Working for Yourself:
How the Self–employed Use Their Time Differently

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Highlights

- Flexible work hours are very important to most business owners.

- Self-employed individuals are less likely to work a standard 40-hour work week compared to wage and salary workers. A greater fraction work more than 40 hours, less than 40 hours, or report working variable hours week to week.

- The self-employed work on more days, though slightly less often during the traditional workweek.

- Compared to wage and salary employees, self-employed individuals report working fewer daily hours.

- Self-employed individuals tend to start work later in the day than wage and salary workers and tend to work later into the evening as a result.

- Along with their altered work schedule, the self-employed also see differences in other activities they do, such as caring for others, housework, and sleeping.

- Self-employed individuals work choices suggest they have more flexibility in the timing of their work.

Introduction

Self-employed individuals are stereotypically thought to work long hours to the detriment of other areas in their lives. There are individuals who exemplify this stereotype, but the self-employed are a diverse group who use the flexibility of being their own boss in a variety of ways. When asked what motivated them to become business owners, both balancing work and family and flexible hours were said to be very important by a majority of respondents.[1] Women and Racial and Ethnic Minorities were even more likely to say these two categories were very important.[2] This brief attempts to document these differences compared to other individuals working for wages or salaries, which closely match the self-employed in demographic characteristics.

The biggest difference is how self-employed individuals time their work. With a self-determined work schedule, self-employed individuals can spend more time on non-work activities in the middle of the day, such as childcare, household work, and running errands. The presence of these differences suggests there are important non-monetary, intangible benefits to self-employment that are difficult to observe in most survey data.

American Time Use Survey (ATUS) data from 2016 until 2019 is used for this publication.[3] For a subsample of households surveyed in the Current Population Survey (CPS), the Bureau of Labor Statistics conducted a follow up survey on how individuals spent their time for one day. In this brief, only those individuals over the age of 18, not in school, and currently employed are considered. This provides a sample of 2,633 individuals identifying themselves as self-employed and 20,237 identifying as wage and salary workers with which to match.[4]

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[1] 2023 American Business Survey, Census Bureau

[2] Business owners said balancing work and family was very important 57 percent of the time and said flexible work hours were very important 53 percent of the time. For women the values were 60 and 67 percent respectively and for Racial Minorities the values were 63 and 59 percent respectively.

[3] The microdata files for the American Time Use Survey are available from the Bureau of Labor Statistics at American Time Use Survey. For convince linking the data to the CPS it was accessed through IPUMS at IPUMS Time Use. Data from 2020 and beyond has been excluded from the majority of this issue brief, due to its potential impact of the COVID-19 pandemic on part of the sample. However, it appears as though it had little impact on when work was done, as seen in the section "Impacts of the Covid-19 Pandemic".

[4] There are concerns that the differences in behavior noted in this brief are from differences other than the decision to be self-employed. It is true that the self-employed differ in other relevant characteristics. Most notably they are more likely to be male, white, disabled, and older than the general working population, while also being less likely to have children under the age of 5. To address these concerns self-employed individuals are matched to wage and salary workers which closely match them in terms of demographics, using propensity score matching. The appendix to this issue brief details the method and shows the unmatched results which are largely similar, except for time spent caring for others.

Hours Worked Weekly

The first area to consider is the number of hours usually worked by self-employed individuals and how it compares to the hours worked by wage and salary employees. On average, a self-employed individual works 37.9 hours per week, which is less than their wage and salary counterparts who work 40 hours per week. The distribution of hours worked is outlined in Figure 1. The main difference between self-employed and wage and salary earners is that 41.1 percent of wage and salary earners reported between 38 and 42 working hours compared with just 17.0 percent of self-employed individuals. The self-employed are more likely to work 43 or more hours (31.7 vs. 30.1 percent), 37 or less hours (36.6 vs. 22.6 percent), or say their hours vary week to week (14.9 vs. 6.3 percent). This suggests that while self-employed individuals have more flexibility to work a nontraditional number of hours, they use this flexibility in different ways. More choose to reduce their number of hours worked, but a small percentage increased their hours worked.

**Figure 1. Usual Hours Worked per Week**

Source: American Time Use Survey 2016 to 2019, authors calculation. Hours are rounded to the nearest five hours. Each bin is noted by its midpoint, so the 40-hour bin includes all workers reporting usual hours worked between 38 and 42 hours. Self-employed individuals are matched to a wage and salary worker closely resembling them based on demographics.

Days of the Week Worked

The next area to consider is the days of the week on which self-employed individuals work. For both types of workers, at least 78 percent worked Monday through Friday.[5] The most likely day of work for both groups is Tuesday, with 88.3 percent of wage and salary earners and 84.9 percent of self-employed individuals working that day. While the self-employed work somewhat less often during weekdays, they diverge substantially from the wage and salary earners for weekend work. On Saturdays, 51.0 percent of self-employed individuals spent at least some time working compared with just 36.1 percent of wage and salary workers. On Sundays the time gap was narrower, with 40.8 self-employed individuals vs. 30.4 percent of wage and salary workers). Because of the wide gap on the weekends, the self-employed tend to work more days per week. The self-employed work 71.6 percent of days (5.01 days per week) while wage and salary earners work slightly fewer at 70.0 percent (4.90 days per week).
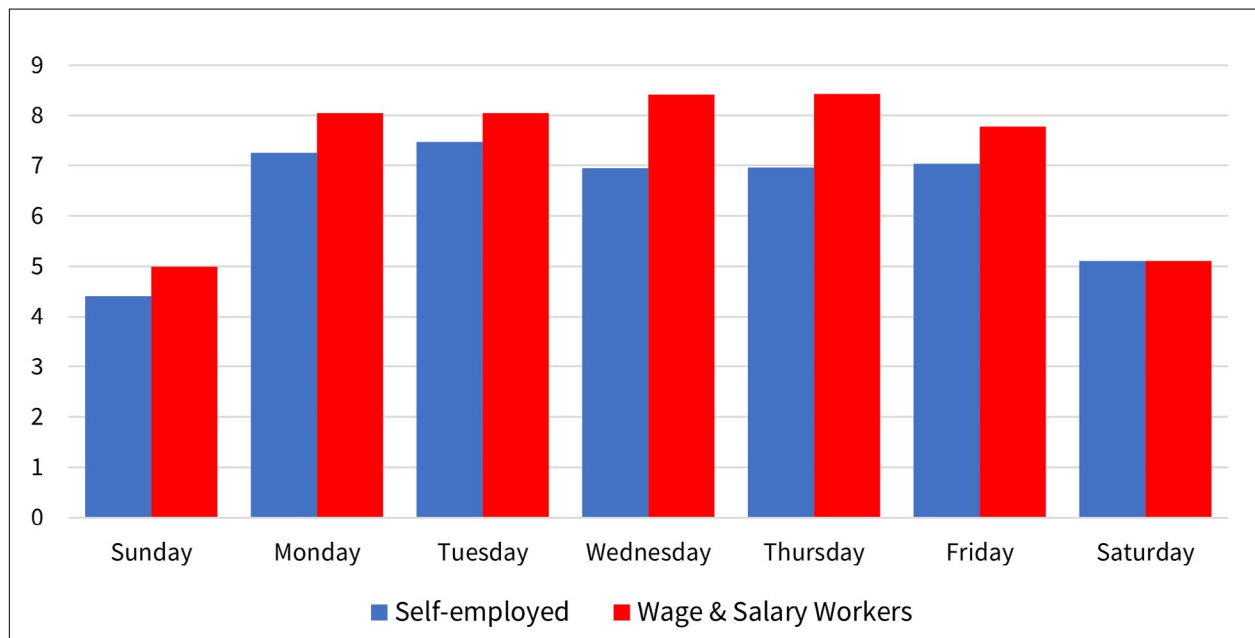
Figure 2. Days of the Week Worked
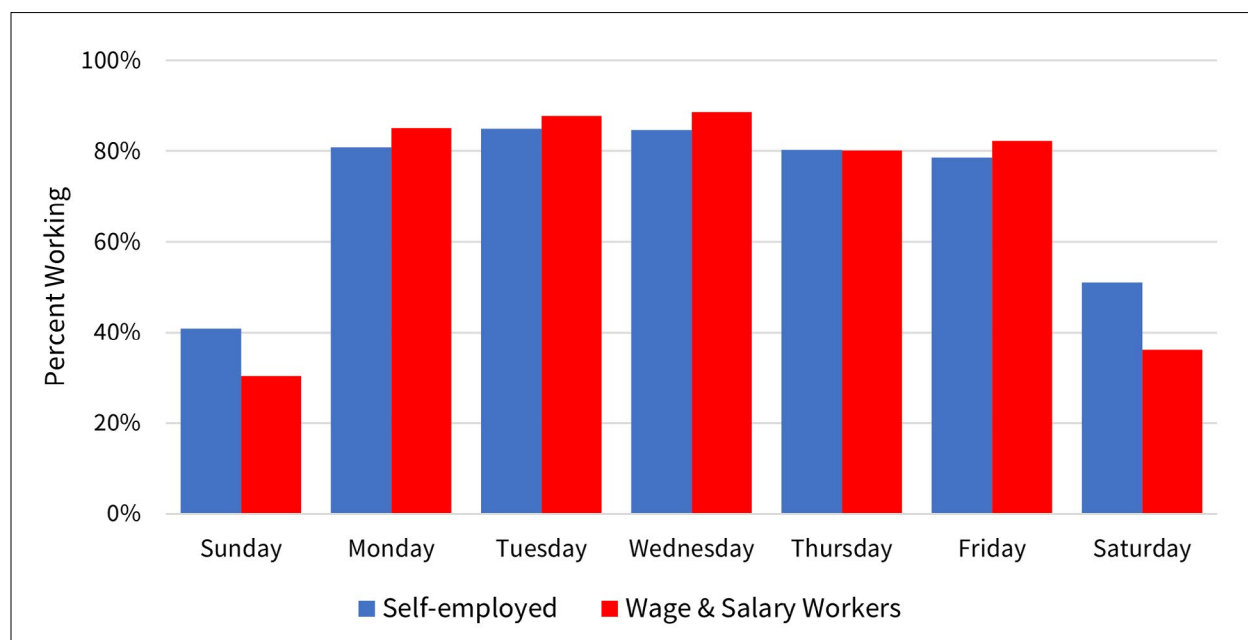
Source: American Time Use Survey 2016 to 2019 authors calculation. Self-employed individuals are matched to a wage and salary worker closely resembling them based on demographics.

