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**Abstract**

This paper analyzes work from home from a household perspective, focusing on its various relationships with spouses' wages, household labor supply, expenditures, and chores. We use a collective model that predicts that work-from-home decisions result from joint utility maximization. Using data from the PSID (2011-2021), we find that both partners' wages and hours are associated with their own and their spouse's WFH status in pooled specifications, but these associations weaken substantially when accounting for endogeneity and unobserved heterogeneity. Instrumental variable estimates suggest that wage effects are partly driven by occupational sorting, while fixed effects models reveal that changes in WFH status are strongly correlated across spouses but largely unrelated to short-term changes in wages or hours. Implications point to the need for models of remote work that incorporate intra-household dynamics, and to the importance of recognizing WFH as a negotiated outcome rather than an individual choice.

*Keywords*: work from home; collective model, PSID data.

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# 1. Introduction

The expansion of work from home (WFH) arrangements, often referred to as telecommuting, teleworking, or remote work (see, e.g., Gimenez-Nadal et al., 2020), has represented a major transformation in labor markets in recent years. While WFH was previously limited to specific sectors, such as self-employment or certain professional occupations, technological advances and changing organizational practices have enabled its rapid diffusion across a wider range of jobs (Bloom et al., 2015; Restrepo and Zeballos, 2022). WFH has been associated with greater flexibility, reductions in commuting time, and improved work-life balance (Athanasiadou and Theriou, 2021; Kim, 2020). At the same time, remote work introduces new challenges, including blurred boundaries between paid work and domestic life, increased demands at home, and potential changes in household organization (Brindal et al., 2022; Hamermesh, 2020; Fujiwara et al., 2020; Möhring et al., 2021; Ruiz et al., 2021; Gimenez-Nadal et al., 2023).

A growing literature has examined the determinants and consequences of WFH. Prior to the COVID-19 pandemic, studies highlighted its potential to reduce urban congestion, support organizational outcomes, and facilitate a more equal distribution of household responsibilities (Sampath et al., 1996; Safirova, 2002; Golden, 2006; White et al., 2007; Gajendran and Harrison, 2007; Duxbury and Halinski, 2014; Dockery and Bawa, 2018; Giménez-Nadal et al., 2020, 2024). However, concerns remain regarding unequal access to telework, persistent gender gaps in unpaid work, and the risk of exacerbating existing inequalities (Edwards and Field-Hendrey, 2002; Allen et al., 2013; Chung and van der Horst, 2018; Del Boca et al., 2020). The COVID-19 pandemic triggered an unprecedented and sudden expansion of WFH, prompting new research on its effects on time use, family dynamics, and well-being (Del Boca et al., 2020; Blahopoulou et al., 2022; Restrepo and Zeballos, 2022; Pabilonia and Vernon, 2023; Giménez-Nadal et al., 2023, 2025).

Despite this surge of interest, much of the existing research has approached WFH as an individual decision, emphasizing job characteristics or personal preferences. However, the adoption of WFH can also be viewed as a household-level outcome, shaped by the joint preferences, constraints, and bargaining processes of all members (Chiappori, 1988, 1992; Chiappori et al., 2002). In this context, changes in work location can influence the allocation

of market work, domestic responsibilities, and joint leisure, with potential consequences for the well-being of all household members, and for the allocation of resources within households, ultimately affecting intrahousehold inequality.

This paper analyzes WFH from a household perspective, focusing on its various relationships with spouses' wages, labor supply, expenditures, and chores. We use a collective model of labor supply to interpret WFH as a negotiated household outcome, rather than as a purely individual choice. Our analysis is based on data from the Panel Study of Income Dynamics (PSID) for the period 2011-2021, which provides detailed panel information on US households. The results contribute to the literature by highlighting the importance of intrahousehold dynamics in shaping WFH adoption, offering new insights for both researchers and policymakers concerned with the future of work and family life.

Our findings show that the decision to WFH within households is shaped by both individual characteristics and strong interdependence between partners, as the probability that one spouse WFH increases significantly when the other spouse does, even after accounting for fixed effects. The results also indicate that wives' housework hours are positively related to the probability that the wife works from home, while husbands' housework hours show no significant association. Wage and hours worked by either spouse are not significantly related to their own or their partner's probability of working from home after controlling for unobserved heterogeneity. Family earnings are positively and robustly associated with the probability of working from home for both husbands and wives, although the size of this effect is smaller when using models that control for individual fixed effects. Overall, the findings highlight the importance of intra-household dynamics and suggest that WFH adoption is the result of both economic factors and joint decision-making within couples.

