The Firm as Tax Shelter

Micro Evidence and Aggregate Implications of Consumption Through the Firm

David Leite
Paris School of Economics

MOTIVATION

- *Consumption through the firm* prevents business income from being taxed as a distribution – either as dividends or wages – and inflates firm costs.

- It is a *margin of tax evasion* that circumvents CIT, PIT & VAT, regardless of differences in tax rates between L and K, and irrespective of how broadly the tax bases are designed.

- It does not require tax sophistication and it is almost impossible to enforce given the *wide range of expenditures that lie on the border between business and personal consumption*.

- Has important implications for the measurement of the *scale of tax evasion* and *income inequality*, and it might distort the measurement of household's final consumption and firms' intermediate consumption, and result in undervaluation of the GDP.

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Despite these implications, **consumption through the firm has not been well studied**.

STATE OF ART

- The literature has focused on the flexibility of owner-managers to chose how to label business income to minimize taxes at payout and to use firms as tax-free saving vehicles through strategic earnings retention (Smith et al., 2021; Miller et al., 2020).

- Some authors have suggested it as a payout strategy among individuals who control firms (Kopczuk and Zwick, 2020; Alstadsæter et al., 2014; Clotfelter, 1983).

- For example, following the introduction of dividend taxation in Norway in 2006: *"While all categories of assets grow, the increase in durable asset categories that include company cars, planes, and boats is particularly striking"* (Alstadsæter et al., 2014).

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However there is no direct empirical evidence so far.
Yet, the press is full of colorful anecdotal evidence... ▸ Sources

Former Caja Madrid directors accused of misusing company credit card

Eighty-three executives collectively spent €15m over 10 years at savings bank that merged to become Bankia before 2012 bailout

Ex-Bankia chair Rodrigo Rato, above, and former Caja Madrid CEO Miguel Blesa have been summoned to appear before a judge over the scandal. Photograph: Dominique Faget/AFP/Getty Images Photograph: Dominique Faget/AFP/Getty Images

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Wall Street exposed as convicted escort boss reveals client list of 9,800.

By ABC News
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Enquête
Carlos Ghosn: quand le patron de droit divin revient sur la réunion de sa cour à Versailles

Dans son audition au Liban que révèle «Libération», le magnat de l'automobile, interrogé pour la première fois sur ses «dépenses personnelles» prises en charge par Renault-Nissan, a tenté de justifier maladroitement les fastes d'une soirée payée par l'alliance le jour de son anniversaire.

THIS PAPER

- This paper uses data from *social security records* and *electronic invoices* in Portugal:
  - Monthly consumption expenditures covering ≈ 70-75% of the net-of-VAT final consumption expenditures of resident households recorded in National Accounts.
  - Monthly business expenditures covering all business-to-business transactions.
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BACKGROUND AND DATA

ELECTRONIC INVOICES: THE E-FATURA SOFTWARE SYSTEM

- e–Fatura is an electronic invoicing software adopted in 2013 to fight VAT fraud.

- For firms and other legal entities, electronic invoicing is mandatory, so e–Fatura cover the universe of business-to-business transactions.

- For final consumers, the government provides a set of incentives for them to ask for an invoice with their taxpayer number at the time of the purchase:

  - Weekly lotteries with a prize of 35,000 euros each.

  - Rebate on personal income tax of 15% of the VAT supported on restaurants, hairdressers, vets, car repair.

  - Deduction to personal income tax of 35% of all expenditures (up to 500 euros), plus 15% of the expenditures on health, education and transport expenditures.

- From 2016 to 2019, the data generated by e-Fatura cover ≈ 70-75% of household final consumption recorded in National Accounts.

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EXAMPLE OF THE E-FATURA ONLINE ACCOUNT

EMPLOYEE-TO-MANAGER TRANSITIONS

Two distinct social security regimes:

- **Employees**
- **Business managers**

Social security records provide data on the month individuals start contributing under a regime ⇒ stocks & flows

Focus: individuals who switch from Employee to Business manager from Jan-2016 to Dec-2019
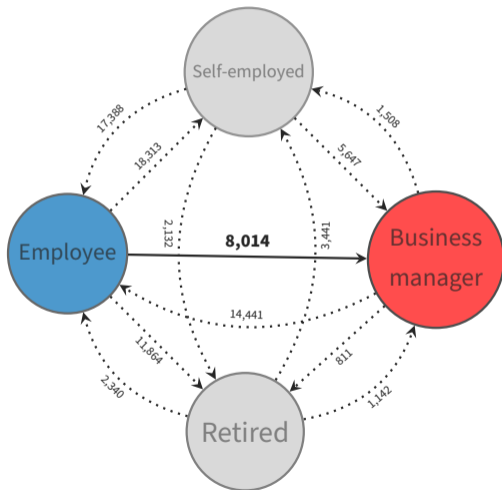
ANALYSIS DATASET

	2016	2017	2018	2019	2016-2019
Individuals					
Switchers	6,973	7,272	7,418	8,014	29,677
Spouse/partner	4,032	4,075	3,896	3,991	15,994
Children/others	6,514	6,503	6,294	6,498	25,809
All individuals	17,519	17,850	17,608	18,503	71,480
Share who stay 48 months	0.82	0.78	0.72	0.68	0.77
Matched with Monthly Expenditure data					
Total Observations	5,237,167	5,617,369	6,024,052	6,601,955	23,480,543
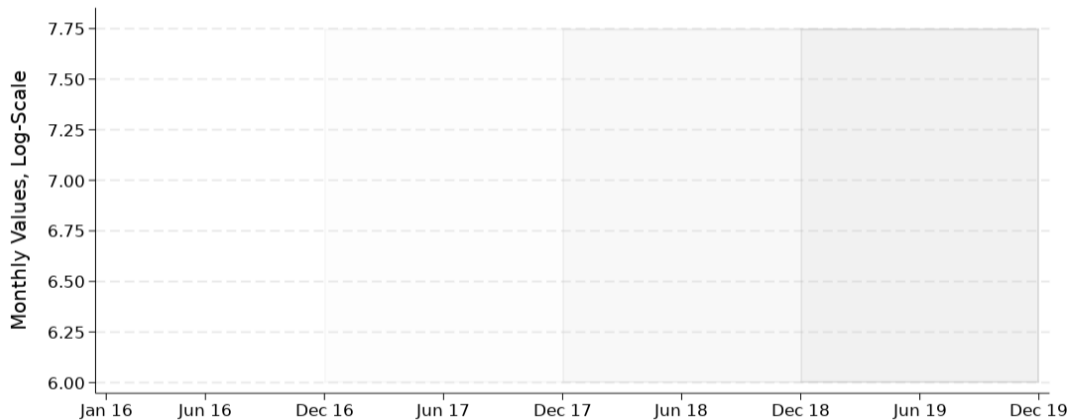
‣ Summary statistics ‣ Firm characteristics of switchers ‣ Expenditure shares of switchers