Much like how there is variation in the percentage of individuals working each day, there is also variation in the number of hours worked each day. As seen in Figure 3, conditional on working, self-employed individuals work fewer hours on every day of the week, except Saturday where the difference is minimal. Both groups work more hours during the traditional work week and less on the weekend, though the gap is most narrow on the weekend with a gap of 16.6 minutes compared with 60.6 during the week. Additionally, the peak working day is different for each group. The self-employed work most on Tuesdays while wage and salary earners work most on Thursdays.

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[5] The ATUS denotes some days as holidays and those days have been dropped.

Figure 3. Hours Worked per Day

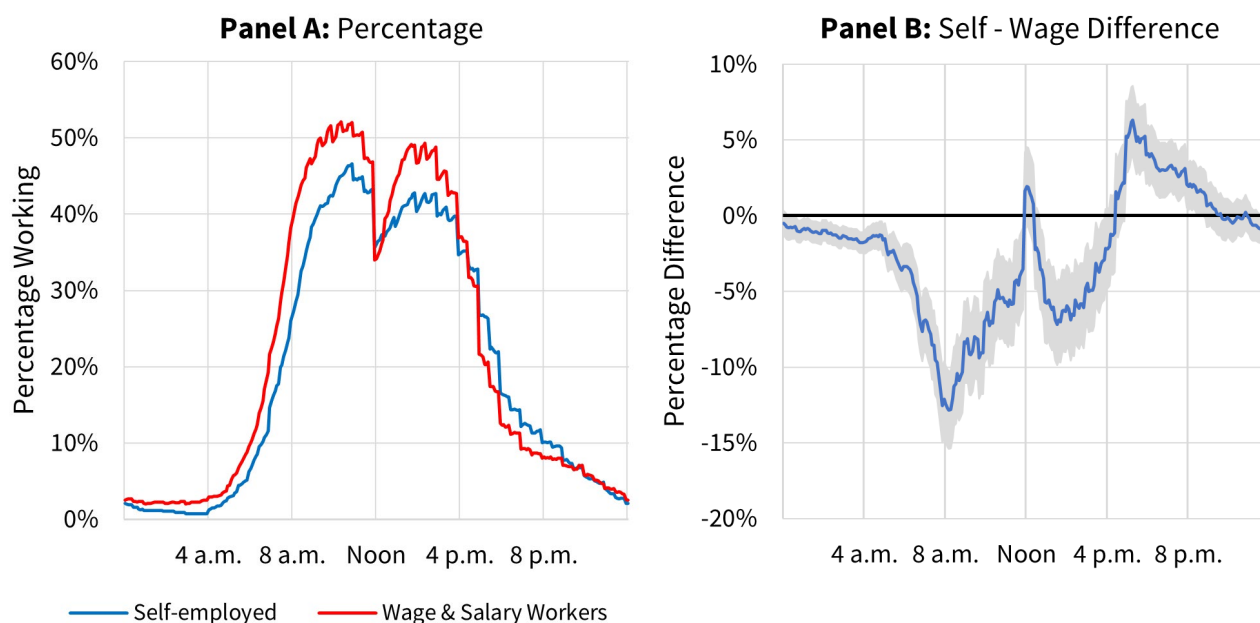Source: American Time Use Survey 2016 to 2019, authors calculation. Work hours are conditional on an individual working on the given day. Self-employed individuals are matched to a wage and salary worker closely resembling them based on demographics.

Daily Work Patterns

Daily work patterns vary for self-employed individuals as well. The ATUS dataset is a useful tool to explore a how people typically spend a single day. The data is a comprehensive look at a single day of many individuals. Individuals can report primary activities in increments as short a single minute. For example, an individual might report brushing their teeth from 7:15 a.m. to 7:17 a.m. To present the data in a more simplified format, two aggregations are made. First, activities are grouped into categories. Besides work, the other major categories are sleeping, unpaid care for others[6] (children, elderly, etc.), household work (cleaning, cooking, yardwork, etc.), leisure (attending events, recreation, eating socially, etc.) and other (shopping, running errands, grooming, eating non-socially, etc.). Second, the data is aggregated into 5-minute blocks and the category which filled the largest portion, or took the most time, is assigned to the whole block.

Figure 4. Time Spent Working

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

For each 5-minute block, the percent of individuals working is graphed in Panel A of Figure 4. Both the self-employed and wage and salary earners work most often during the middle of the day between the hours of 8 a.m. and 5 p.m. There are several notable differences. First, wage and salary workers begin working earlier in the day on average. By 8 a.m., 39.3 percent are at work while just 26.9 percent of the self-employed are. The gap then closes steadily throughout the day, except for around noon when many people eat lunch. By 4:30 p.m., a self-employed individual is more likely to be working than a wage and salary worker. As the day progresses further, fewer individuals of both types continue work

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[6] Unpaid care for others can also be recorded as a secondary activity, which is also included into this category. For example, an individual might report cooking dinner from 5:30 p.m. till 6:00 p.m. while also looking after their own child. In this case for the 30-minute interval an individual would be recorded as both engaging in household work and care for others.

but the decline is slower for the self-employed, not leveling until 9:30 p.m. This pattern suggests that some self-employed individuals use their flexibility to shift working hours later than the traditional 9-5 workday.

To better show the spread between the groups, Panel B of Figure 4 graphs the difference between the two groups (self-employed minus wage and salary earners), along with a 95 percent confidence interval to show when the difference is unlikely due to random fluctuations. This framing confirms the trends noticed above and reveals another pattern: fewer self-employed individuals work overnight. While neither group works much between midnight and 5 a.m., the difference between the groups is still statistically significant.

