The Impact of Telework on Consumption
Evidence from Mobile Phone and Transaction Data

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Context and motivation

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Telework in France

- Teleworkers: 3% in 2017 → 20% in 2021–2024
- Among teleworkers: 2-3 days/week working from home
- Strong occupational gradient
  - Executives: ∼50% telework
  - Manual workers: ∼0%

Geography of telework

- Telework jobs are concentrated in city centers
- Teleworkers' residences are spread across city centers and the suburbs
- Telework changes workers' daily location: city center ↔ suburbs

Context and motivation

Consequence (what we find in this paper)

- Spatial redistribution of offline consumption
  - Workers shift spending from their office to their home, from urban cores to residential areas
- Context-dependent consumption behavior
  - At home, more cooking
  - At workplace, more on-the-go purchases
- Negative overall effect on in-store consumption?

Context and motivation

Why should economists care?

- Telework is structurally transforming urban economies (post-COVID persistence)
- Consumption is hyper-local and sensitive to daily mobility
  - $+1\%$ presence $\Rightarrow$ $+1\%$ card payments in stores (Breton et al., 2025)
  - Online payments $\simeq 10\%$ of payments in France (Banque de France)
- But we lack causal evidence on how telework impacts consumption
  - Relevant for urban planning, local retail strategy, territorial cohesion

Research Question

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What is the economic impact of telework on <u>where</u> and <u>how much</u> people consume offline?

1. How does telework shift daily presence between home and workplace?
2. How do these shifts translate into changes in local spending?
3. What are the spatial and sectoral net effects?

Closest literature: working from home and local spending

- Alipour et al (2025), *Working from Home and Local Spending*
  - German evidence using cross-sectional telework potential at residence
  - Using a IV DiD methodology, they show that:
    $\uparrow$ teleworkers share among residents $\rightarrow \downarrow$ commuting $\rightarrow \uparrow$ local spending
  - Using a DiD methodology, they show that:
    Post-covid, $\downarrow$ spending in city centers
  - Suggest spatial redistribution, but no evidence on aggregate effects
- Althoff et al (2022), *The Geography of Remote Work*
  - US evidence using cross-sectional telework potential at the workplace
  - Furthermore, they show that:
    $\uparrow$ teleworkers share among workers $\rightarrow \downarrow$ local spending
  - Suggest a negative impact for city centers, but no evidence on spatial relocation and aggregate effects
- Barrero et al. (2021) assume a pure spatial redistribution of spending

Other related literature on telework

- Residential relocation ("donut effect")
  - US: relocation away from city centers, affecting housing markets (Ramani & Bloom, 2021; Gokan et al., 2022; Li et al., 2026)
  - Europe: limited migration; short-run adjustments mainly via daily routines (Alipour et al., 2025; GIP POPSU, 2022)
- Mobility and daily activity
  - Telework reduces commuting and reshapes daily activity patterns (Delventhal et al., 2022; Kiko et al., 2024)
  - Descriptive evidence on presence reallocation (De Fraja et al., 2021)
  - Change in presence have consequences for the office market (Bergeaud et al., 2021)
- Labor economy
  - Change in presence have consequences for employment, with losses in accommodation, food services, and retail in areas most exposed to telework (Dalton et al., 2023; Denagiscarde, 2025)
- Welfare effects
  - Economic gains for teleworkers via lower lunch and gas costs (Barrero et al., 2021)

Literature gap

Existing studies focus on one side of telework effects (home vs workplace),
suggesting spatial redistribution of consumption,
<u>but the causal net effect on local demand remains unclear</u>.

Contributions

1. First two-sided causal assessment of telework on consumption
   - Identify both positive/negative demand shocks from home-presence and workplace absence
2. Identification using high-frequency data
   - Mobile phone location data + card transactions
   - Municipality–day variation (within a month in the post-covid area)
3. Telework measurement innovation
   - Move beyond occupation-based teleworkability indices (Dingel & Neiman 2020)
   - Finer resolution than Google Mobility or proxies based on national surveys

Data
Municipality-weekday level (September 2022)

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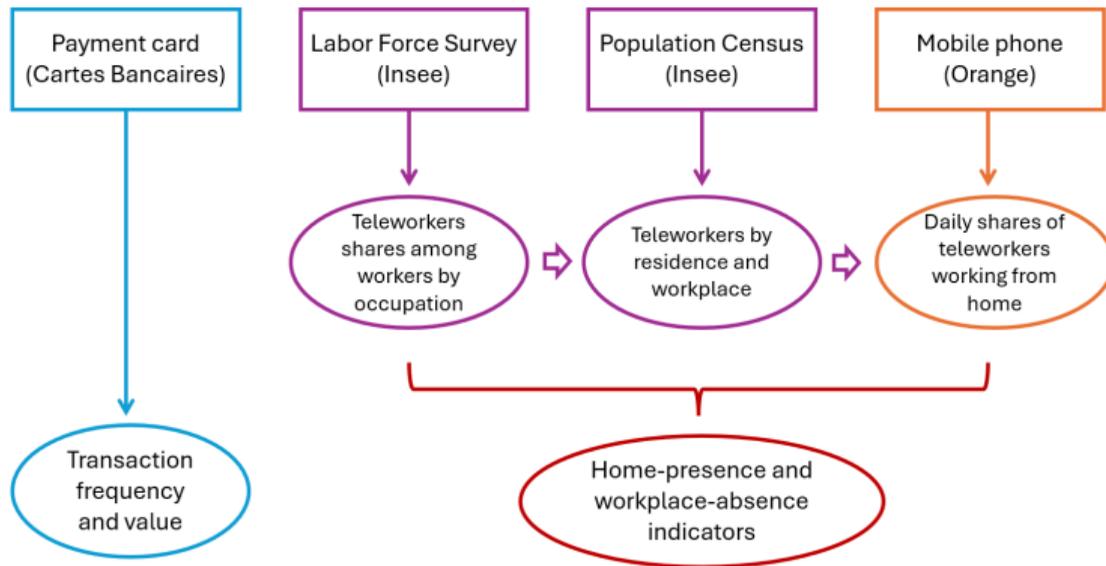checks and limits

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Payment card
(Cartes Bancaires)

Labor Force Survey
(Insee)

Population Census
(Insee)

Mobile phone
(Orange)

Teleworkers
shares among
workers by
occupation

Teleworkers by
residence and
workplace

Daily shares of
teleworkers
working from
home

Transaction
frequency
and value

Home-presence and
workplace-absence
indicators

⏭ teleworkers shares

Case study

Lyon Functional Urban Area

- 560 municipalities, 2.7 million residents,
  1.2 million workers, 220K teleworkers
  (19% of working population)
- Urban core + commuting zone
- Ideal spatial setting to study
  residence–workplace mobility and
  consumption reallocation