EXAMPLE: INDIVIDUALS WHO SWITCH FROM EMPLOYEE TO BUSINESS MANAGER

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Employee → Business Manager
December 2016

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Employee → Business Manager
December 2016

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Income

Expenditure

Monthly Values, Log-Scale

▸ Raw Event: 2016 & 2017 Cohorts   ▸ Raw Event: 2018 & 2019 Cohorts
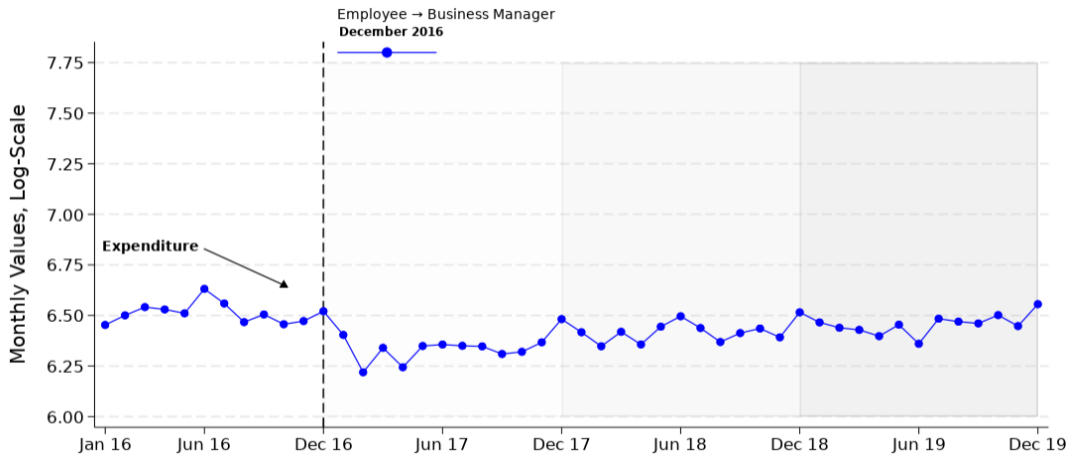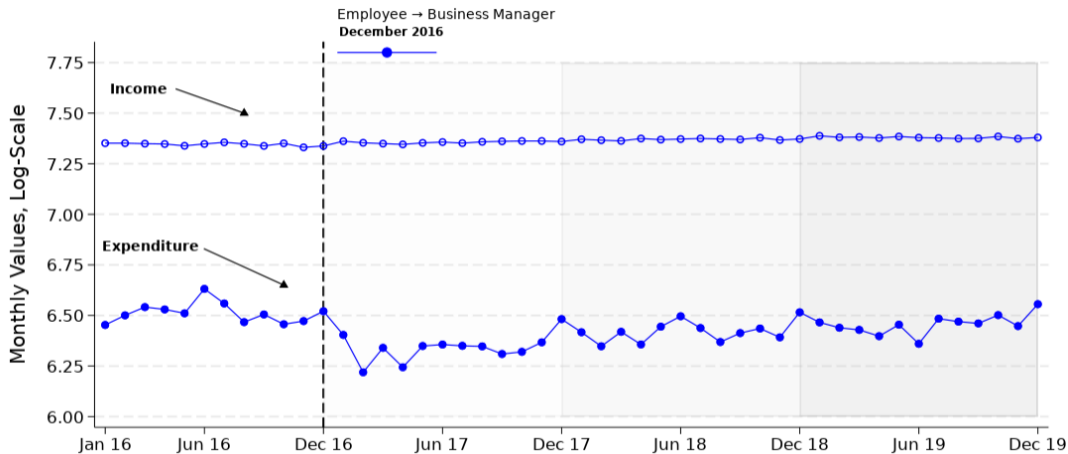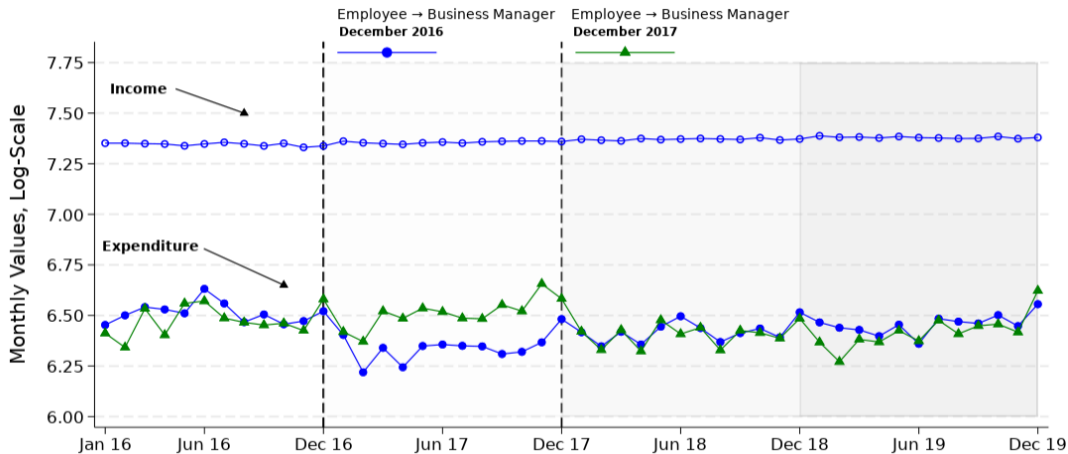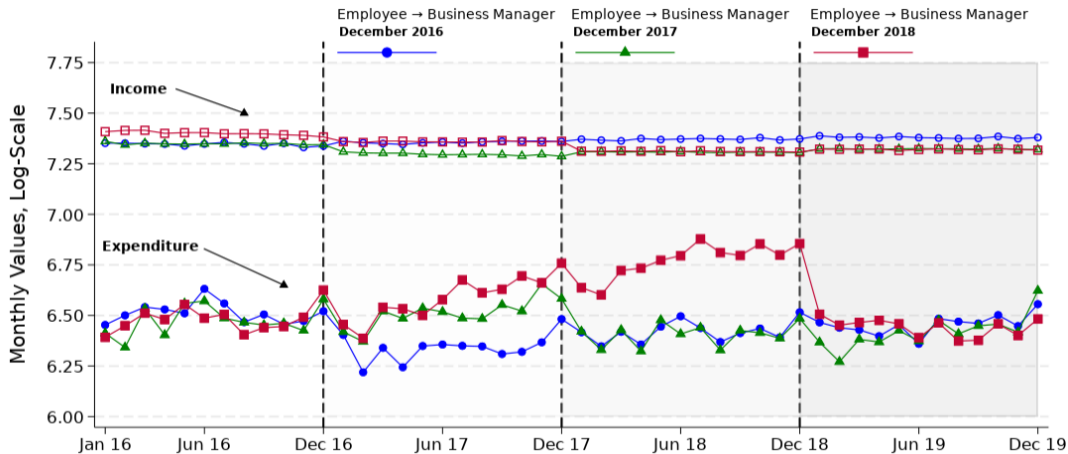
CONSUMPTION THROUGH THE FIRM: MICRO EVIDENCE