Other Time Uses

Because the self-employed pattern their work differently compared to wage and salary earners, it is natural to ask if and how they pattern their other daily activities. Figure 5 reveals that the self-employed do spend more time throughout the day caring for others, with the gap narrowing as the evening progresses. Overall, the self-employed spend an extra twenty minutes caring for others per day.
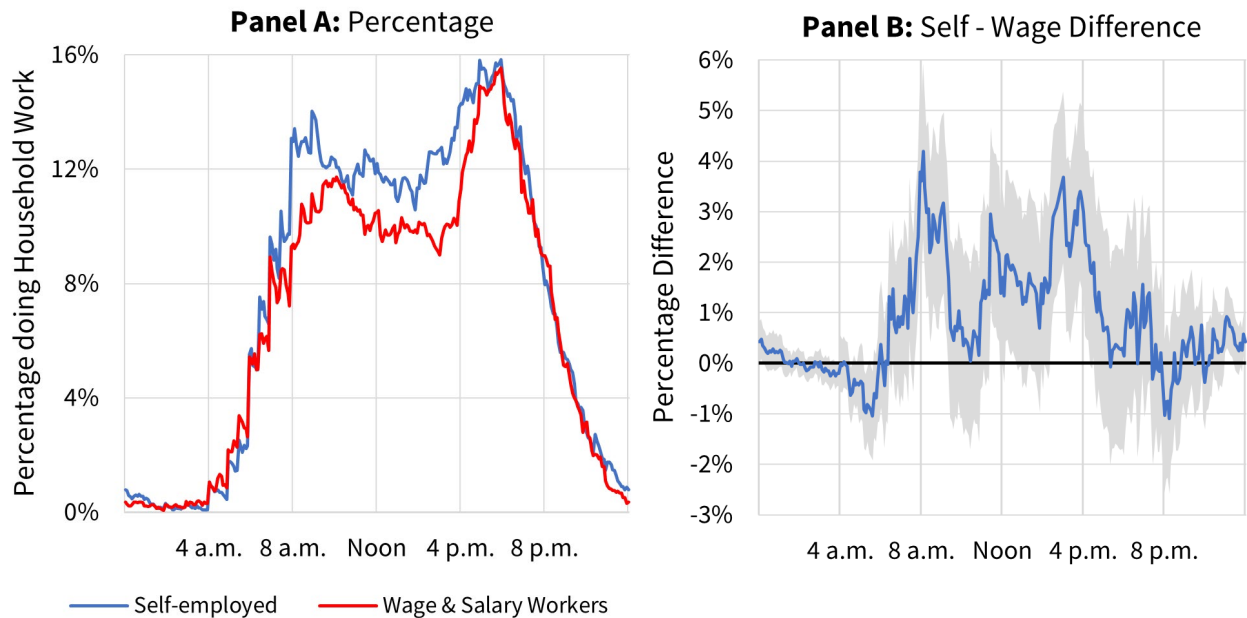
Figure 5. Time Spent Caring for Others
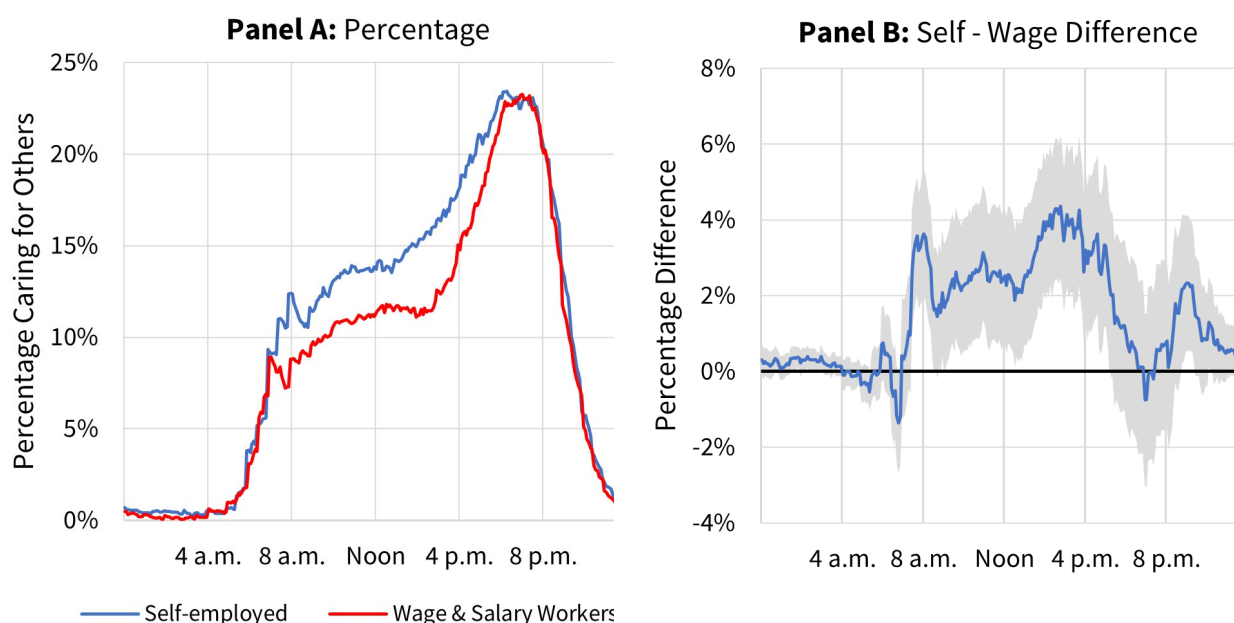
Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.
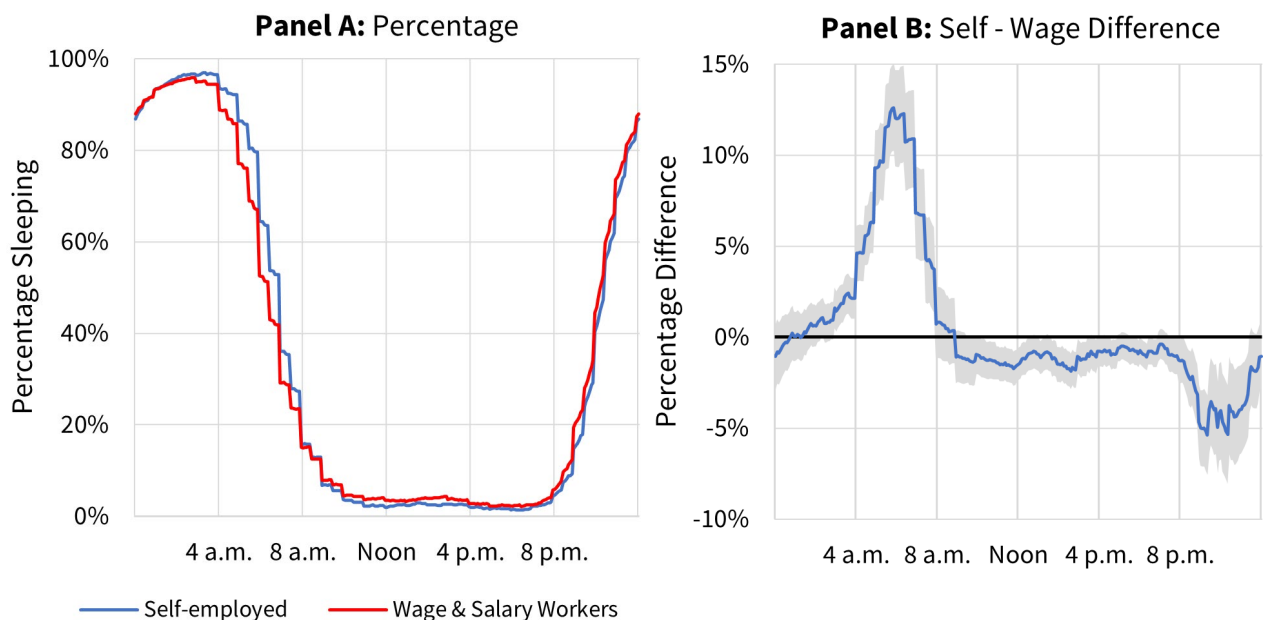
Next, self-employed individuals spend more time on housework throughout the day as seen in Figure 6. There are two peaks in the difference: one at 8 a.m. and another at 3 p.m. When looking at sleep in Figure 7, the self-employed appear to be later to bed and later to rise. Also of note is lower levels of sleep midday, likely due to less overnight work. As shown in Panel B the self-employed gain more sleep in the morning than they lose in the evening. On average, this results in an extra 21 minutes of time spent on rest.