Spatial distribution of teleworkers
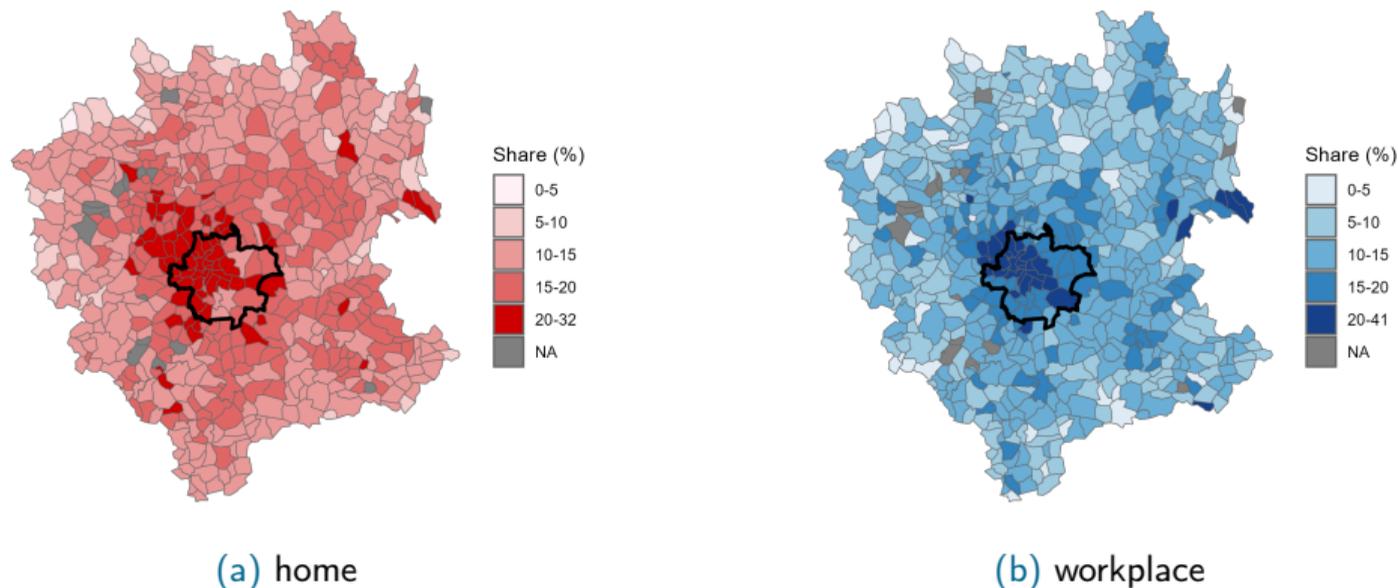
(a) home

(b) workplace

Figure 1: Share of teleworkers among workers

Notes: Telework rates by occupation and residence location group (LFS 2022) mapped onto the population census residence–workplace matrix. The figure shows that teleworkers jobs are more concentrated in the urban core than their residences.

Teleworkers between the core and the commuting zone

| | Teleworkers share | | Daily presence | |
	Residence	Workplace	$\Delta\%$[1]	Δ[2]
Urban core	58.8	67.1	-4.84	-10,963
Commuting zone	41.2	32.9	+3.42	+7,753

Table 1: Distribution of the 220K teleworkers in the Lyon FUA

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[1]Average daily percentage change in workers presence relative to workplace-attached workers
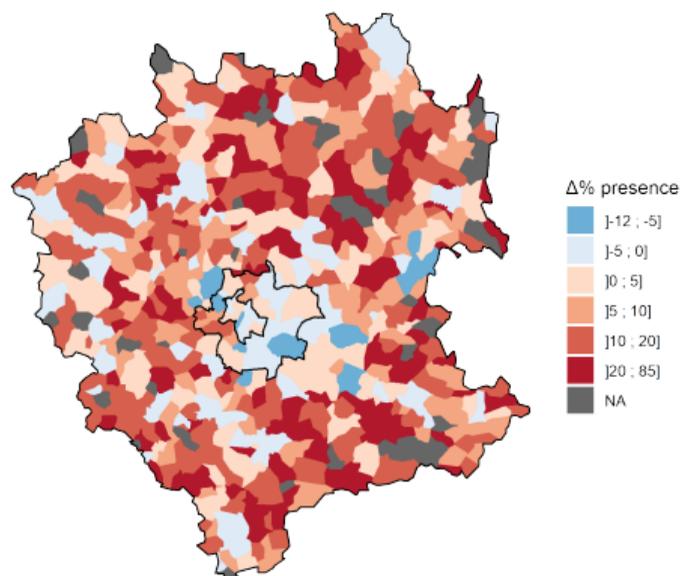[2]Absolute change

Local presence shifts

Figure 2: Telework-driven variation in daily presence

Notes: The figure presents the average daily change in worker presence per municipality due to telework, relative to workplace-attached workers. Most municipalities show a relative increase in presence compared with a no-telework scenario (high in % but small in absolute change), while a few see decreases (low in % but large in absolute change).

Identification strategy

Identification strategy

1. Telework model
   - Infer daily shocks in home-presence from mobile phone data
   - Quantify the two home-presence/workplace-absence shocks at the municipality-weekday level
2. Consumption model
   - Municipality–weekday variation in telework practice in a two-way fixed effects model $\rightarrow$ isolate the daily telework causal effects

Step 1: Telework model

Telework model

$$\text{Residents}_{i,t} = \sum_d \widehat{\beta_d} \text{ Teleworkers}_i + \widehat{\alpha} \text{ Inactives}_i + \tag{1}$$

$$\sum_{kg} \gamma_{d(t),k,g(i)} \text{ Part-time workers}_{i,k} + \epsilon_{i,t}$$

- $\text{Residents}_{i,t}$: number of individuals present in their residential zone i on weekday t, during working hours (9:00–12:00)
  Source: Mobile phone data, Orange (September 2022)

- Teleworkers_i: estimated residents who regularly work from home
  Source: Labor Force Survey (Q4, 2022) + Population Census (2021)

- $\widehat{\beta_d}$: estimated share of teleworkers working from home on weekday $d(t)$

- $\gamma_{d,k,g}$: share of part-time workers not working on day $d(t)$, socio-professional category k, and residential zone group $g(i)$ within the FUA ▸ see
  Source: Labor Force Survey (Q4, 2022)

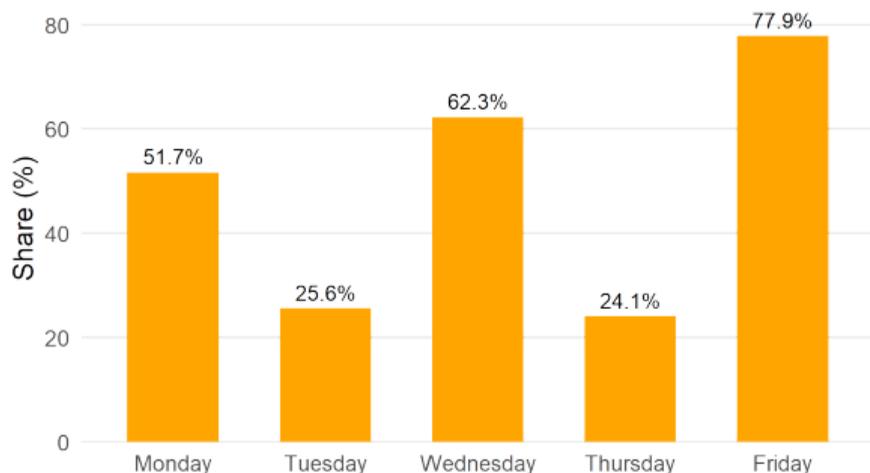- Inactives, part-time workers
  Source: Population Census (2021)

Results: estimated daily telework practice $\widehat{\beta_d}$

Figure 3: Average daily shares of teleworkers working from home[3] ⤳ validity test

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[3]Note: The coefficients for Monday, Wednesday, and Friday are statistically significant at the 1% level, while those for Tuesday and Thursday are significant at the 15% level.