EVENT STUDIES WITH STAGGERED ADOPTION

I estimate how monthly personal expenditures evolve after an individual chooses to switch from being an *employee* to being a *business manager* with an event study:
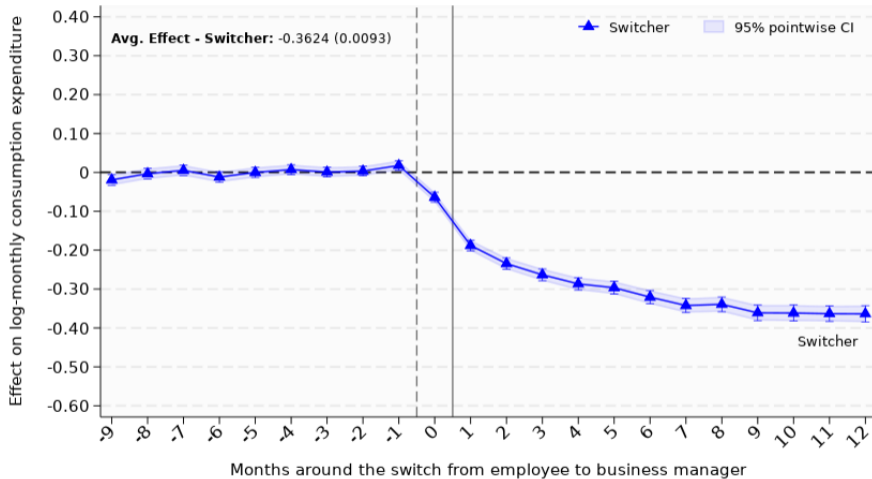
$$log(y_{it}) = \alpha_i + \lambda_t + \sum_{g \in G} \delta_g \cdot \mathbf{1}\left[t - E_i \in g\right] + \varepsilon_{it}, \tag{1}$$

- i indexes individuals and the t indexes calendar months, y_{it} is the reported monthly expenditure, λ_t is a year-by-calendar month fixed effect and δ_i is an individual fixed effect, $e_{it} = t - E_i$ is the event time, the set G collects disjoint sets g of *relative periods $l \in [-T, T]$*.

- To account for the heterogeneity in treatment timing, I estimate the event study using the estimator from Callaway and Sant'Anna (2020).

- Estimates derived with the estimators of De Chaisemartin and D'Haultfoeuille (2020) and Borusyak et al. (2021) are invariant to the specification choice.

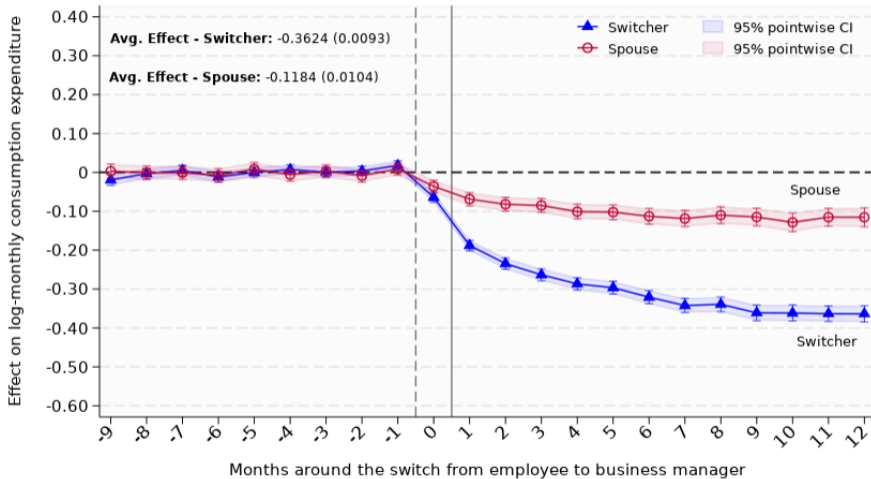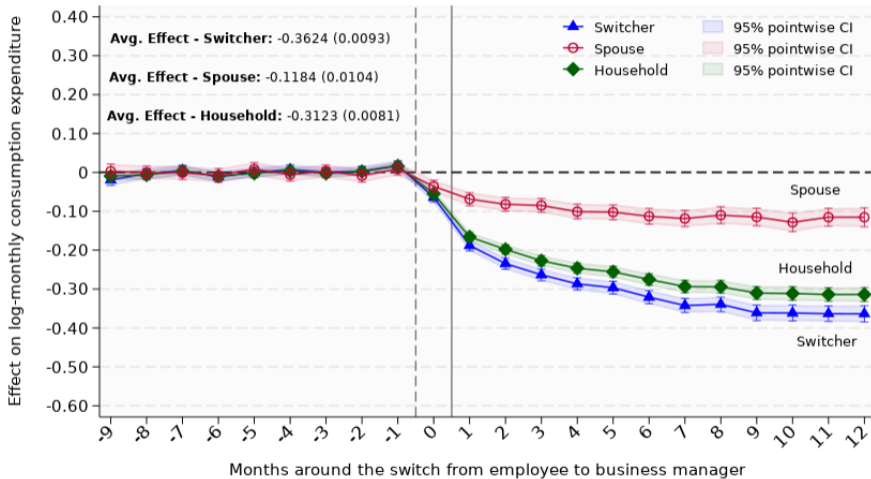## EVENT STUDIES WITH STAGGERED ADOPTION