Figure 6. Time Spent on Household Work

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

Figure 7. Time Spent Sleeping

When it comes to leisure, outlined in Figure 8, both groups are most likely to relax in the evening. Self-employed individuals tend to delay their leisure due to their shifted patterns of work and sleep leading to a spike in difference near 10 p.m., though both groups spend about the same amount of time on leisure over the course of a day.
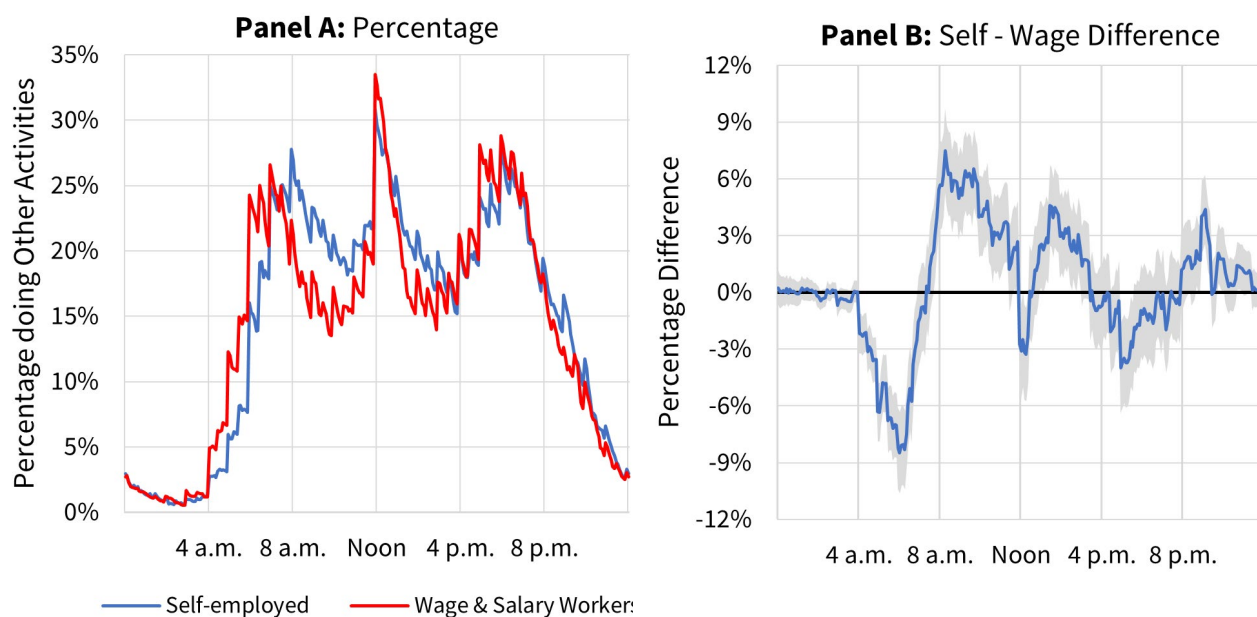
Figure 8. Time Spent on Leisure
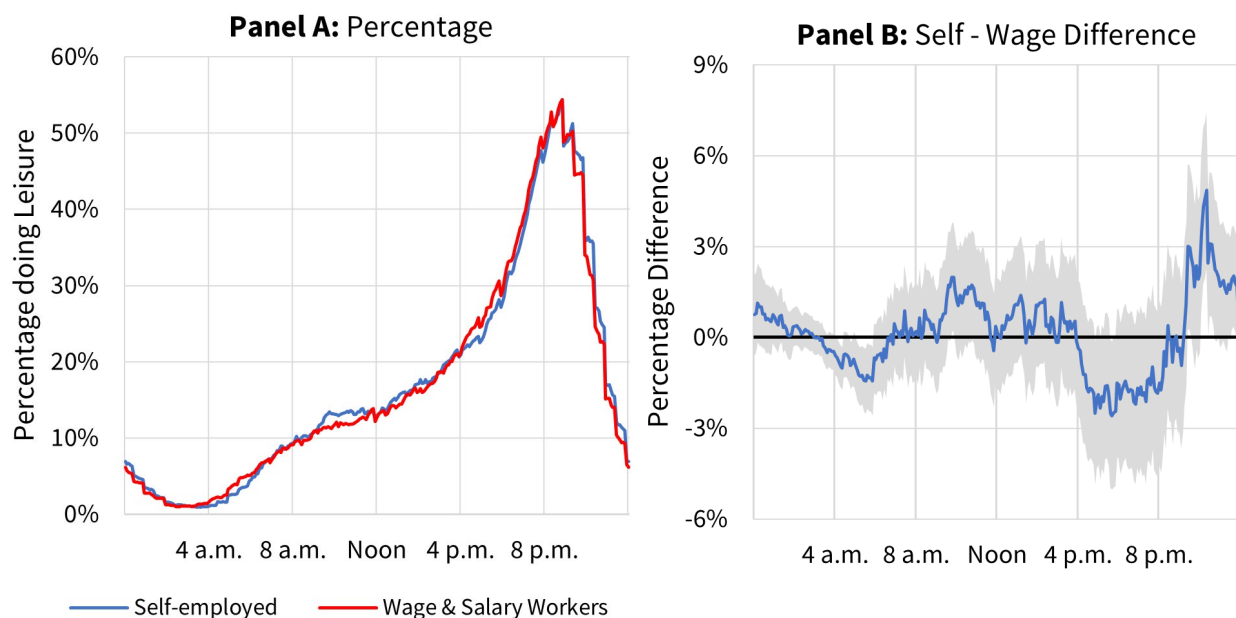
Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

Finally, we look at all other activities. This category is comprised of chores outside the house like shopping and receiving professional services (except for eating and grooming). Its pattern is similar to household work, with the self-employed doing more throughout the middle of the day, though the later sleeping pattern of self-employed individuals leads to a difference in morning activities.

Figure 9. Time Spent on Other Activities

Panel A: Percentage

**Panel B:** Self - Wage Difference

Self-employed   Wage & Salary Workers

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

Impacts of the COVID-19 Pandemic

Since the pandemic, working culture in the United States has changed. The most notable difference is an increase in working from home, either fully or on a hybrid schedule. Wage and salary workers saw the biggest shift with the percentage of work done from home, rising from 10.2 percent in 2019 to 29.7 percent in 2021 (Figure 10). In comparison, self-employed individuals worked from home at higher rates before the COVID-19 pandemic than wage and salary workers did afterwards. Given their higher base rate, self-employed workers did not see as large an increase in work from home due to the pandemic, only increasing from 35.4 percent in 2019 to 42.1 percent in 2021. This increase in flexibility about where work is done might potentially lead to changes in when work is done as well. The 2021 and 2022 samples of the ATUS are used to explore post-pandemic working habits.

**Figure 10. Time Spent Working from Home**
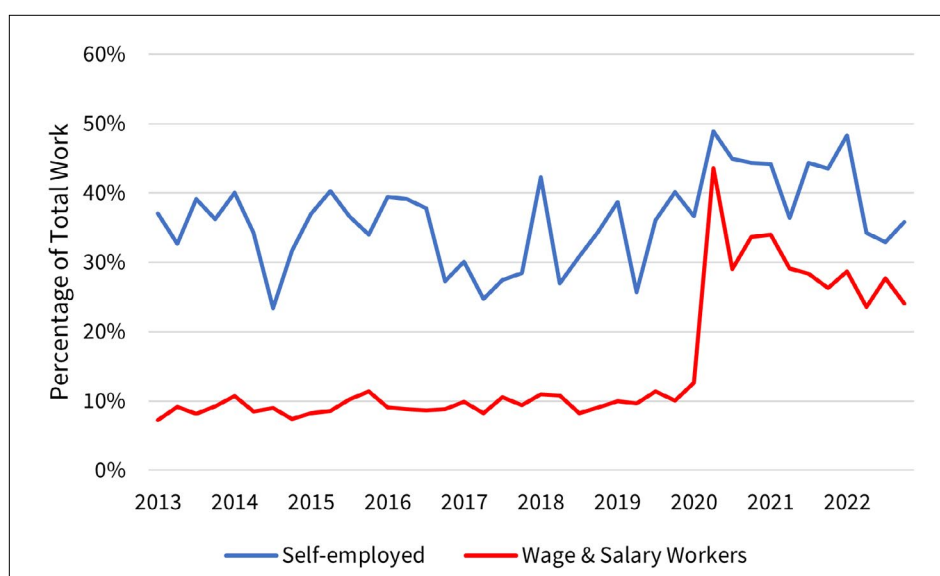
Source: American Time Use Survey 2013 to 2012, authors calculation. Wage and Salary Workers are not matched to self-employed individuals. Monthly data is aggregated to the quarter.