Definitions: variables of interest

Daily teleworker presence/absence by municipality (home vs. work)

$$\text{WFH}_{it}^{(\mathcal{H})} = \widehat{\beta}_t \frac{\sum_{jk} \tau_{kg(i)} \text{Workers}_{ijk}}{\sum_{jk} \text{Workers}_{ijk}} \tag{2}$$

$$\text{WFH}_{jt}^{(\mathcal{W})} = \widehat{\beta}_t \frac{\sum_{ik} \tau_{kg(i)} \text{Workers}_{ijk}}{\sum_{ik} \text{Workers}_{ijk}} \tag{3}$$

- Workers_{ijk} : workers living in i, working in j, with occupation k
  Source: Population Census (2021)

- $\tau_{kg(i)}$: share of workers who regularly work from home by occupation k and residence group $g(i)$
  Source: Labor Force Survey (Q4, 2022) ▸ see

- $\widehat{\beta}_t$: share of teleworkers working from home on day t
  Source: Mobile phone data, Orange (September 2022)

Descriptive statistics: variables of interest

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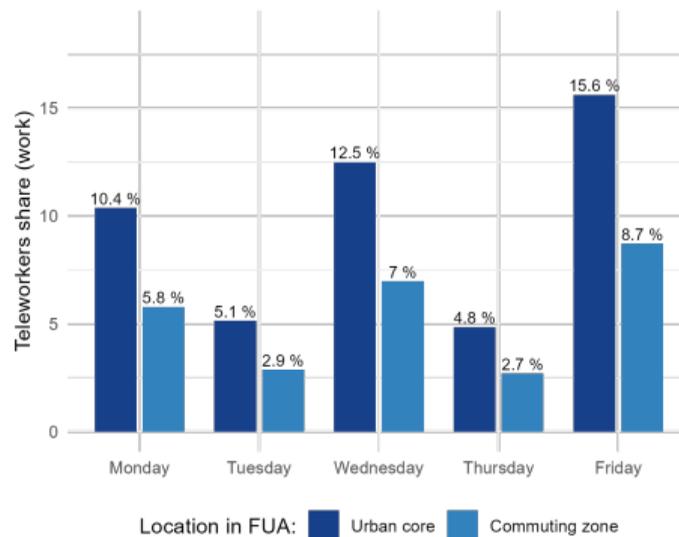Sectoral
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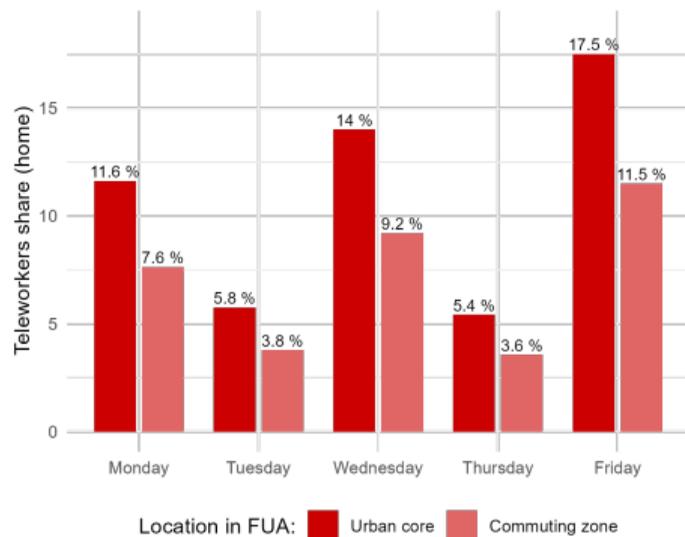
(a) home   (b) workplace

Figure 4: Share of workers working from home per day, urban core vs commuting zone

Notes: The two indicators appear symmetric on average, but not at the municipality level. Patterns depend on the residence–jobs local structure.

Step 2: Consumption model

Consumption model

Using Poisson Pseudo-Maximum Likelihood (PPML) method, we estimate :

$$Y_{it} = \exp\left[\theta_1 \text{WFH}_{it}^{(\mathcal{H})} + \theta_2 \text{WFH}_{it}^{(\mathcal{W})} + \beta X_{it} + \delta_i + \gamma_{gt} + \epsilon_{it}\right]$$

- Y_{it} : transactions (frequency and value) in municipality i on date t (September 2022)
- $\text{WFH}_{it}^{(\mathcal{H})}$: daily teleworkers home-presence (% of workers living in i)
- $\text{WFH}_{it}^{(\mathcal{W})}$: daily teleworkers workplace-absence (% of workers working in i)
- δ_i: municipality fixed effects
- γ_{gt}: date $\times$ municipality-group fixed effects
- X_{it}: weather, public transportation disruptions/delays, home-presence/workplace-absence of part-time workers on day-off

Semi-elasticities of transaction frequency

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$$Y_{it} = \exp\left[0.985^{***}\, \mathsf{WFH}_{it}^{(\mathcal{H})} + -1.713^{***}\, \mathsf{WFH}_{it}^{(\mathcal{W})} + \sum_c \beta_c X_{it}^c + \delta_i + \gamma_{gt} + \epsilon_{it} \right]$$

On average, from Thursday to Friday :

Home	**Workplace**
+8.3pp presence	+6.4pp absence
$\Downarrow$	$\Downarrow$
↑ 8.2% transactions	↓ 11.0% transactions
(+109)	(-146)

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[3]Signif. codes: ***: 0.01

Semi-elasticities of transaction value

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$$Y_{it} = \exp\left[0.969^{***} \, \text{WFH}_{it}^{(\mathcal{H})} + -1.343^{***} \, \text{WFH}_{it}^{(\mathcal{W})} + \sum_c \beta_c X_{it}^c + \delta_i + \gamma_{gt} + \epsilon_{it} \right]$$

On average, from Thursday to Friday :

Home	**Workplace**
+8.3pp presence	+6.4pp absence
$\Downarrow$	$\Downarrow$
↑ 8.0% spending	↓ 8.6% spending
(+3,813€)	(-4,074€)