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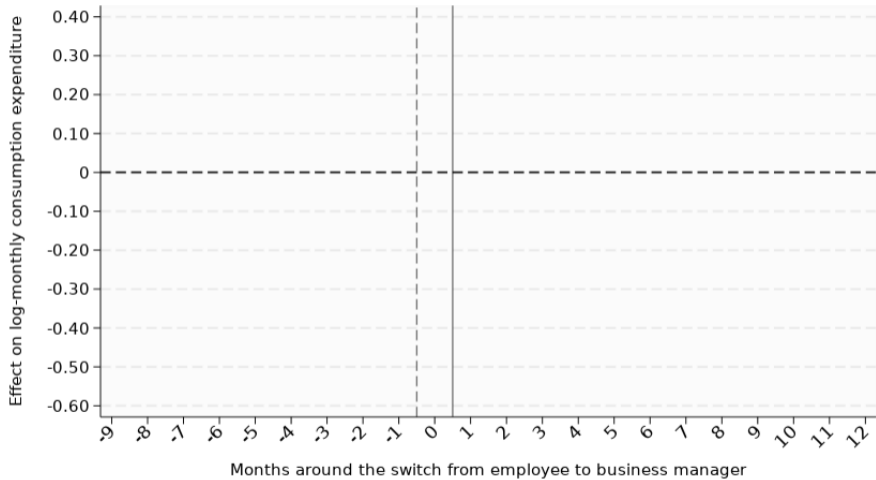
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Switcher
Spouse
95% pointwise CI
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Spouse

Switcher

Effect on log-monthly consumption expenditure

Months around the switch from employee to business manager

BASELINE RESULTS

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Effect on log-monthly consumption expenditure

Months around the switch from employee to business manager

Legend: Switcher, Spouse, Household, 95% pointwise CI

Spouse, Household, Switcher

▸ Alternative estimators

INCOME SHOCK?

- Individual expenditures drop by about 36% when individuals become managers (20% in the first month after becoming business manager).
- Spouse's expenditures drop by spouse by about 12% and combined household expenditures drop by about 31%.
- Is this alternatively the result of an income shock and/or increases in savings?
  - Income Shock? Employees opening their own business but earning less business income as compared to labor income.
  - Prudence? Individuals become entrepreneurs and increase precautionary savings in face of uncertain business incomes.
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  - Prudence? Individuals become entrepreneurs and increase precautionary savings in face of uncertain business incomes.
- If it is a shock to income, all consumption should react, but…

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES

Wholesale & retail trade; car repair
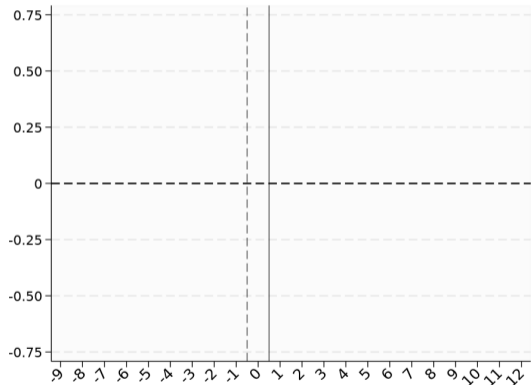
Nonessential health services
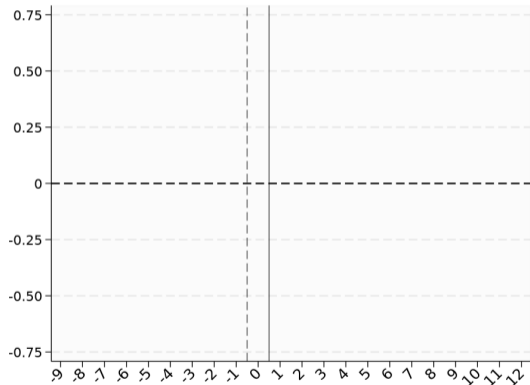
BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES

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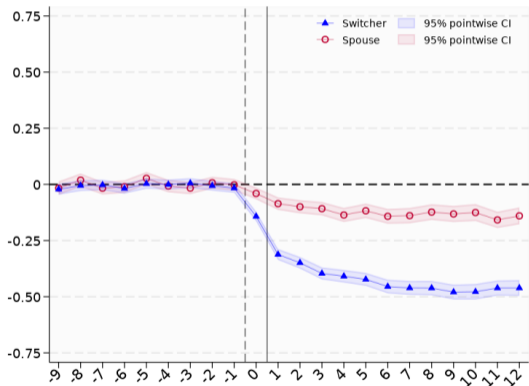
Nonessential health services
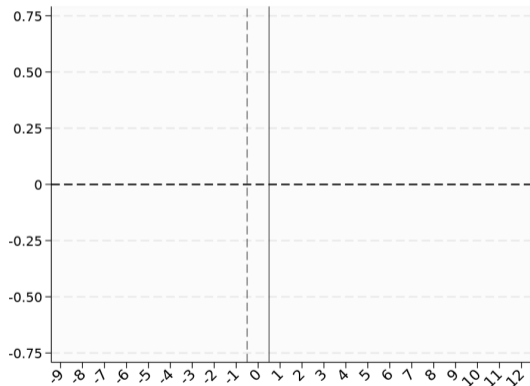
Supermarkets, clothing and shoes, household equipment,
food and beverages, fuel and car repair.