This paper contributes to the literature by analyzing WFH as a negotiated household outcome using the collective model of labor supply and panel data from the PSID. It departs from existing research by focusing on intra-household dynamics, estimating models that allow for individual heterogeneity and endogenous wages, and by documenting the strong mutual influence of spouses' WFH status. The results provide new evidence on the

household-level mechanisms underlying the adoption of WFH and underscore the value of considering both partners' characteristics and choices in empirical research on remote work.

The rest of the paper is structured as follows. Section 2 describes the theoretical framework, while Section 3 shows the data and variables. Section 4 describes the empirical strategy and the results, and Section 5 concludes.

## 2. Theoretical framework

This paper interprets the decision to WFH within the household through the lens of the collective model of labor supply (Chiappori, 1988, 1992). Unlike unitary models, the collective framework acknowledges that household members may have distinct preferences and that outcomes reflect a Pareto-efficient allocation of resources subject to a joint budget constraint. Decisions on labor supply, time use, and consumption are thus the result of a bargaining process, whether explicit or implicit, in which individual preferences and relative bargaining power jointly determine the final allocation.

We assume the choice to engage in WFH is not merely an individual labor market decision but also a household-level outcome. WFH alters the spatial and temporal structure of time use, potentially affecting not only market work but also domestic responsibilities, child supervision, and joint leisure. In dual-earner households, the adoption of WFH by one partner can influence the marginal value of time for the other, altering intra-household specialization patterns and bargaining dynamics.

WFH may also interact with gender norms and institutional constraints, shaping its feasibility and desirability asymmetrically across partners. For instance, if women bear a disproportionate share of domestic work, the opportunity to WFH could either reinforce or relax traditional roles, depending on the relative gains in utility and bargaining position. Moreover, the extent to which WFH leads to changes in commuting time, productivity, or earnings may shift the internal distribution of resources and influence future bargaining positions.

We interpret observed WFH outcomes as the result of a household-level optimization problem that reflects both partners' preferences, the production possibilities within the

household, and any constraints, technological, institutional, or social, that limit feasible choices. This perspective allows us to treat WFH not as a simple function of individual job characteristics, but as an equilibrium outcome shaped by joint preferences, constraints, and the internal allocation of time and power.

# 3. Data and variables

### 2.1 The data

We use data from the Panel Study of Income Dynamics (PSID), a longitudinal household survey conducted in the United States (PSID, 2021). The PSID is the longest-running household panel study in the world. It began in 1968 with a nationally representative sample of over 18,000 individuals living in 5,000 families across the U.S. Since then, detailed information has been continuously collected on these individuals and their descendants, covering a wide range of topics including employment, income, wealth, expenditures, health, marriage, fertility, child development, philanthropy, and education, among others. More than 7,600 peer-reviewed publications have been based on the PSID.

The PSID data consists of a single individual-level file, which contains information on every respondent interviewed, along with identifiers that allow linking this information to the family-level files (one per wave). These family files gather data collected through regular interviews with one or more household members. From 1968 to 1997, interviews were conducted annually; since 1997, the survey has followed a biennial schedule.

The content of the survey has evolved over time to reflect changing scientific and policy priorities. Nonetheless, many core domains, such as employment, income, wealth, education, and expenditures, have been measured consistently since the outset. Over the years, the survey has been restructured to incorporate additional samples, including the low-income SEO sample and a refresher sample of immigrant families, as well as to introduce new content areas. This study uses data from the 2011 to 2021 waves (i.e., the 2011, 2013, 2015, 2017, 2019, and 2021 interviews), as these are the years for which information is available on key variables relevant to the analysis.

### 2.2 Sample requirements

The sample is constructed using data from the PSID waves 2011 to 2021, collected biennially, when commuting and WFH are observed. The sample includes only individuals from the PSID core representative samples, excluding those from the Survey of Economic Opportunity and the immigrant refresher samples for each wave. This ensures national representativeness and temporal consistency (Theloudis et al., 2025).