---

[3]Signif. codes: ***: 0.01

Substitution between workplace and home consumption

Average substitution rate at the municipality level for $+1$ teleworker at home vs -1 teleworker at the workplace:

$$\left| \frac{\exp(\theta_1 \overline{\text{Workers}^{(\mathcal{H})}}) - 1}{\exp(\theta_2 \overline{\text{Workers}^{(\mathcal{W})}}) - 1} \right| \approx \left| \frac{\theta_1}{\theta_2} \right|$$

Estimated substitution

- 0.60 in transaction frequency ($\text{CI}_{90\%} = [0.41 ; 0.93]$)
- 0.76 in transaction value ($\text{CI}_{90\%} = [0.47 ; 1.36]$)

Estimate $< 1 \Rightarrow$ incomplete consumption substitution

Telework local net effect

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$$\Delta_i\% = \frac{100}{T} \sum_t \left(\exp(\widehat{\theta}_1 \mathsf{WFH}_{it}^{(\mathcal{H})} + \widehat{\theta}_2 \mathsf{WFH}_{it}^{(\mathcal{W})}) - 1 \right)$$

Transaction count

Transaction value

Predicted change
- -20% to -15%
- -15% to -10%
- -10% to -5%
- -5% to -2%
- -2% to 0%
- 0% to 2%
- 2% to 5%
- 5% to 7%
- NA
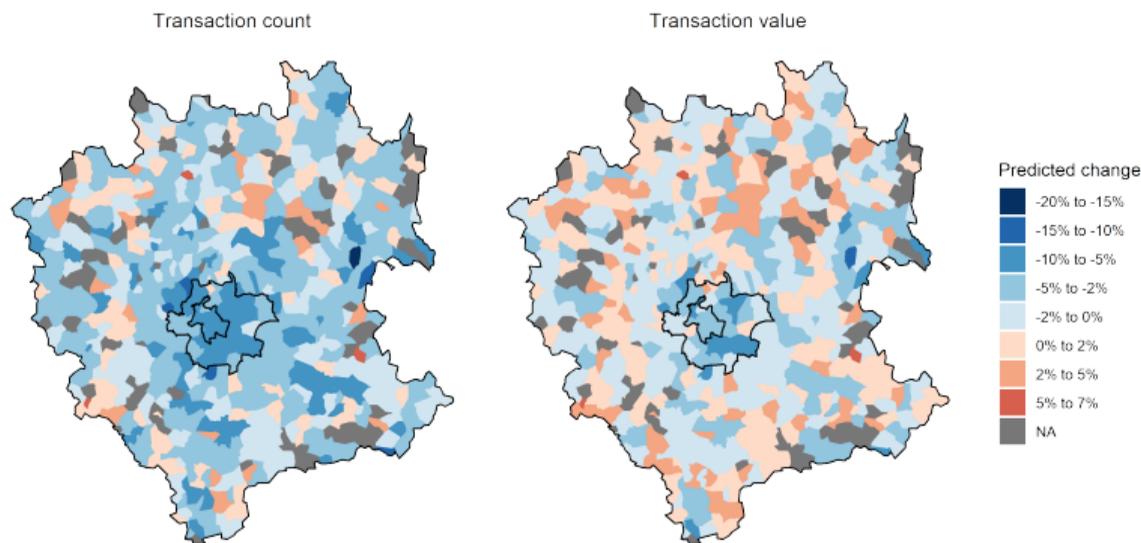
Figure 5: Average daily transaction changes induced by telework

Telework local net (significant) effect

We attest the significance of our results using a bootstrap procedure:

- Draw 500 samples of 532 municipalities with replacement
- Each sample includes the full time series of transactions and telework shares
- Compute the empirical 90% confidence intervals

Telework local net (significant) effect

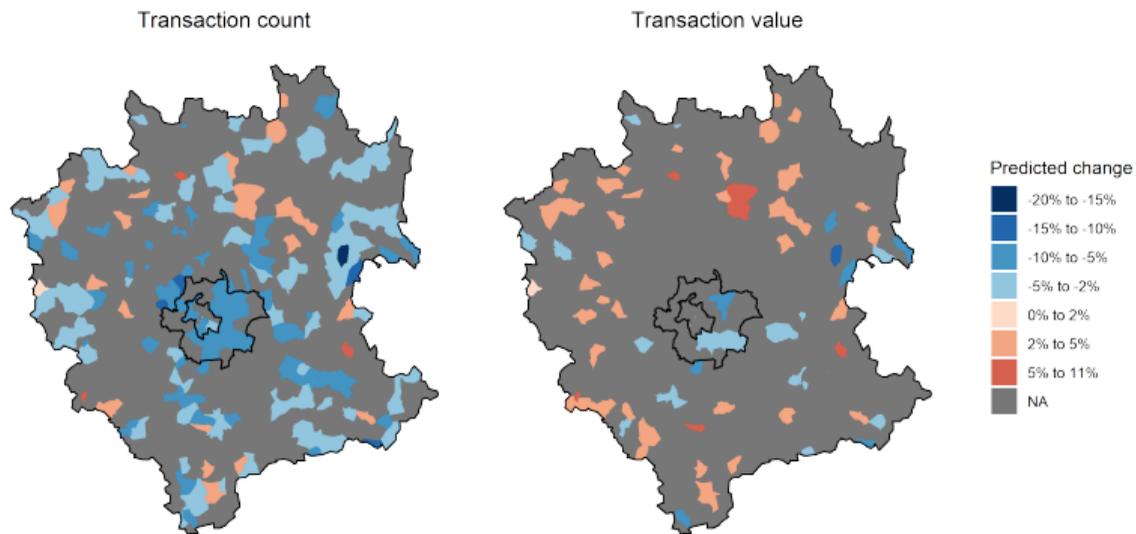Results at the 10% empirical significance level:

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Figure 6: Average daily transaction changes induced by telework

Telework aggregated net effect

| | | Transaction count | | | Transaction value | | |
Zone group	(1) N_g	(2) $\sum_{i \in g} y_{ig}$	(3) $\Delta_g\%$	(4) Δ_g	(5) $\sum_{i \in g} y_{ig}$	(6) $\Delta_g\%$	(7) Δ_g
Lyon city	9	227,074	-6.82 [-12.03; -0.10]	-15,497	6,195,465	-2.98 [-8.62; 4.04]	-184,758
Rest of the core	30	190,564	-6.67 [-11.17; -0.64]	-12,713	6,944,555	-3.30 [-8.14; 2.28]	-229,428
Urban commuting zone	166	254,930	-4.82 [-8.02; -0.46]	-12,285	10,467,588	-2.39 [-6.05; 1.86]	-250,169
Rural commuting zone	327	58,652	-2.70 [-5.59; 0.78]	-1,584	2,331,438	-0.81 [-3.79; 2.77]	-18,803
All	532	731,220	-5.75 [-9.92; -0.38]	-42,079	25,939,046	-2.63 [-7.06; 2.63]	-683,158