The first difference is that self-employed individuals are working fewer hours each week, with an average of 36.9 hours per week compared with 37.9 hours per week in the sample from 2016 to 2019. At the same time, there is no change in the hours worked by wage and salary earners. The decline appears to come from self-employed individuals working fewer days rather than fewer hours on the days they work. The percent of days worked declined from 71.6 percent to 68.7 percent while the hours per day worked remained flat.

As for when work is done throughout the day, pre-COVID-19 patterns continue to hold afterwards as well. Figure 10 displays time spent working the same as Figure 4 just with data from 2021 and 2022. No major difference can be identified between the two figures. While self-employed individuals were unlikely to change their behavior due to the pandemic, the rise in work-from-home policies for wage and salary workers might have led to timing flexibilities for that group. However, the one flexibility does not seem to have led to the other.

Figure 11. Time Spent Working (post-pandemic)
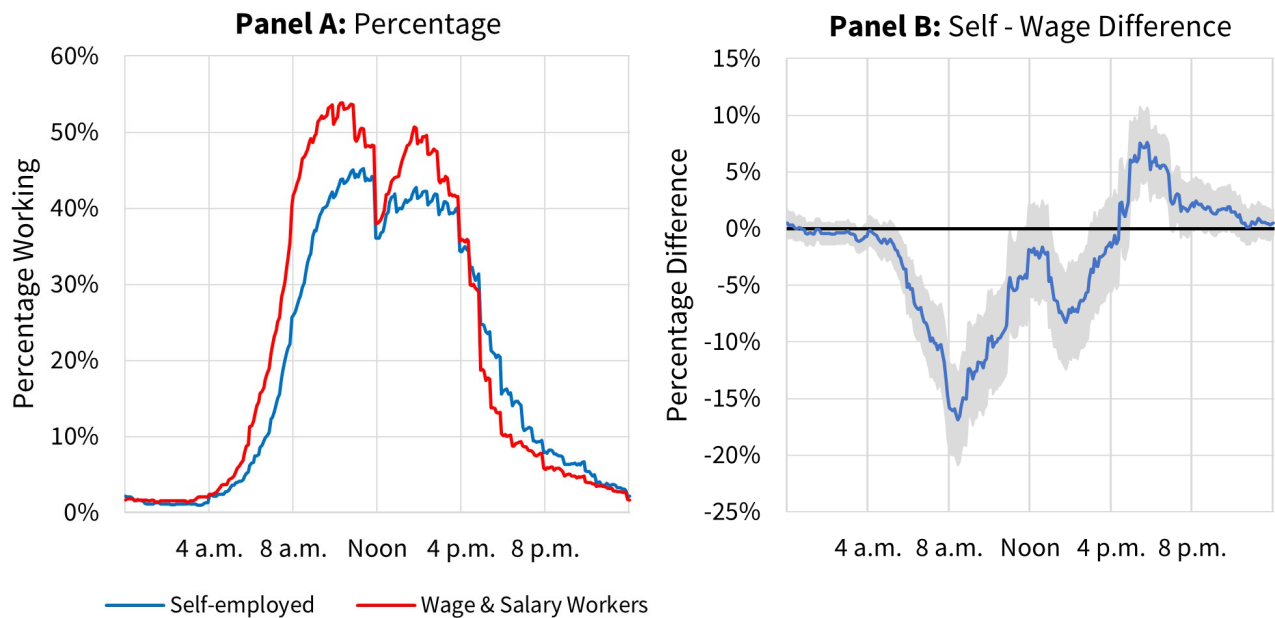
Source: American Time Use Survey 2021 to 2022, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

Conclusion

Self-employed individuals do have a different pattern to their work in comparison to those working for wages or salary. Being their own boss provides flexibility in work-related decisions and scheduling. A smaller percentage of the self-employed work the traditional 40 hours a week, with some working more and others working less. Similarly, the self-employed are less tied to the traditional Monday to Friday workweek and the 9 to 5 workday. These shifts in working behavior are associated with differences in many other aspects of life, particularly sleep patterns, caring for others, and household chores. Lastly, these differences appear to persist through the COVID-19 pandemic suggesting that increased location flexibility for wage and salary workers did not lead to a greater flexibility in when work is performed as is the case for the self-employed. Future research is necessary to determine if the time-use choices made by self-employed individuals are a consequence of self-employment or if self-employment is a choice deliberately made to increase flexibility in scheduling their daily lives.

Appendix – Propensity Score Matching

One potential concern with comparing self-employed individuals to the rest of the working public is the differences in demographics between the two groups. It is possible that the differences in time use are due to these demographical differences rather than the self-employment decision itself.

As such, a propensity score matching method has been used to find wage and salary workers which are most similar to the self-employed individuals. As seen in Table A.1, the demographic characteristics of the self-employed are statistically different from the whole population of wage and salary earners. Five major differences exist:

1. Men are more likely to be self-employed than women with 59.7 percent of the self-employed being men.

2. The self-employed are more likely to identify as white, and conversely less likely to identify as other races.

3. Self-employed individuals are less likely to have children under the age of 5.

4. The self-employed are more likely to be disabled.[7]

5. The self-employed are older on average, with the average self-employed individual being 7.2 years older than the average non-self-employed individual.

Table A.1. Summary Statistics

Variable	Self employed		Unmatched Wage & Salary Workers			Matched Wage & Salary Workers		
	Mean	Std	Mean	Std	t-stat	Mean	Std	t-stat
Worked Today	0.706	0.456	0.683	0.466	2.41**	0.688	0.463	1.40
Usual Weekly Hours	37.95	19.53	40.60	11.94	-5.87***	40.22	13.07	-4.34***
Variable Weekly Hours	0.148	0.355	0.053	0.224	12.48***	0.062	0.241	9.62***
Hours: Working	4.701	4.422	5.267	4.365	-5.81***	5.277	4.405	-4.49***
Hours: Care for Others	2.670	4.427	2.694	4.268	-0.27	2.260	3.985	3.54***
Hours: Household Work	1.873	2.297	1.576	1.972	6.10***	1.666	2.046	3.35***
Hours: Sleep	8.429	1.974	8.440	2.085	-0.27	8.322	1.952	1.91*
Hours: Leisure	4.101	3.084	3.886	2.963	3.31***	4.068	3.031	0.38
Hours: Other Activities	3.573	2.716	3.427	2.498	2.54**	3.481	2.409	1.26
Female	0.403	0.491	0.504	0.500	-9.25***	0.393	0.488	0.73
Hispanic	0.132	0.338	0.148	0.355	-2.12**	0.132	0.339	-0.03
White	0.879	0.326	0.791	0.407	11.87***	0.887	0.316	-0.84
Black	0.066	0.249	0.136	0.342	-11.96***	0.067	0.251	-0.14
Asian	0.041	0.199	0.051	0.219	-2.10**	0.038	0.190	0.58
Other Race	0.013	0.115	0.023	0.151	-3.77***	0.008	0.087	1.93*

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[7] Previous work by the SBA Office of Advocacy has explored this topic (Job Characteristics and Transitions among Older Self-employed Individuals with Work-limiting Health Conditions). The flexibility of self-employment is advantageous for those with disabilities who may find it difficult to work for long stretches at once.