We keep households formed at least by a reference person, and a spouse (or cohabiting partner), as we are focused on studying two-member households (Chiappori et al., 2002) and drop a small number of observations that correspond to non-heterosexual couples. We also drop households with missing information on the key variables and keep only couples between 21 and 65 years old (Mazzocco, 2007). Finally, we remove outliers in terms of the key variables using the Blocked Adaptive Computationally Efficient Outlier Nominators (Billor et al., 2000). These restrictions leave a sample of 6,821 observations, corresponding to 1,658 households. In other words, each household is observed on average during 4.11 periods of time.

### 2.3 Variables

We observe annual hours worked of both spouses, as well as commuting times. Commuting time refers to the duration, in minutes, of a typical one-way trip from home to work, and allows us to identify WFH as the censored value. We also observe hourly wages, measured in $ per hour, annual chores hours, and annual family earnings. Wealth corresponds to net assets and is harmonized across waves, with extreme values excluded.

Consumption is observed through reported expenditures in several domains: food (at home, delivered, and away from home), housing, transportation, childcare, schooling, utilities, and health care. All reported amounts are annualized when necessary, using standard conversion factors based on the reported frequency. Monetary variables are deflated to 2021 dollars using the Consumer Price Index.

We also identify several demographics. The age of spouses is measured in years, while educational attainment is measured as the highest completed level of education and used to

group individuals into broad qualification categories. We also observe race, the family size, the number of kids, and the age of the youngest kid. Finally, the PSID includes information on the State of residence, and on occupation. Occupational categories are harmonized across survey years, as the PSID uses different census coding schemes across waves (2000 codes for 2011–2015 and 2010 codes for 2017–2021).

Table 1. Summary statistics

| | Husbands | | Wives | |
|---|---|---|---|---|
| Individual variables | mean | st.dev. | mean | st.dev. |
| Age | 43.281 | 10.912 | 41.667 | 10.820 |
| White | 0.913 | 0.282 | 0.926 | 0.261 |
| Black | 0.056 | 0.230 | 0.039 | 0.193 |
| Primary education | 0.062 | 0.241 | 0.024 | 0.152 |
| Secondary education | 0.230 | 0.421 | 0.176 | 0.381 |
| College/University | 0.500 | 0.500 | 0.508 | 0.500 |
| Master/PhD | 0.209 | 0.406 | 0.292 | 0.455 |
| Wage | 36.157 | 27.788 | 28.150 | 20.746 |
| Work annual hours | 2195.376 | 635.436 | 1783.384 | 674.469 |
| Chores annual hours | 31.153 | 25.931 | 57.068 | 40.708 |
| Work from home | 0.124 | 0.329 | 0.117 | 0.321 |
| Household variables | | mean | st.dev. | |
| Family annual earnings | | 127.805 | 78.266 | |
| Wealth | | 363.349 | 718.405 | |
| Annual expenditure | | 26.977 | 15.217 | |
| Family size | | 3.253 | 1.203 | |
| Number of children | | 1.056 | 1.172 | |
| Age youngest child | | 3.702 | 5.063 | |
| # observations | | 6821 | | |

Note: The sample (PSID 2011-2021) is restricted to two-member spouses between 21 and 65 years with positive labor market outcomes and non-missing information on the key variables.

### 2.4 Descriptive statistics

Table 1 shows the summary statistics of the key variables. The average age is 43.3 years for husbands and 41.7 years for wives, with similar dispersion across individuals (standard deviations of 10.9 and 10.8, respectively). The majority of respondents are White (91.3% of husbands and 92.6% of wives), followed by a small share of Black individuals (5.6% and

3.9%, respectively). Educational attainment shows notable gender differences. While approximately half of both husbands and wives hold a college or university degree, a higher share of wives have attained a Master's or doctoral degree (29.2% versus 20.9%). Conversely, a greater proportion of husbands report primary or secondary education as their highest level completed.

Men earn substantially higher hourly wages than women on average ($36.16 versus $28.15), and also work more hours per year (2,195 hours for husbands compared to 1,783 hours for wives). In contrast, wives spend significantly more time on household chores, with an average of 57.1 hours per year, nearly double that of husbands (31.2 hours). The incidence of telework is similar across genders, with 12.4% of husbands and 11.7% of wives reporting WFH.

At the household level, average family earnings amount to $127,805 per year, with a standard deviation of $78,266. Net wealth is highly variable, with a mean of $363,349 and a standard deviation exceeding $700,000, reflecting the well-known skewness in wealth distribution. Average annual household expenditure is $26,977. The mean household size is 3.25 members, including just over one child on average. The average age of the youngest child is 3.7 years.