Table 2: Aggregate daily impact of telework: predicted percentage change in transactions

Sectoral heterogeneity

Sectoral heterogeneity
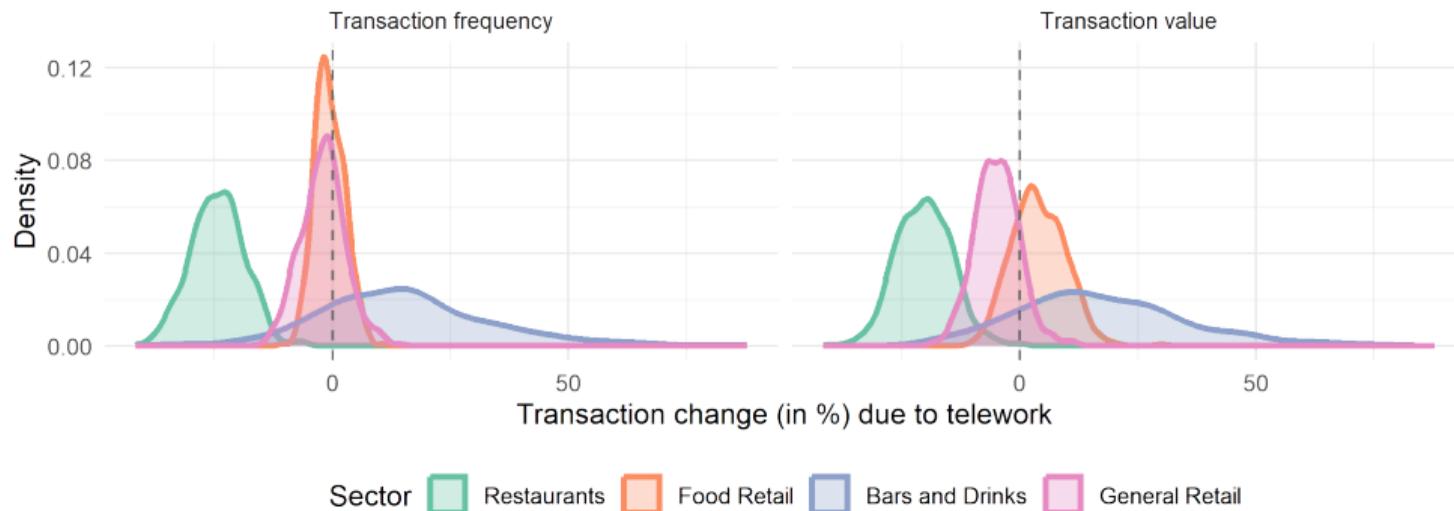
Figure 7: Bootstrap distribution of the average daily aggregated effect of telework, by sector

Sectoral heterogeneity

- Restaurants: strongly negatively affected
  - Net effect: -25% transactions [-34; -15], -21% value [-29; -11][4]
  - Reflects strong dependence on workplace foot traffic
- Bars and cafés: positive but imprecise
  - Net effect: $+14\%$ transactions [-10; +47], $+15\%$ value [-9; +49]
  - Consistent with third-place working or local leisure consumption
- Food retail: mild positive response
  - Net effect: -1.7% transactions [-5.7; 4.8], $+2.8\%$ value [-4.8; 12.8]
  - Consistent with more home cooking / larger grocery purchases
- Other sectors: no significant effects

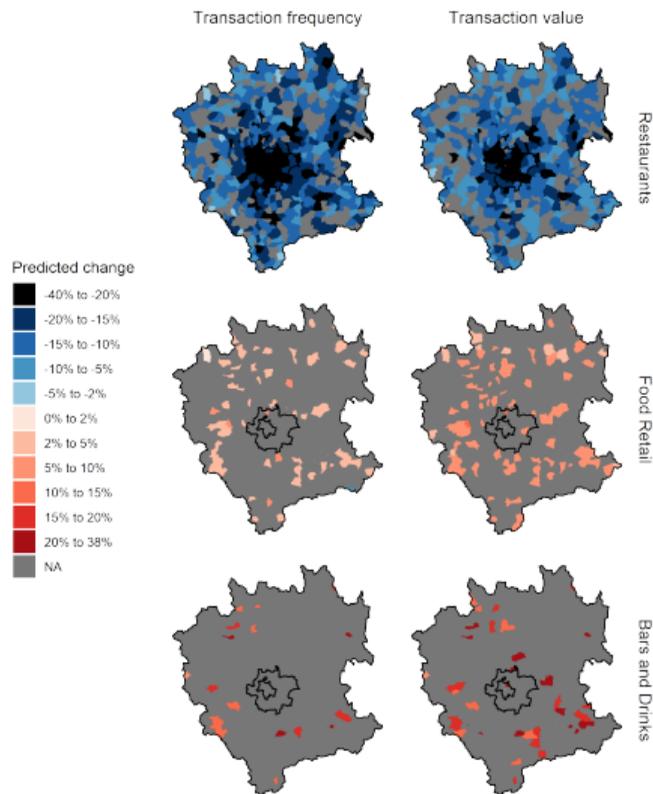[4]90% confidence intervals

Sectoral and spatial heterogeneity

Figure 8: Statistically significant (10% level) telework effect by sector

Robustness checks and limits

Robustness checks

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Double bootstrap standard errors

- To account for the uncertainty from the two-step estimation procedure ▸ see

Measurement error bias

- Telecommuters only (living and working in a different municipality)
- Sensitivity analysis: using finer spatial resolution of WFH shares $\widehat{\beta}$ (spatial group & municipality level) ▸ see
- Instrumental variable strategy: two-stages residual inclusion with shift-share-style instruments ▸ see
- ⇒ Results are robust

Model extensions

- Spatial spillovers ▸ see
- Temporal substitution ▸ see

Limits

- External validity
  - Do our results generalize to polycentric urban areas?
- One-month data
  - Captures daily adjustments only, no long-run adaptations (firms, employment, location choices)
  - How are WFH savings reallocated on the long-run?
- Consumption measurement
  - In-store transactions only
  - Does telework have an effect on online consumption?