	Self employed		Unmatched Wage & Salary Workers			Matched Wage & Salary Workers		
Variable	Mean	Std	Mean	Std	t-stat	Mean	Std	t-stat
Live with Partner	0.656	0.475	0.585	0.493	6.77***	0.660	0.474	-0.26
Own Child < 5	0.149	0.356	0.189	0.391	-5.00***	0.157	0.364	-0.77
Disability	0.057	0.232	0.038	0.191	3.85***	0.053	0.224	0.63
Less than Highschool	0.071	0.256	0.054	0.225	3.05***	0.072	0.258	-0.18
Highschool	0.467	0.499	0.482	0.500	-1.35	0.461	0.499	0.40
Bachelor's	0.269	0.444	0.274	0.446	-0.48	0.271	0.445	-0.14
Greater than Bachelor's	0.193	0.395	0.191	0.393	0.30	0.196	0.397	-0.24
Age	51.66	14.32	44.53	13.44	22.62***	51.61	14.20	0.11
Observations	2,634		20,272			2,634		

Source: American Time Use Survey 2016 to 2019, authors calculation. Hispanic is not exclusive to the racial categories. The t-stat compare the self-employed to wage and salary earners. * indicates statistical significance at the 1% level, ** indicates statistical significance at the 5% level, and *** indicates statistical significance at the 1% level.

The propensity score matching method matches the self-employed with an individual in the wage and salary worker population with similar demographic characterisitics. The matching algorithm begins with a logistic regression, which predicts the likelihood an individual is self-employed using demographic factors, including gender, race, presence of a partner in the household, presence of own children under five in the household, disability, education, and age, as well as an interaction between gender and children under the age of five.

The results of this regression can be seen in Table A.2. Then, using the coefficients from this regression, a predicted probability of being self-employed is generated. The self-employed are then matched with their nearest neighbor, without replacement, to get a sample of wage and salary earners that closely matches the self-employed with respect to the observed demographic characteristics.

Table A.2. Matching Logit Regression

Variable	Point Estimate	Standard Error
Female	-0.492***	0.047
Hispanic	-0.165**	0.067
Black	-0.809***	0.084
Asian	-0.249**	0.108
Other Race	-0.457***	0.177
Live with Partner	0.174***	0.046
Own Child < 5	0.017	0.083
Female X Own Child < 5	0.568***	0.116
Disability	0.164*	0.095
Less than Highschool	0.329***	0.091
Bachelor's	0.011	0.052
Greater than Bachelor's	-0.043	0.059

Variable	Point Estimate	Standard Error
Age	0.041***	0.002
Observations – Self	2,634	
Observations – Not	20,272	
Pseudo R^2	0.058	

Source: American Time Use Survey 2016 to 2019, authors calculation. The dependent variable is self-employed status. The omitted category of race is white, and education is completed high school. Hispanic is not exclusive to the racial categories. * indicates statistical significance at the 1% level, ** indicates statistical significance at the 5% level and *** indicates statistical significance at the 1% level.

As seen in the final columns of Table A.1, this matched sample is more similar to the self-employed sample with respect to their demographic characterisitics. At the same time, their working decisions are still substantially different. Both the matched and unmatched groups show wage and salary earners working more hours than the self-employed group, suggesting that demographics do not explain the differences between them. To clarify this point, all the of the figures from the main body are replicated in the appendix with the full sample of non-selfemployed replacing the selected match data. Most of the patterns noted in the main brief are found in these figures as well, though some are not present. For example, the differences in care provided to others, which is not present in the unmatched datais likely because the self-employed are older and less likely to have young children.

Figure A.1. Usual Hours Worked per Week (Unmatched)

Source: American Time Use Survey 2016 to 2019, authors calculation. Hours are rounded to the nearest five hours. Each bin is noted by its midpoint, so the 40-hour bin includes all workers reporting usual hours worked between 38 and 42 hours.
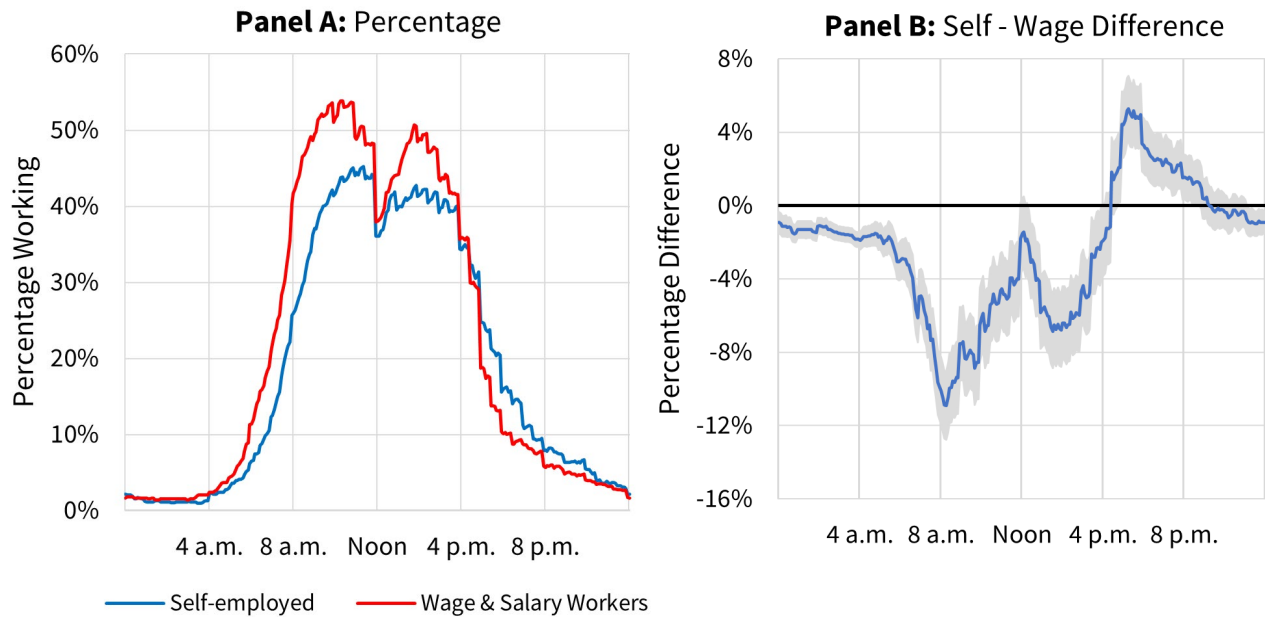
Figure A.2. Days of the Week Worked (Unmatched)
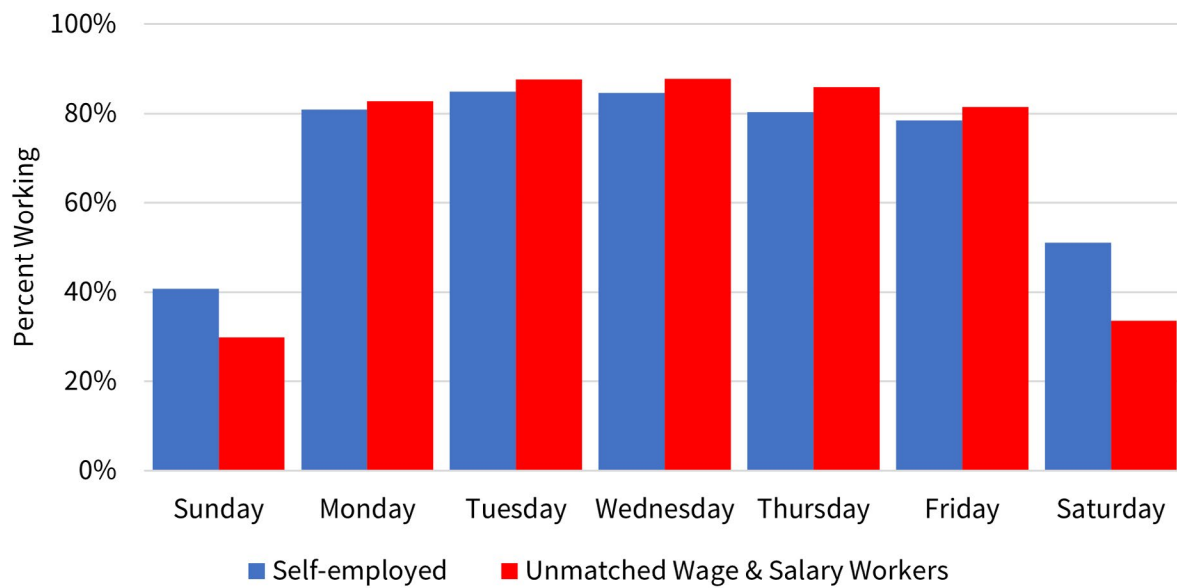
Source: American Time Use Survey 2016 to 2019, authors calculation.