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES
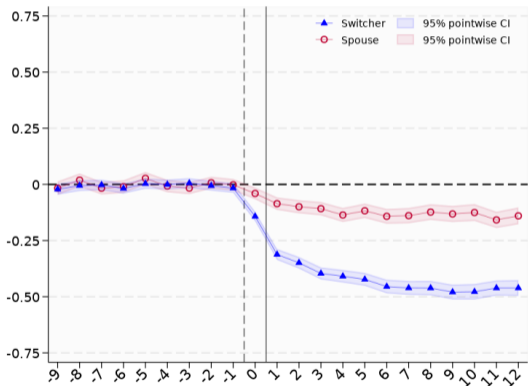
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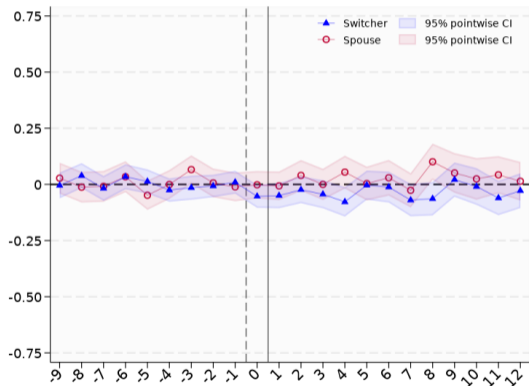
Nonurgent medical services provided by the private sector, namely dentistry and therapy.

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES
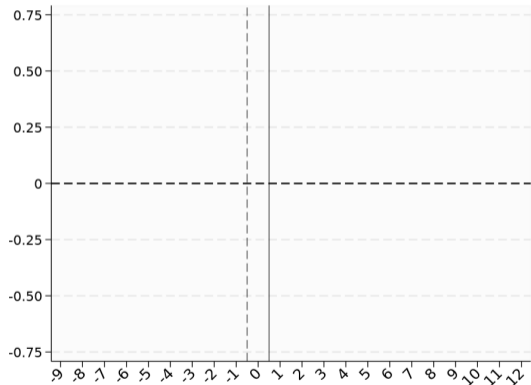
Hotels & restaurants

Private education
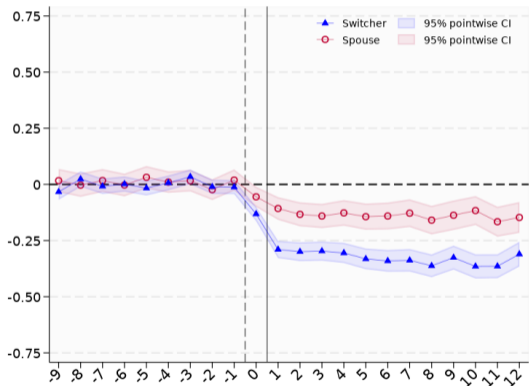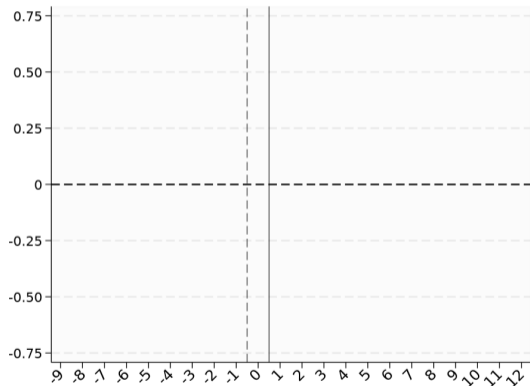
BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES

Hotels & restaurants

Hotels, holiday and short stay accommodation, catering, food and beverage service activities.

Private education

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES

Hotels, holiday and short stay accommodation, catering, food and beverage service activities.
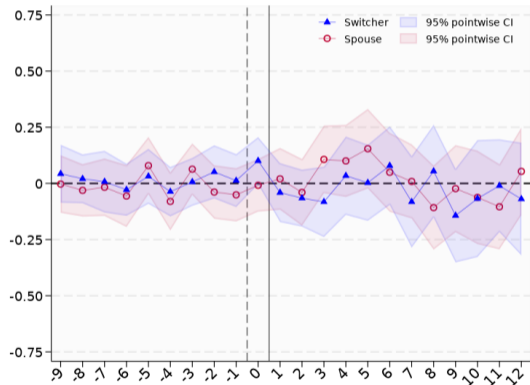
Education services provided by the private sector, namely private tutoring and sports, and cultural activities.

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES
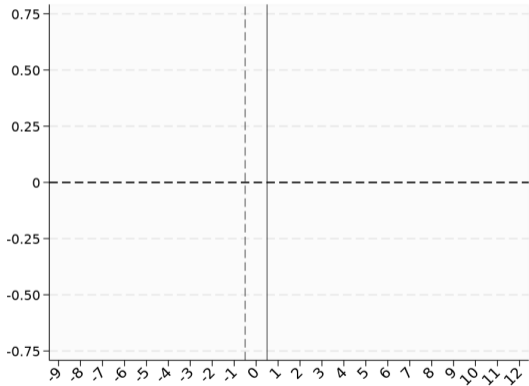
Information & communication

Electricity, gas & air conditioning

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES

Information & communication

Legend:
- Switcher
- Spouse
- 95% pointwise CI
- 95% pointwise CI
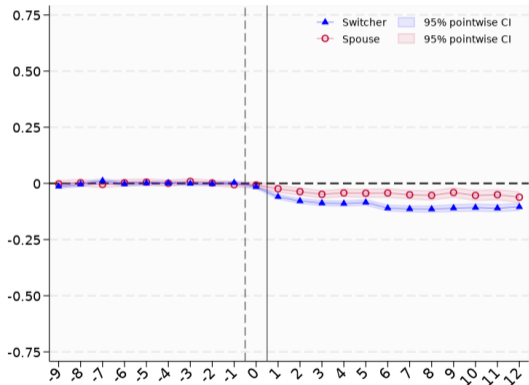
Mobile phones, internet, television, and other telecommunication services.