Conclusion

Conclusion

Telework is not economically neutral

⇒ Challenges the "pure redistribution" assumption (Barrero et al. 2021)

- Spatial shift in shop visits and spending:
  → the urban core experience higher decrease in transaction frequency and value than the commuting zone (very residential municipalities see gains)

- Not a pure spatial shift in spending:
  → net large decrease in restaurants
  → weak increase in food retail and cafés

- Overall, weak evidence of a negative net effect in spending over the Lyon FUA

Thank you for your attention ! ☺
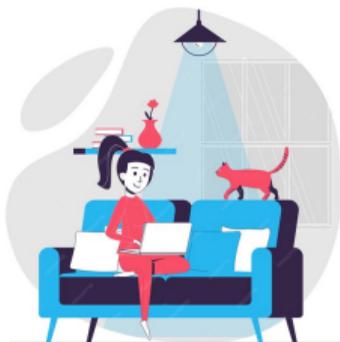
✉ gabrielle.gambuli@telecom-paris.fr

Telework by occupation and FUA location ⊳ back to data ⊳ back to model
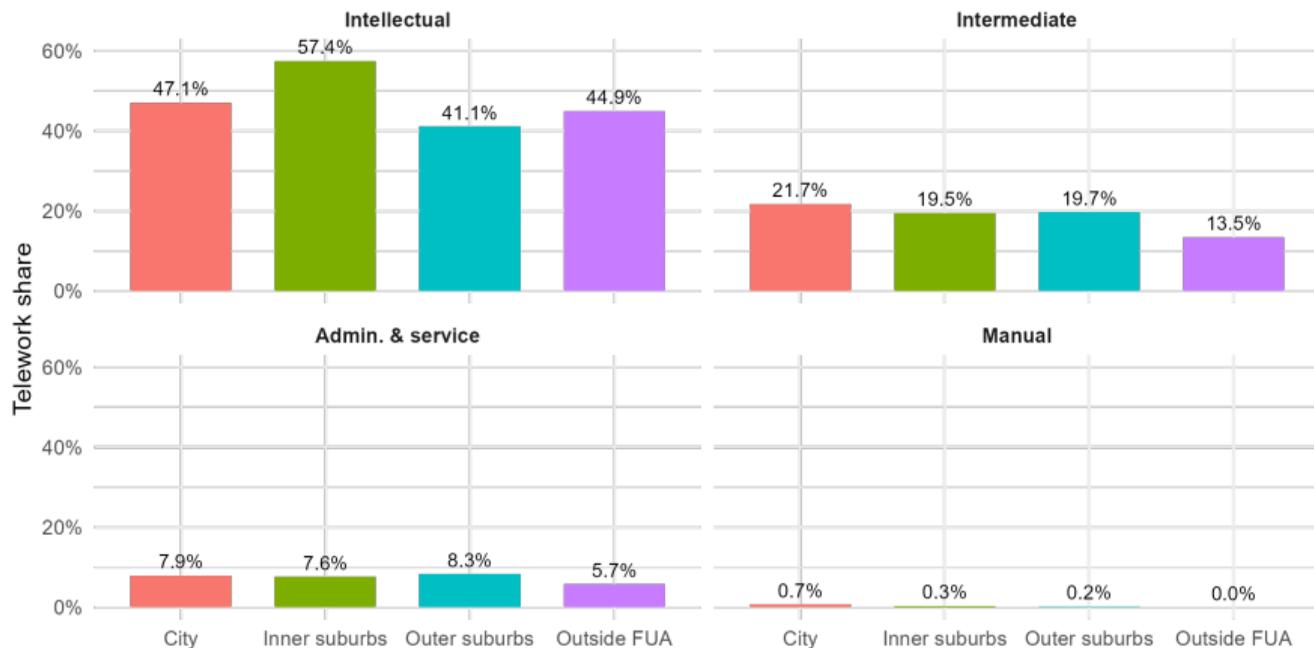
Non-working part-time workers
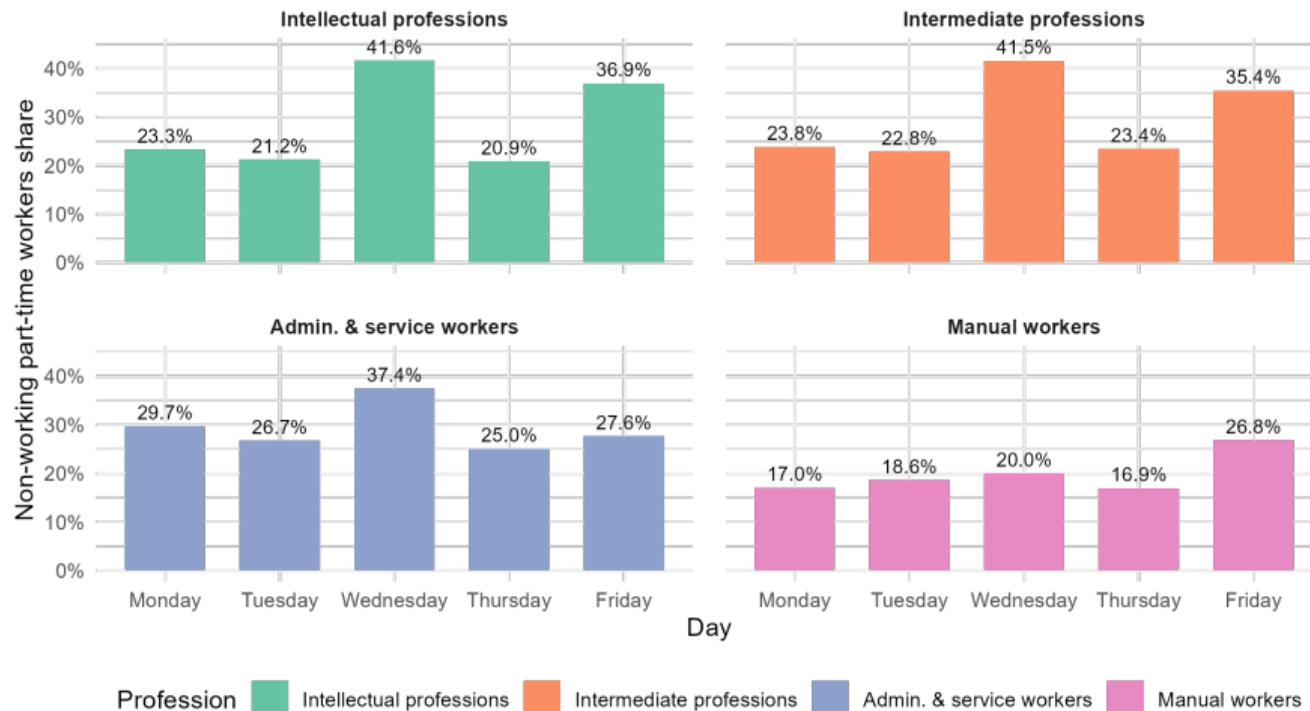
External validation: WFH daily patterns ⏎ back

Exploratory analysis from a large Paris public institution using access-badge
presence data (Oct 2022–Feb 2024) across 9 office buildings, mainly occupied by
executives and highly teleworkable workers.