# 4. Econometric analysis

## 4.1 Strategy

To investigate the determinants of WFH within couples, we estimate linear probability models for the probability that either the husband or the wife WFH. The dependent variables are binary indicators equal to one if the individual reports WFH, and zero otherwise. Given the theoretical framework outlined above, we interpret WFH as the outcome of a household-level decision process, reflecting both individual characteristics and intra-household interdependencies.

We estimate two separate regressions: one for the probability that the husband WFH, and another for the wife. The explanatory variables include log wages and log annual working hours of both spouses, capturing opportunity costs and labor supply intensity and

complementarities. We also control for family earnings and net wealth, both in logarithmic form, to account for household-level income and wealth effects. Expenditure is included as a proxy for consumption needs and financial constraints. Additionally, we control for annual hours devoted to household chores by each partner, reflecting intra-household specialization in domestic production, which may influence the feasibility or desirability of teleworking.

To account for complementarities or substitution in WFH decisions, each model includes the spouse's WFH status as a regressor. This captures strategic interactions within the couple: whether one partner's telework status makes it more or less likely that the other also WFH. The specification further controls for individual demographics (age, race, education), family composition (household size, number of children, and age of the youngest child), and includes fixed effects for year, region, and occupation. These absorb common shocks, geographical heterogeneity in telework feasibility, and occupation-specific constraints. Standard errors are always robust to heteroskedasticity.

First, we estimate equations separately for husbands and wives using OLS. Next, we estimate them simultaneously using SUR. Third, because wages may be endogenous, we predict them using a Mincer-style equation like Blundell et al. (2016) and Theloudis et al. (2025). Finally, we exploit the panel structure of the data and net out individual fixed effects.

### 4.2 Results

The results obtained under OLS and SUR are shown in Table 2. Results are qualitatively consistent across specifications, but SUR estimates tend to produce slightly larger coefficients in absolute value and are more precisely estimated, particularly for core labor market variables. This is expected, as the SUR framework exploits the correlation between the error terms of the two equations which likely reflect joint unobserved household-level factors. Given the similar direction and significance of the estimates, and the gain in efficiency from jointly estimating the system, we focus the interpretation on the SUR results.

Higher own wages are associated with a significantly lower probability of WFH for both husbands and wives. Specifically, a 1% increase in a husband's wage is associated with a 0.138 percentage point reduction in his probability of WFH, while the corresponding effect for wives is 0.081. These negative associations may reflect occupational sorting: individuals

with higher wages may be in occupations or roles where physical presence is more rigidly required, or where managerial responsibilities reduce WFH feasibility. Additionally, higher wages may increase the opportunity cost of domestic presence, reinforcing traditional workplace attendance. The partner's wage is also negatively associated with one's own WFH probability, with elasticities of -0.028 and -0.112 for husbands and wives, respectively. This suggests that the wage of the spouse influences intra-household allocation of work location, likely reflecting relative productivity, bargaining dynamics, or complementarities in time use.

Hours worked are negatively correlated with the probability of WFH. For both partners, own working hours exert a strong negative effect, while partner's hours also matter, though to a slightly lesser extent. These results are consistent with the notion that WFH is less compatible with longer work schedules, possibly due to coordination difficulties, employer demands, or constraints in domestic space or infrastructure. On the other hand, the time devoted to household chores shows a modest but significant pattern for wives: an increase in a wife's housework hours is associated with a higher probability of her WFH. This aligns with the idea that telework facilitates the combination of paid and unpaid work. Conversely, husband's housework hours do not significantly predict WFH for either spouse.

Importantly, there is strong evidence of interdependence in WFH. The probability that one partner WFH increases substantially when the other does. A husband's WFH status raises the wife's probability of WFH by 26.2 percentage points, and reciprocally, a wife's WFH increases the husband's probability by 27.9 points. This symmetry suggests complementarities in location choices, potentially driven by coordination of domestic tasks, preferences for joint presence, or shared constraints (e.g., childcare availability or housing space).

Household earnings are positively associated with WFH for both partners, with elasticities of 0.18 for husbands and 0.21 for wives, while wealth shows no significant effect. This suggests that current labor income, rather than accumulated assets, is more relevant to the WFH decision, possibly reflecting job types, employer flexibility, or immediate financial incentives.