Electricity, gas & air conditioning

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES

Information & communication

Mobile phones, internet, television, and other telecommunication services.
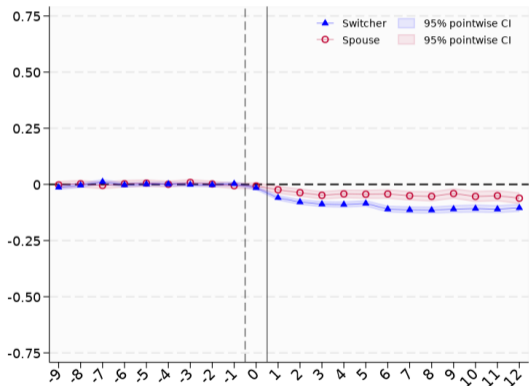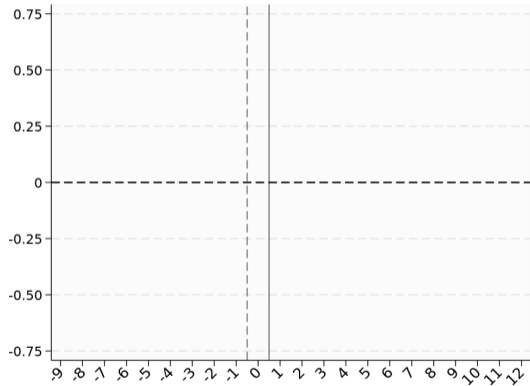
Electricity, gas & air conditioning
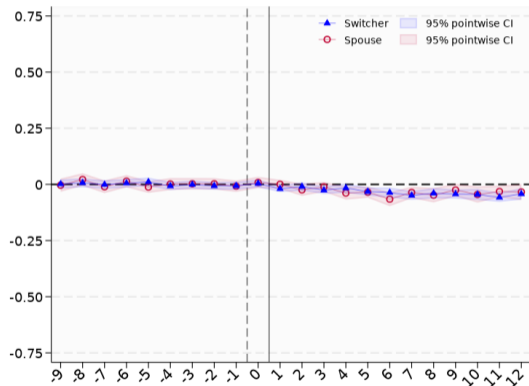
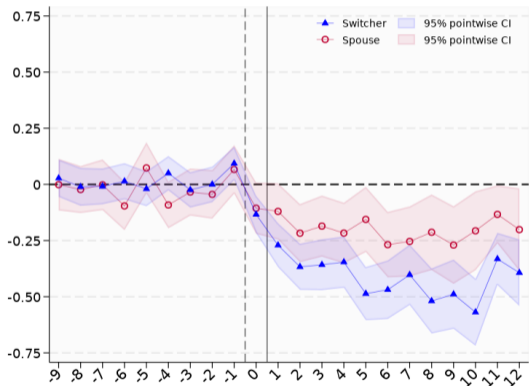# BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES
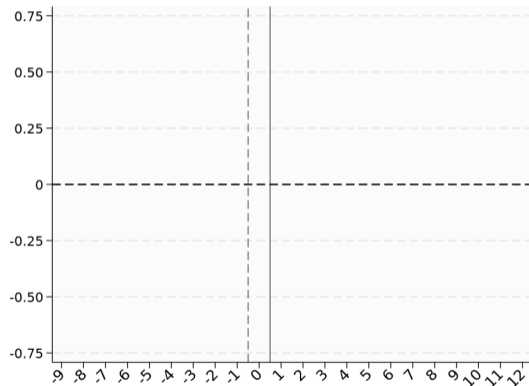
Technical activities
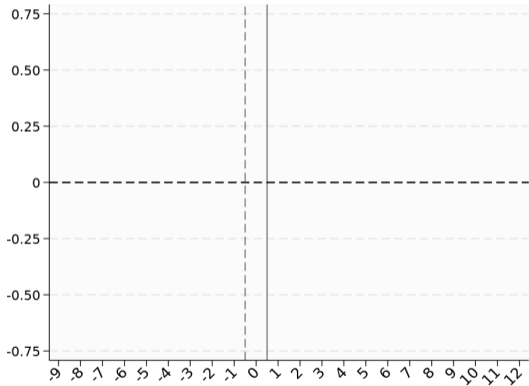
Water distribution

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES
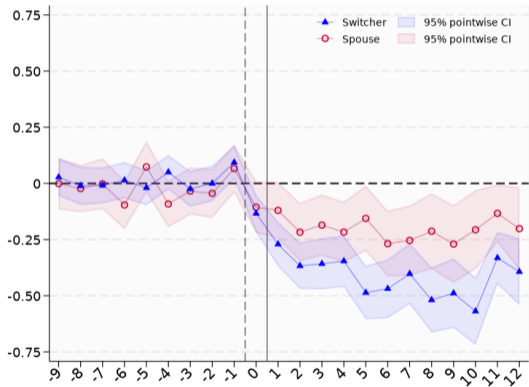
Technical activities

Water distribution

Services from lawyers, accountants and tax advisors, architects, and engineers.

BORDERLINE VS. HARD-TO-SHIFT EXPENDITURES

Technical activities

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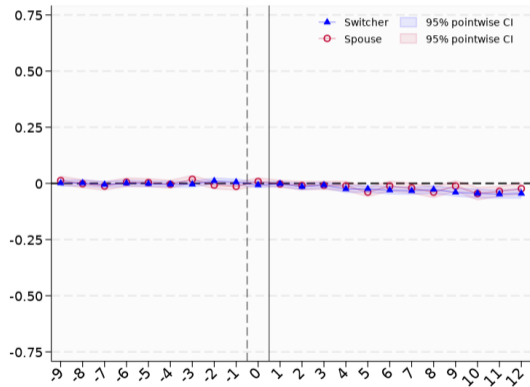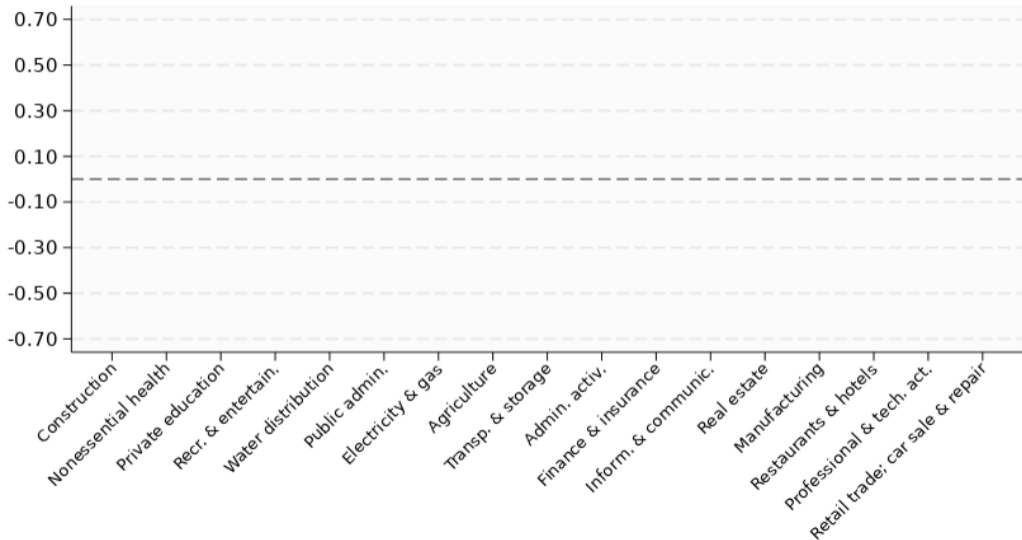
AVERAGE EFFECTS ON ALL EXPENDITURE CATEGORIES — HOUSEHOLD