	Mon	Tue	Wed	Thu	Fri
Institution's estimates in Paris	55%	38%	55%	48%	75%
Our estimates in Lyon FUA	52%	26%	62%	24%	78%
Difference	+3pp	+12pp	-7pp	+24pp	-3pp

Table 3: WFH shares (excluding holidays)

- Average telework: **2.7 days/week** (institution) vs **2.4** in our data
- Slightly higher intensity explained by:
  - universal telework eligibility
  - no restriction on telework days
  - central Paris location $\rightarrow$ stronger congestion during commuting time

Sectoral transaction patterns
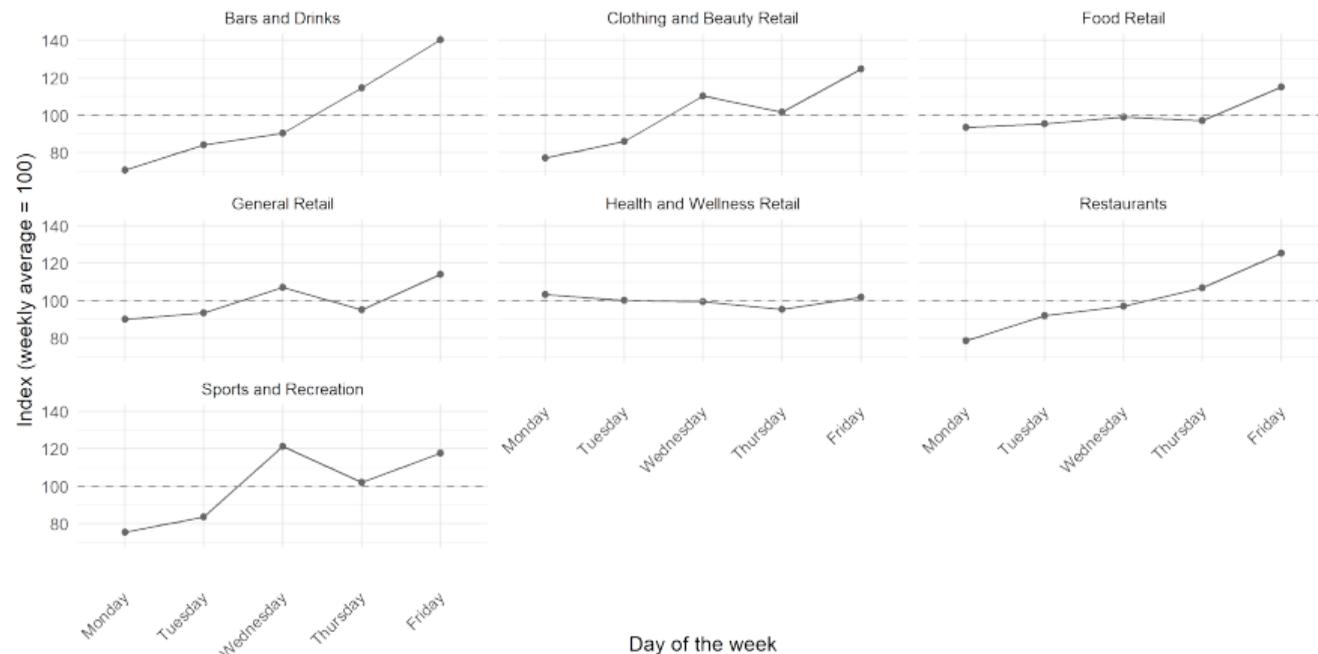
Note: The figure shows average daily deviations from the weekly mean (indexed to 100) in the number of transactions by sector, based on observed transactions in the Lyon FUA during weekdays in September 2022.

Figure 9: Average daily deviations from weekly transaction frequency averages, by sector

Bootstrapped CI: simple and double ⤷ back
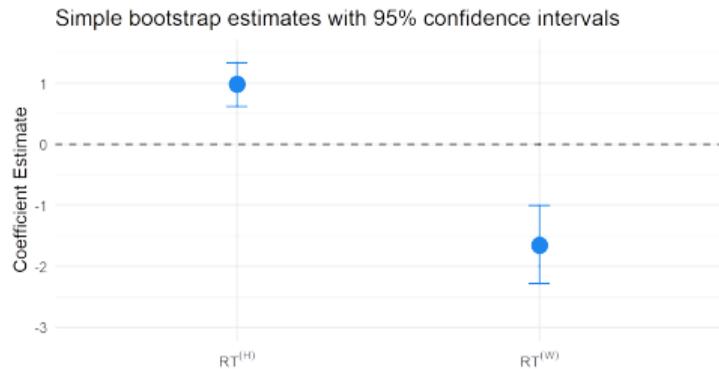
(a) Simple
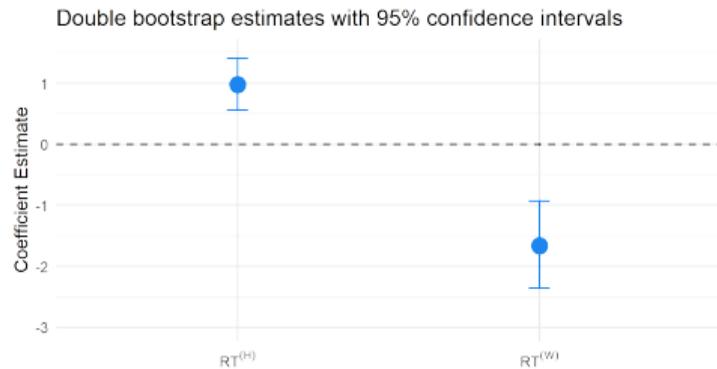
(b) Double

Figure 10: Bootstrapped coefficients and confidence intervals

Sensitivity analysis: WFH shares

Objective: test robustness using alternative methods to estimate daily telework shares (β)

1. **Spatial group approach:** From telework model, estimate β separately for the urban core and commuting zone, then construct $WFH^{(H)}$ and $WFH^{(W)}$.

2. **Municipality-level approach:** Solve telework model at the municipality level to predict β, applying appropriate adjustments (so the sum of teleworked days per week is 2.4), then construct $WFH^{(H)}$ and $WFH^{(W)}$.

Sensitivity analysis: WFH shares `back`

	Spatial group ($\widehat{\beta_{gt}}$)		Municipal ($\widehat{\beta_{it}}$)	
	Count	Value	Count	Value
WFH$^{(\mathcal{H})}$	0.68***	0.73***	0.23**	0.20*
	(0.21)	(0.28)	(0.10)	(0.11)
WFH$^{(\mathcal{W})}$	-1.33***	-1.07***	-0.39	-0.72***
	(0.36)	(0.36)	(0.30)	(0.26)
Fit statistics				
Observations	10,640	10,640	10,640	10,640
BIC	166,542.9	5,411,006.4	166,932	5,782,827

Note: Signif. codes: ***: 0.01, **: 0.05, *: 0.1. Clustered standard-errors at the municipality level in parentheses. All specifications include municipality and date-by-zone type fixed effects, and controls.