Figure A.3. Hours Worked per Day (Unmatched)
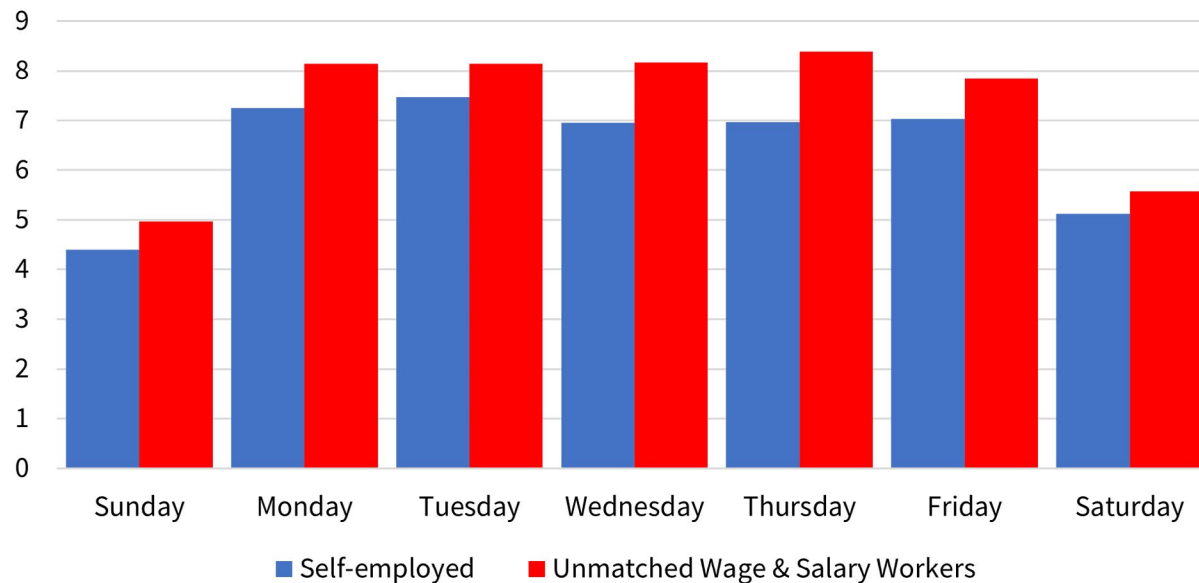
Source: American Time Use Survey 2016 to 2019, authors calculation. Hours worked are conditional on an individual working on the given day.

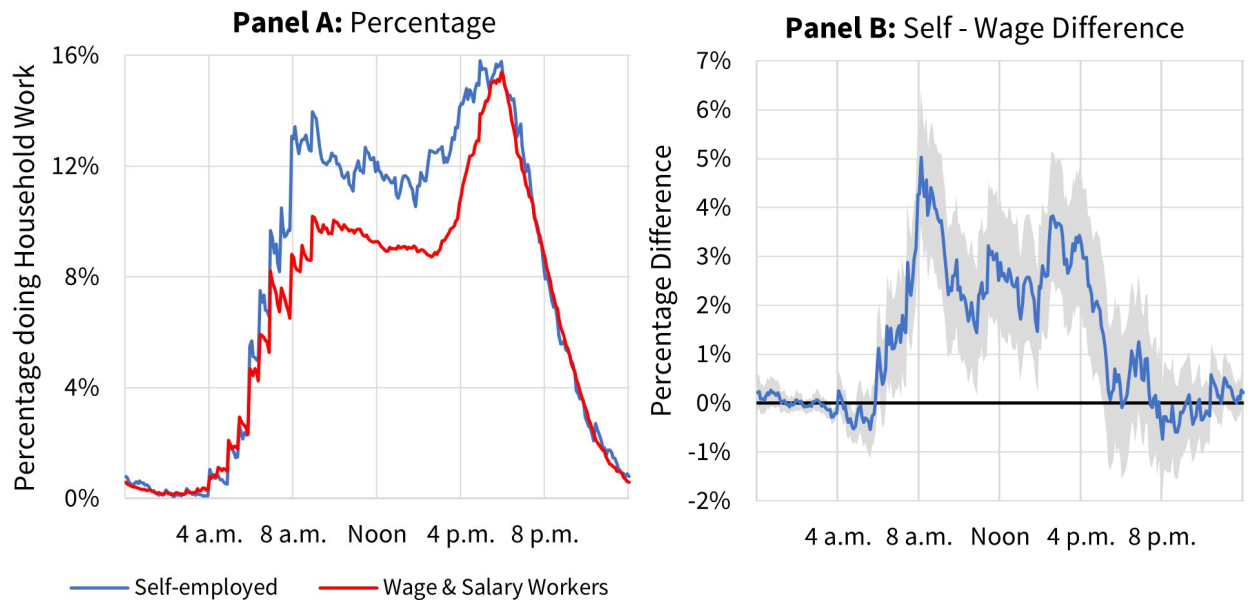**Figure A.4. Time Spent Working (Unmatched)**

Panel A: Percentage

Panel B: Self - Wage Difference

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

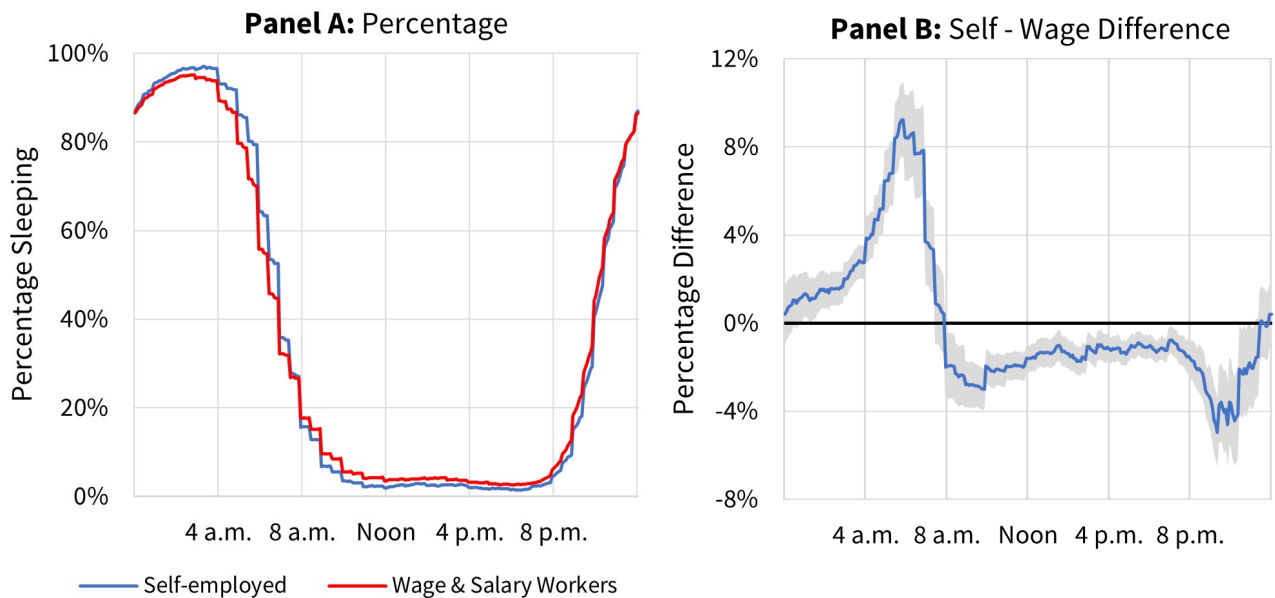**Figure A.5. Time Spent Caring for Others (Unmatched)**
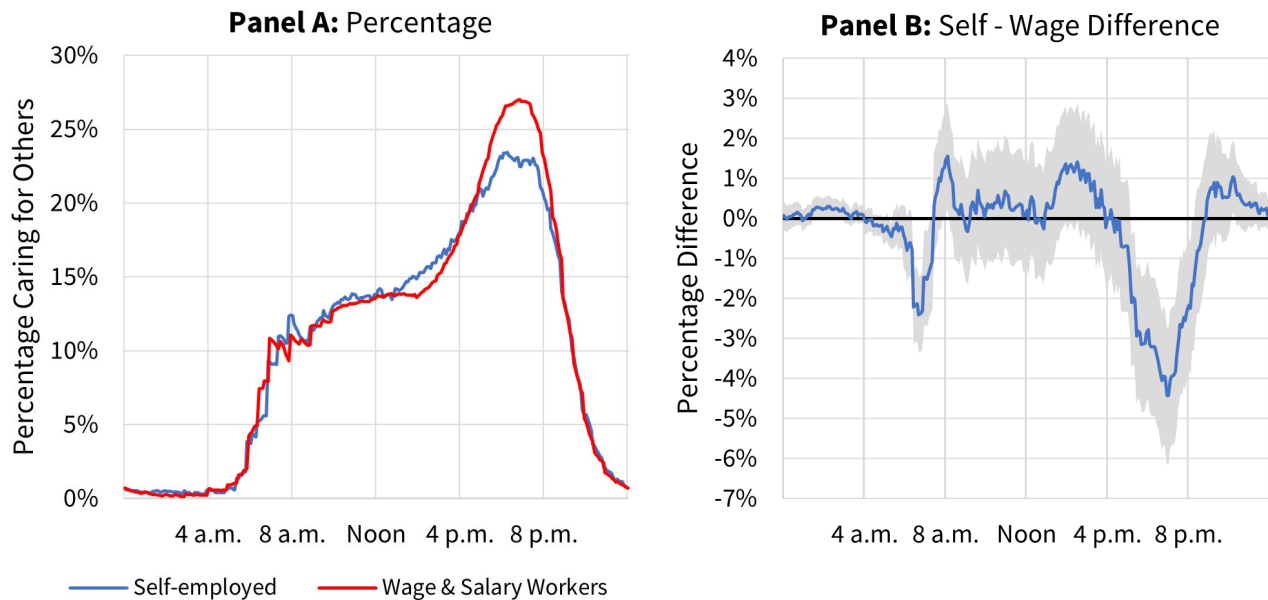
Panel A: Percentage