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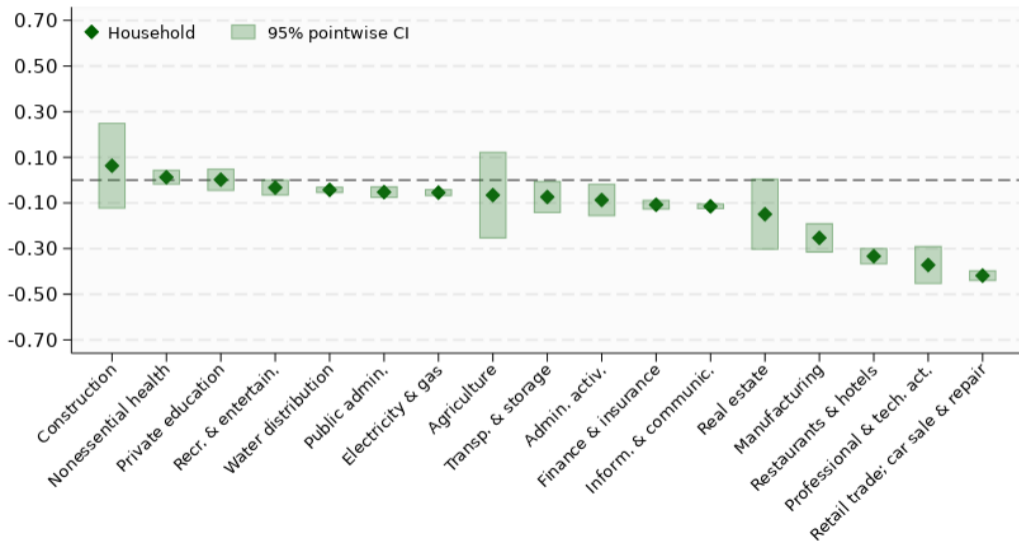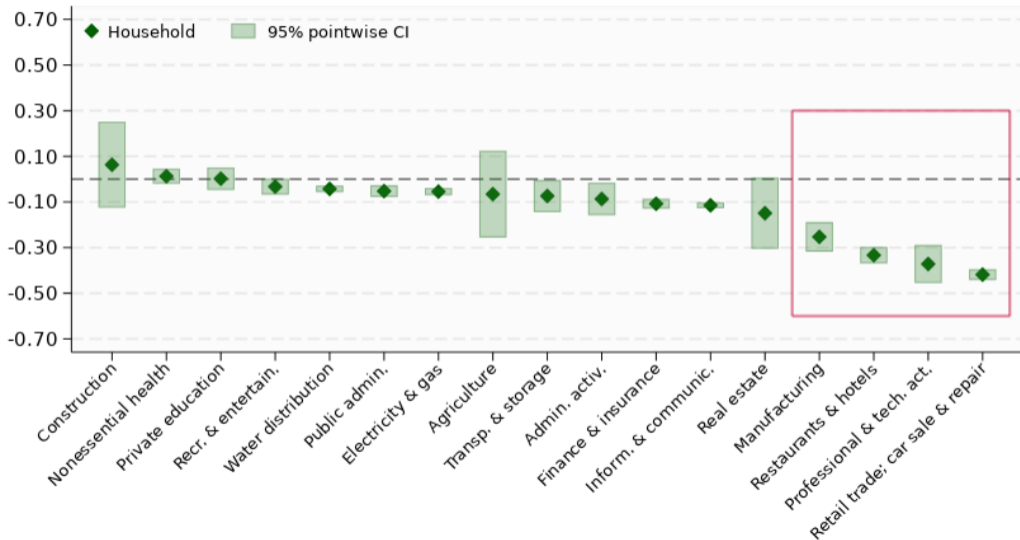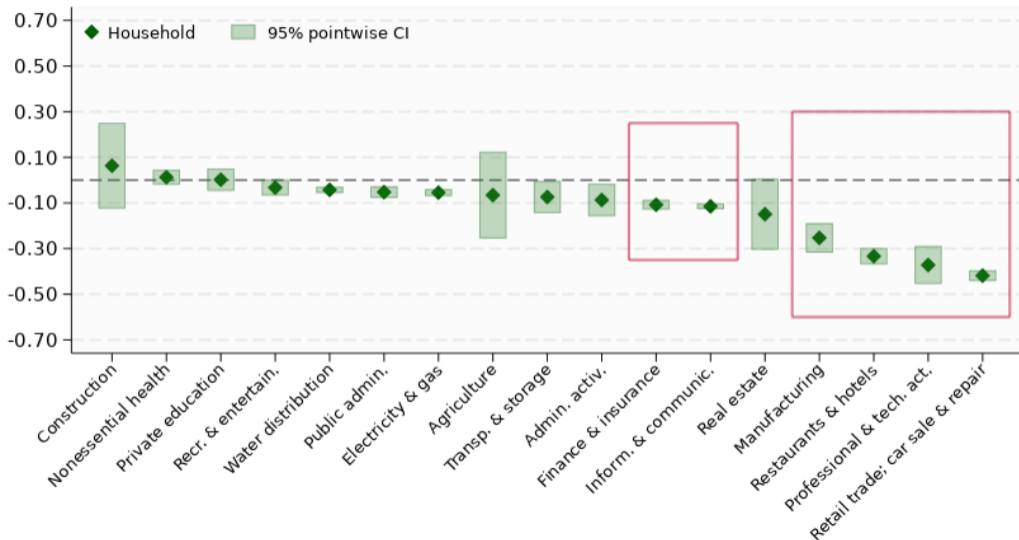
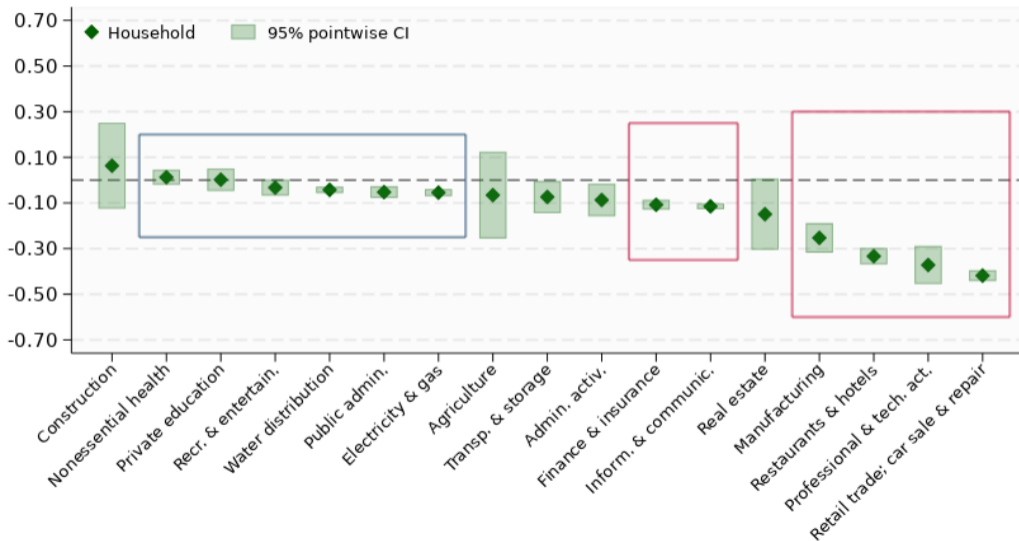# AVERAGE EFFECTS ON ALL EXPENDITURE CATEGORIES — HOUSEHOLD