Table 2. Baseline estimates

| | MCO | | SUR | |
|---|---|---|---|---|
| VARIABLES | Husbands | Wives | Husbands | Wives |
| Husband log wage | -0.098*** | -0.034** | -0.138*** | -0.081*** |
| | (0.018) | (0.015) | (0.011) | (0.011) |
| Wife log wage | -0.012 | -0.085*** | -0.028*** | -0.112*** |
| | (0.012) | (0.016) | (0.009) | (0.008) |
| Husband work hours | -0.062*** | -0.038*** | -0.122*** | -0.086*** |
| | (0.017) | (0.014) | (0.011) | (0.010) |
| Wife work hours | -0.022** | -0.061*** | -0.045*** | -0.118*** |
| | (0.010) | (0.013) | (0.007) | (0.007) |
| Log expenditure | 0.003 | -0.020 | 0.002 | -0.023** |
| | (0.013) | (0.014) | (0.010) | (0.010) |
| Husband log chores | 0.006 | -0.002 | 0.004 | -0.002 |
| | (0.006) | (0.006) | (0.005) | (0.004) |
| Wife log chores | -0.011 | 0.015** | -0.011* | 0.012** |
| | (0.008) | (0.007) | (0.006) | (0.006) |
| WFH status of husband | | 0.139*** | | 0.262*** |
| | | (0.021) | | (0.011) |
| WFH status of wife | 0.147*** | | 0.279*** | |
| | (0.022) | | (0.012) | |
| Log family earnings | 0.112*** | 0.124*** | 0.179*** | 0.214*** |
| | (0.027) | (0.029) | (0.018) | (0.018) |
| Log family wealth | 0.002 | 0.001 | 0.001 | 0.001 |
| | (0.001) | (0.001) | (0.001) | (0.001) |
| Demographics: | | | | |
| Age | 0.002** | 0.002*** | 0.001** | 0.001** |
| | (0.001) | (0.001) | (0.000) | (0.000) |
| Race: black | -0.005 | -0.012 | -0.005 | -0.007 |
| | (0.026) | (0.028) | (0.017) | (0.020) |
| Race: other | -0.020 | 0.015 | -0.020 | 0.021 |
| | (0.030) | (0.042) | (0.022) | (0.020) |
| Education: secondary | -0.032 | -0.022 | -0.030* | -0.025 |
| | (0.026) | (0.045) | (0.017) | (0.026) |
| Education: college/university | -0.013 | 0.018 | -0.014 | 0.009 |
| | (0.025) | (0.045) | (0.017) | (0.025) |
| Education: Master/PhD | -0.017 | -0.006 | -0.019 | -0.017 |
| | (0.029) | (0.047) | (0.019) | (0.026) |
| Family size | -0.004 | -0.000 | -0.002 | 0.003 |
| | (0.010) | (0.011) | (0.008) | (0.008) |
| Number of children | 0.000 | 0.025** | -0.007 | 0.018** |
| | (0.011) | (0.013) | (0.009) | (0.009) |
| Age of youngest child | -0.000 | -0.003*** | 0.000 | -0.003*** |
| | (0.001) | (0.001) | (0.001) | (0.001) |
| Constant | 0.537*** | 0.553*** | 1.041*** | 1.198*** |
| | (0.158) | (0.164) | (0.102) | (0.101) |
| Year FE | Yes | Yes | Yes | Yes |
| Region FE | Yes | Yes | Yes | Yes |
| Occupation FE | Yes | Yes | Yes | Yes |
| Observations | 6,821 | 6,821 | 6,821 | 6,821 |
| R-squared | 0.071 | 0.079 | 0.049 | 0.052 |

Note: Robust standard errors in parentheses, clustered at the household level. *** significant at the 1%; ** significant at the 5%; * significant at the 10%.

Among demographic variables, age has a small but positive effect on WFH probability for both partners. Educational attainment, race, and household size are not significantly associated with WFH once occupation, region, and year fixed effects are included. The presence of children plays a nuanced role: the number of children is positively associated with WFH for wives, but not for husbands, suggesting that childcare responsibilities may drive WFH among women. Moreover, the age of the youngest child is negatively associated with the probability that the wife WFH, indicating that WFH is more common when children are younger and more in need of supervision.