Table 4: Transaction count and value responses to alternative telework shares (spatial group vs municipal level)

Instrumental variables: shift-share-style

Goal: isolate exogenous variation in telework to identify causal effects on local consumption

- Share component: historical exposure
  - Combines pre-COVID telework propensities by occupation (2017) with residence–workplace–occupation matrices from 1999 census
  - Provides cross-sectional variation in telework potential across municipalities
- Shift component: unexpected daily deviations
  - Captures how daily WFH rates in 2022 exceed expected baseline levels (based on executives' part-time day-off rates)
  - Acts as a proxy for unanticipated shifts in home presence
- Instruments:

$$\text{IV}_{it}^{(\mathcal{H})} = 100 \cdot \left(\widehat{\beta}_t - \gamma_{k=\text{executives},t} \right) \cdot \frac{\sum_{jk} \tau_{k,2017} \text{Workers}_{ijk,1999}}{\text{Workers}_{1999}^{(\mathcal{H})}} \quad (4)$$

$$\text{IV}_{jt}^{(\mathcal{W})} = 100 \cdot \left(\widehat{\beta}_t - \gamma_{k=\text{executives},t} \right) \cdot \frac{\sum_{ik} \tau_{k,2017} \text{Workers}_{ijk,1999}}{\text{Workers}_{1999}^{(\mathcal{W})}} \quad (5)$$

IV results ⊳ back

Dependent Variables:	$RT^{(\mathcal{H})}$	$RT^{(\mathcal{W})}$	$RT^{(\mathcal{H})}$	$RT^{(\mathcal{W})}$		Transaction count			Transaction value	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Relevance test		First-stage		Baseline	Second-stage	Redundancy	Baseline	Second-stage	Redundancy
	OLS	OLS	OLS	OLS	Poisson	Poisson	Poisson	Poisson	Poisson	Poisson
Variables										
$IV^{(\mathcal{H})}_{1999}$	3.90***	1.00*	3.52***	-0.735			-0.429			0.778
	(1.11)	(0.534)	(1.03)	(0.583)			(1.61)			(1.84)
$IV^{(\mathcal{W})}_{1999}$	-2.42***	0.342	-2.55***	1.42***			-0.595			-1.60
	(0.754)	(0.392)	(0.738)	(0.492)			(1.08)			(1.19)
$RT^{(\mathcal{H})}$				0.445***	1.15***	1.25***	1.13***	1.06***	1.44***	0.944***
				(0.045)	(0.226)	(0.357)	(0.259)	(0.269)	(0.412)	(0.283)
$RT^{(\mathcal{W})}$			0.386***		-1.74***	-2.34***	-1.45***	-1.36***	-2.19***	-1.04***
			(0.044)		(0.383)	(0.411)	(0.344)	(0.391)	(0.640)	(0.366)
$Residuals^{(\mathcal{H})}$						0.336			0.022	
						(0.499)			(0.616)	
$Residuals^{(\mathcal{W})}$						1.02**			1.16	
						(0.424)			(0.777)	
Fit statistics										
Observations	10,600	10,600	10,600	10,600	10,600	10,600	10,600	10,600	10,600	10,600
BIC	-70,030.1	-68,517.3	-72,020.7	-70,507.8	166,527.7	166,376.4	166,376.4	5,428,850.1	5,418,952.6	5,418,952.6
R^2	0.96932	0.95623	0.97459	0.96375						
Within R^2	0.04086	0.01824	0.20576	0.18704						
Wald stat	6.2	9.1	30.8	40.1						

Table 5: 2SRI results, 1999 instruments

Spatial spillovers model

- Telework effects may extend beyond home/work municipalities $\rightarrow$ saved commuting time can shift spending to neighboring areas
- To capture this, we extend the baseline model with **spatial lags**:

$$Y_{it} = \exp\left[\theta_1 \mathsf{WFH}_{it}^{(H)} + \theta_2 \mathsf{WFH}_{it}^{(W)} + \lambda_1 \sum_{j \neq i} w_{ij} \mathsf{WFH}_{jt}^{(H)} + \right.$$
$$\left. \lambda_2 \sum_{j \neq i} w_{ij} \mathsf{WFH}_{jt}^{(W)} + \delta_i + \gamma_{gt} + \epsilon_{it}\right]$$

- Neighbors defined via shared boundaries; row-standardized weights (w_{ij}) give average WFH intensity in surrounding municipalities
- Coefficients on neighbors (λ_1, λ_2) capture spillover effects on local spending

Spatial spillovers results [back]

	Count	Value
	(1)	(2)
WFH$^{(\mathcal{H})}$	0.888***	0.794***
	(0.244)	(0.270)
WFH$^{(\mathcal{W})}$	-1.525***	-1.271***
	(0.343)	(0.421)
WFH$^{(\mathcal{H})}_{neighbors}$	1.021**	1.145***
	(0.418)	(0.429)
WFH$^{(\mathcal{W})}_{neighbors}$	-1.312***	-1.056*
	(0.472)	(0.594)
Fit statistics		
Observations	10,640	10,640
BIC	166,035.0	5,397,806.7

Note: Signif. codes: ***: 0.01, **: 0.05, *: 0.1. Clustered standard-errors at the municipality level in parentheses. All specifications include municipality and date-by-zone type fixed effects, and controls.

Table 6: Spatial spillover effects of telework on transactions

Intertemporal substitution of consumption

- Goal: examine whether telework shifts consumption between weekdays and weekends
  - Weekday home presence may reduce overall week food spending (home-cooked meals)
  - Saved commuting time may move grocery or leisure spending from weekends to weekdays
- Method: use cardholders with billing address info to link residence to consumption locations
- Model: estimate the effect of telework share among residents on daily transactions

$$Y_{ot} = \exp\left[\sigma_1\,\mathsf{TE}_o^{(\mathcal{H})} + \sigma_2\,\mathsf{Weekend}_t + \sigma_3\,\mathsf{TE}_o^{(\mathcal{H})} \times \mathsf{Weekend}_t \right.$$
$$\left. + \sigma_4\,\log(\mathsf{Population}_o) + \varepsilon_{ot}\right]$$

Intertemporal substitution of consumption ⟲ back

	Transaction count$_{ot}$		Transaction count$_{odt}$	
	(1)	(2)	(3)	(4)
Variables				
TE$^{(\mathcal{H})}$	0.539		-11.8***	
	(1.12)		(0.510)	
Weekend	-0.048		0.000***	
	(0.031)		(0.000)	
log(Population)	1.210***		1.209***	
	(0.061)		(0.061)	
TE$^{(\mathcal{H})}$ × Weekend	-0.339**	-0.330**	-0.0002***	-0.0001**
	(0.159)	(0.154)	(0.000)	(0.000)
Home			19.72***	23.04***
			(0.175)	(0.008)
TE$^{(\mathcal{H})}$ × Home			12.39***	14.65***
			(0.874)	(0.041)
Weekend × Home			-0.049	-0.146***
			(0.031)	(0.030)
TE$^{(\mathcal{H})}$ × Weekend × Home			-0.335**	-0.329**
			(0.159)	(0.154)
Fixed-effects				
Week	✓		✓	
Postcode *o*		✓		✓
Date		✓		✓
Fit statistics				
Observations	4,144	4,144	8,219	8,219
BIC	1,129,432.5	67,398.9	1,125,199.4	67,223.0

Note: Signif. codes: ***: 0.01, **: 0.05, *: 0.1. Clustered standard-errors at the postcode level in parentheses.

Table 7: Intertemporal consumption substitution induced by telework