Work
Race (ref White Male)		
Black Male	0.019*	0.040*
Hispanic Male	0.008	0.013
Sex (ref Male)		
White Female	-0.001	0.005
Intersection of Race and Sex		
Black * Female (ref White Male)		0.013t
Hispanic * Female (ref White Male)		0.009
Education (ref HS or Less)		
Some College	-0.001	0.000
BA+	-0.008	-0.008t
Age (ref 18-29)		
Age 30-49	-0.008	-0.008
Age 50-64	-0.017**	-0.017**
Age 65+	-0.017*	-0.017**
Immigrant	-0.013***	-0.013***
Married	0.001	0.000
Has Children	0.006	0.007
N	11,112	11,112
Pseudo R2	0.0645	0.0707

Notes: EPOP Year 1 data; t p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 6: Marginal effects on the probability of online work in the last 6 months

	Online Platform Work	Online Platform Work
Race		
Black Male	0.034**	0.057*
Hispanic Male	0.012	0.000
Sex		
White Female	0.001	0.000
Intersection of Race and Sex		
Black * Female		0.023*
Hispanic * Female		0.020
Education		
Some College	-0.003	-0.003
BA+	0.000	0.000
Age		
Age 30-49	-0.026*	-0.026*
Age 50-64	-0.044***	-0.044***
Age 65+	-0.057***	-0.057***
Immigrant	-0.026***	-0.025***
Married	-0.006	-0.007
Has Children	0.005	0.005
N	11,112	11,112
Pseudo R2	0.0429	0.0456

Notes: EPOP Year 1 data; t p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 7: Gender and Racial Differences in Motivation for Online Platform Work – Primary Job Last Week

	Female	Male	Black	Hispanic	White
Primary Income Source	55.41	54.45	58.1	50.28	52.2
Supplement Pay	38.93	32.85	57.63	44.32	28.9
Supplement Retirement	12.41	24.79	13.45	6.13	25.3
Help Family or Friends	27.12	22.22	31.99	41.48	16.07
Starting Own Business	14.12	19.56	36.58	11.44	10.47
Career Transition	20.45	17.81	20.05	42.42	12.94
Maintain Skills	7.5	6.38	10.13	3.57	7.67
Obtain New Skills	8.25	11.32	22.66	2.46	7.79
Working for Myself	8.87	19.45	29.21	7.5	11.01
Flexibility	44.74	34.54	46.12	37.39	41.93
Networking	7.59	12.14	28.17	5.65	3.76
For Fun	23.17	17.49	11.16	20.6	25.61
Other Reason	4.03	1.49	0	1.01	5.13
N	134	80	35	36	128

Notes: YR1 EPOP data using probability samples and weights; subset to confirmed platform workers in the last week

Table 8: Gender and Racial Differences in motivation for Online Platform Work – Last 6 months, not last week

	Female	Male	Black	Hispanic	White
Primary Income Source	22.62	18.62	33.03	24.82	17.18
Supplement Pay	66.16	66.99	70.58	70.19	63.48
Supplement Retirement	16.88	19.28	15.04	33.95	13.86
Help Family or Friends	21.22	25.54	26.99	53.69	12.95
Starting Own Business	16.12	11.78	14.37	35.74	8.11
Career Transition	13.85	8.67	10.03	26.28	5.14
Maintain Skills	9.46	4.03	1.62	28.5	1.4
Obtain New Skills	13.28	1.85	0	33.21	1.69
Working for Myself	18.19	5.52	11.72	37.01	5.18
Flexibility	29.42	17.38	19	46.15	15.45
Networking	16.7	8.99	10.05	38.43	6.51
For Fun	47.08	26.16	25.61	57.33	34.39
Other reason	1.86	7.18	6.23	0	5.82
N	213	128	67	42	195

Notes: YR1 EPOP data using probability samples and weights; subset to confirmed platform workers in last 6 months, not last week