Results using predicted wages are shown in Table 3. Once instrumented, the association between wages and WFH outcomes weakens substantially. The previously strong negative association between own wages and WFH disappears entirely for wives and becomes smaller for husbands. Specifically, a higher (instrumented) husband wage is still negatively associated with his own WFH status, but the magnitude is reduced (−0.082) and remains statistically significant at the 1% level. For wives, own wages have no significant impact on WFH, and cross-wage effects (the partner's wage) are insignificant for both partners. These findings suggest that the strong correlations observed in the baseline estimates may have been partly driven by unobserved confounding factors, such as occupational sorting or preferences correlated with both wages and WFH arrangements.

The number of hours worked remains an important predictor of WFH, especially for wives. For women, the association is negative and large: a 1% increase in annual work hours reduces the probability of working from home by 0.09 percentage points. This suggests that WFH is less compatible with longer working schedules among women, possibly due to occupational constraints, work intensity, or lack of flexibility in job roles. For husbands, the effect of own hours remains negative and significant, although more modest in size (−0.042). Interestingly, cross-effects now show that an increase in the wife's hours increases the probability that the husband works from home (0.015), suggesting a compensatory dynamic in time allocation across partners.

Time devoted to housework remains a relevant factor only for women. An increase in female chore time is associated with a higher probability of WFH for wives and a lower probability for husbands. This pattern may reflect household specialization, where women

working from home engage more in domestic production, while men are less likely to work from home when female domestic effort increases. However, the effect sizes are small.

Table 3. Estimates using instrumented wages

| VARIABLES | Husbands | Wives |
|---|---|---|
| Husband log wage | -0.082*** | 0.023 |
| | (0.025) | (0.016) |
| Wife log wage | 0.023 | 0.009 |
| | (0.018) | (0.026) |
| Husband work hours | -0.042*** | 0.005 |
| | (0.009) | (0.009) |
| Wife work hours | 0.015** | -0.090*** |
| | (0.006) | (0.006) |
| Log expenditure | 0.008 | -0.024** |
| | (0.010) | (0.010) |
| Husband log chores | 0.006 | -0.001 |
| | (0.005) | (0.005) |
| Wife log chores | -0.015** | 0.013** |
| | (0.006) | (0.006) |
| WFH status of husband | | 0.274*** |
| | | (0.011) |
| WFH status of wife | 0.290*** | |
| | (0.012) | |
| Log family earnings | 0.004 | 0.036*** |
| | (0.009) | (0.009) |
| Log family wealth | 0.001 | 0.000 |
| Constant | 0.388*** | 0.401*** |
| | (0.113) | (0.112) |
| Demographics | Yes | Yes |
| Year FE | Yes | Yes |
| Region FE | Yes | Yes |
| Occupation FE | Yes | Yes |
| Observations | 6,821 | 6,821 |
| R-squared | 0.071 | 0.079 |

Note: Robust standard errors in parentheses, clustered at the household level.
*** significant at the 1%; ** significant at the 5%; * significant at the 10%.

As in previous specifications, we find strong evidence of strategic interdependence. The probability of WFH is substantially higher when the spouse also works from home. A husband whose wife works from home is 29.0 percentage points more likely to do so himself, and the corresponding figure for wives is 27.4 percentage points. These effects remain large and highly significant after instrumenting wages, confirming that WFH decisions are jointly determined within the household. Once wages are instrumented, household earnings lose explanatory power for husbands but retain a small, positive effect for wives. Wealth remains

insignificant throughout. Expenditure continues to show a negative association with WFH among wives, possibly reflecting that higher spending is associated with more traditional work arrangements or job types with lower flexibility.

Table 4. Estimates including individual fixed effects

| VARIABLES | Husbands | Wives |
|---|---|---|
| Husband log wage | -0.026*** | -0.002 |
| | (0.006) | (0.006) |
| Wife log wage | 0.003 | -0.026*** |
| | (0.005) | (0.005) |
| Husband work hours | -0.002 | 0.002 |
| | (0.004) | (0.004) |
| Wife work hours | -0.001 | -0.003 |
| | (0.004) | (0.003) |
| Log expenditure | -0.007 | -0.004 |
| | (0.006) | (0.005) |
| Husband log chores | -0.003 | -0.001 |
| | (0.003) | (0.003) |
| Wife log chores | 0.002 | 0.007** |
| | (0.004) | (0.003) |
| WFH status of husband | | 0.038*** |
| | | (0.007) |
| WFH status of wife | 0.039*** | |
| | (0.008) | |
| Log family earnings | 0.025** | 0.017* |
| | (0.010) | (0.009) |
| Log family wealth | 0.001* | 0.000 |
| | (0.001) | (0.001) |
| Demographics | Yes | Yes |
| Year FE | Yes | Yes |
| Region FE | Yes | Yes |
| Occupation FE | Yes | Yes |
| Observations | 6,821 | 6,821 |
| R-squared | 0.622 | 0.673 |

Note: Robust standard errors in parentheses, clustered at the household level.
*** significant at the 1%; ** significant at the 5%; * significant at the 10%.