Panel B: Self - Wage Difference

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

Figure A.6. Time Spent on Household Work (Unmatched)

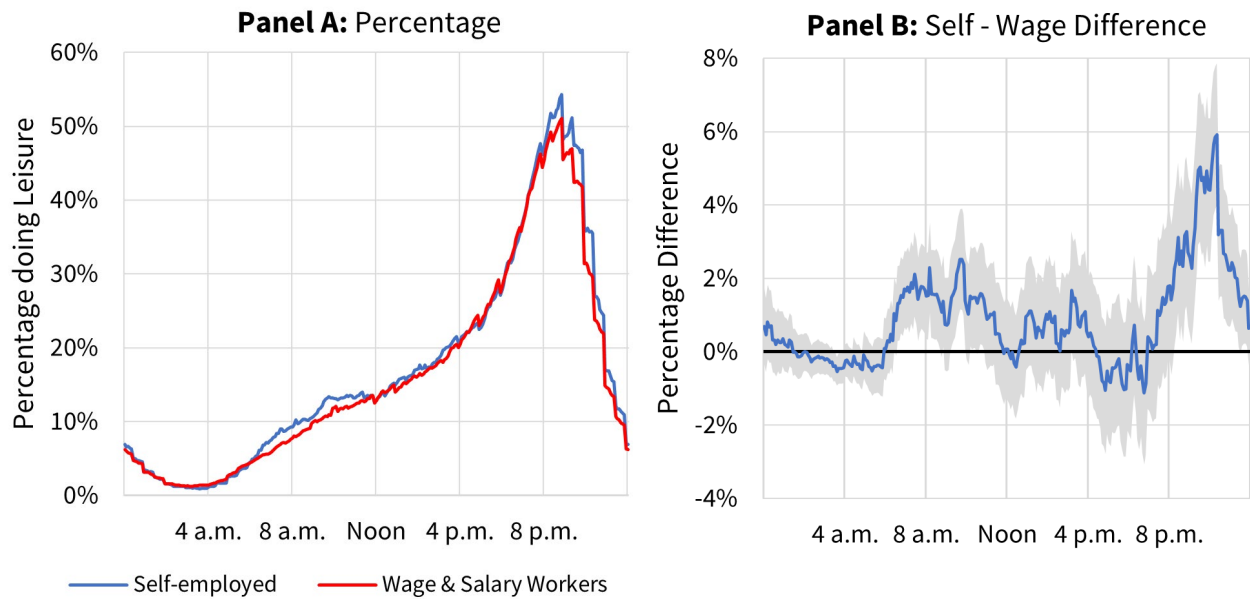**Panel A:** Percentage

Panel B: Self - Wage Difference

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

Figure A.7. Time Spent Sleeping (Unmatched)

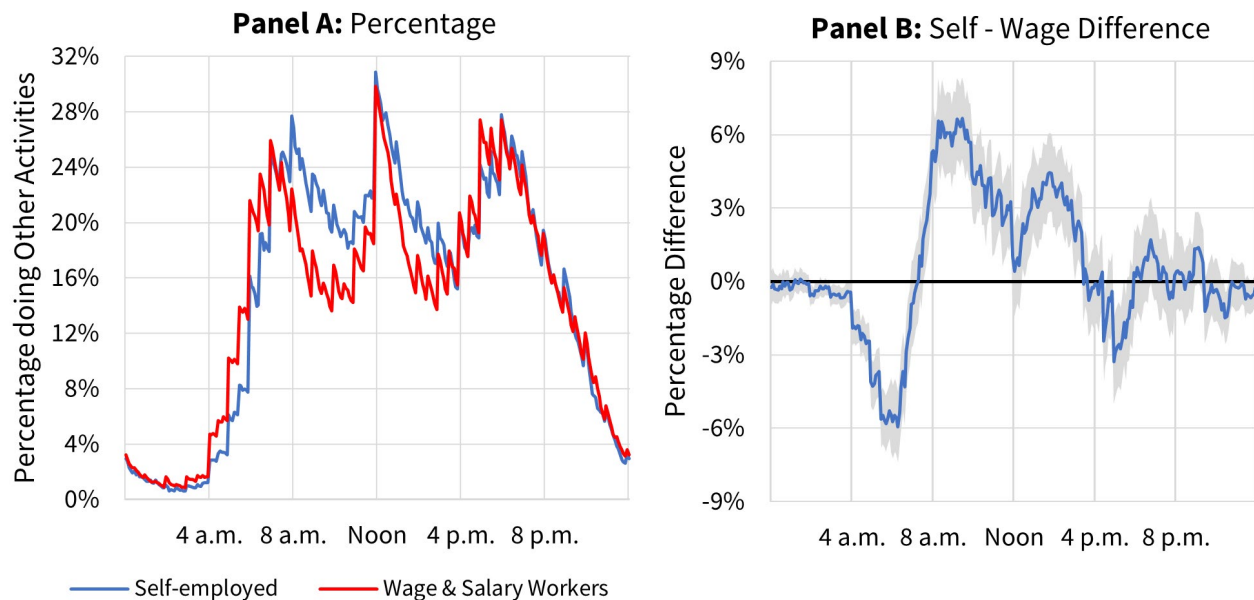**Panel A:** Percentage

Panel B: Self - Wage Difference

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

Figure A.8. Time Spent on Leisure (Unmatched)

Panel A: Percentage

Panel B: Self - Wage Difference

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.

Figure A.9. Time Spent on Other Activities (Unmatched)

Panel A: Percentage

Panel B: Self - Wage Difference

Source: American Time Use Survey 2016 to 2019, authors calculation. The solid line Panel B is the difference between the self-employed and matched wage and salary worker lines in Panel A. The grey area represents the 95% confidence interval, adjusted for multiple hypothesis testing.