Results including individual fixed effects are shown in Table 4. Once individual fixed effects are included, the magnitude and significance of wage coefficients are substantially reduced. A small but statistically significant negative association remains between own wages and WFH for husbands: a 1% increase in a husband's wage is associated with a 0.026 percentage point decrease in his probability of working from home. For wives, the effect of

own wages is negative and statistically significant (−0.026), though smaller than in previous models. These attenuated effects suggest that much of the wage-WFH relationship observed in pooled models is driven by between-individual differences, such as occupational sorting or persistent job characteristics. Importantly, cross-wage effects are no longer significant. This indicates that within-individual changes in a spouse's wage do not have a measurable short-term impact on one's own WFH probability, once permanent traits are controlled for.

Neither own nor partner's working hours are significantly associated with WFH in the fixed effects specification. This suggests that, conditional on individual unobservables, changes in work hours do not drive short-run changes in telework status. Similarly, most housework variables lose significance, except for wives' chore time, which remains positively associated with their own WFH probability. This result, although modest in magnitude, may indicate that increases in domestic responsibilities trigger greater use of telework among women, consistent with intra-household time reallocation.

The interdependence in WFH decisions remains strong even after controlling for fixed individual traits. The effect of the partner's WFH status is statistically significant and substantial: when one spouse starts working from home, the probability that the other does as well increases by around 3.8–3.9 percentage points. This reinforces the idea that WFH decisions are jointly coordinated and responsive to changes in the partner's work arrangement over time. Similarly, Family earnings continue to show a positive and statistically significant association with WFH probabilities, though the effects are smaller than in previous models. Family wealth has a small but statistically significant effect for husbands, and no effect for wives.

# 5. Conclusions

WFH decisions are increasingly present in labor markets, raising questions about how these choices are made within households. Understanding how couples decide who works from home, and under what circumstances, is crucial for evaluating the broader economic and social implications of this shift. This study approaches WFH from a household perspective using the collective model of labor supply, which views household decisions as the outcome

of joint utility maximization and bargaining between partners. Drawing on rich panel data from the Panel Study of Income Dynamics (PSID) covering 2011-2021, we examine how wages, hours worked, household earnings, wealth, and domestic responsibilities relate to the probability of WFH for both spouses.

Our results indicate that both partners' wages and working hours are associated with the likelihood of WFH in cross-sectional analyses, but these relationships weaken considerably when addressing endogeneity and individual heterogeneity. Besides that, the results show that changes in WFH status are strongly coordinated between partners but are not systematically linked to short-term changes in wages or hours worked. The analysis further reveals that current household earnings, rather than accumulated wealth, are positively related to telework. Notably, women's time spent on household chores is associated with a higher probability of WFH for wives, and the WFH status of one spouse substantially increases the probability that the other also works from home.

This study has several limitations. The focus on different-sex, two-member households reduces generalizability to other family structures. Self-reported data may introduce measurement error or reporting bias. Finally, while panel data and econometric corrections are used, some unobserved confounders and the effects of recent labor market changes may remain unaddressed. As a consequence, we cannot interpret the results as causal, but only as conditional correlations

The findings suggest that WFH is not solely determined by individual job characteristics but is shaped by the interaction of both partners' circumstances and household dynamics. Policies aimed at promoting or regulating WFH should consider the household as a relevant unit of analysis, recognizing that WFH decisions often involve negotiation and mutual adjustment between partners. Since WFH status is strongly interdependent within couples and influenced by factors such as household earnings and domestic responsibilities, measures that improve job flexibility, address gender imbalances in unpaid work, or support families with young children may be particularly effective. Policymakers should also be aware that targeting only individual workers may miss important intra-household effects that influence who can benefit from remote work arrangements.

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