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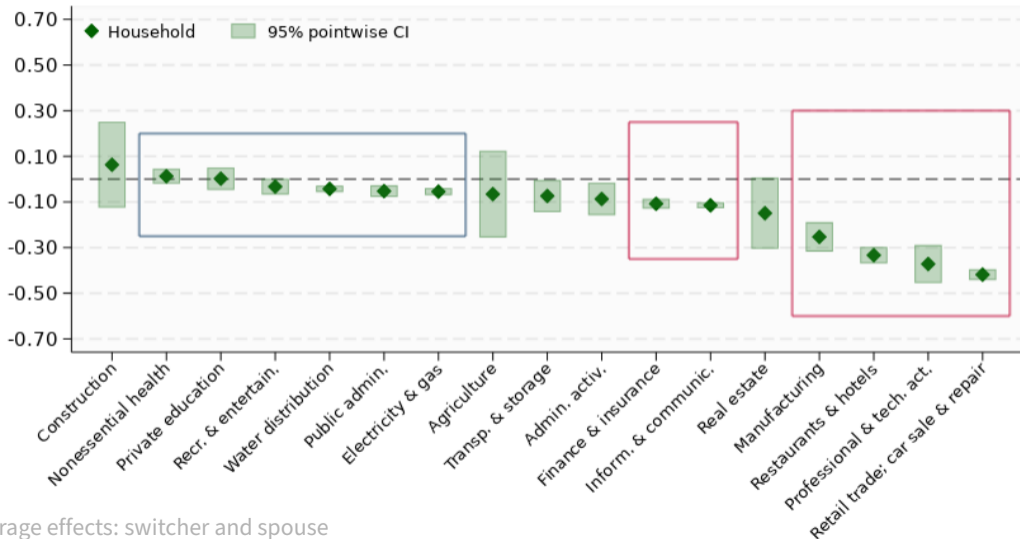
‣ Average effects: switcher and spouse

HOW INCOME EVOLVES AROUND THE SWITCH?

Log annual household taxable income + retained earnings

Years around the switch from employee to owner-manager
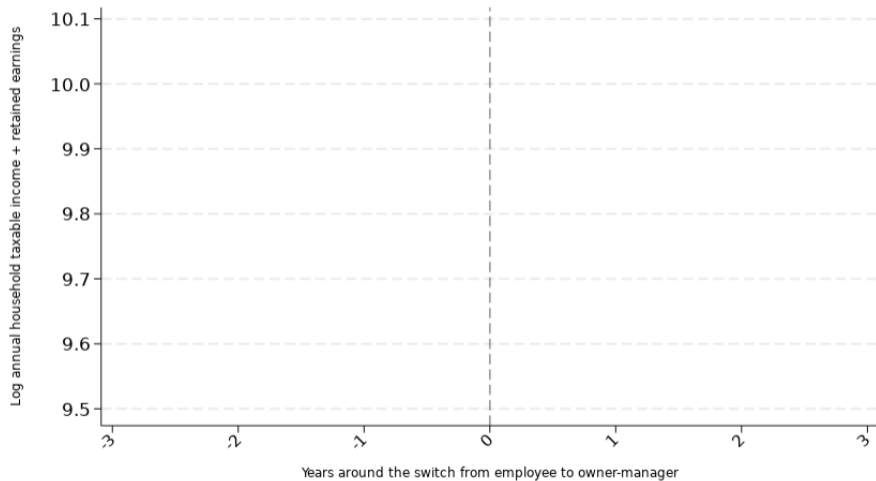
HOW INCOME EVOLVES AROUND THE SWITCH?

HOW INCOME EVOLVES AROUND THE SWITCH?

Chart legend: Cohort 2016 (□), Cohort 2017 (△), Cohort 2018 (○), Cohort 2019 (+)

Y-axis: Log annual household taxable income + retained earnings

X-axis: Years around the switch from employee to owner-manager

Labels: Household income + retained earnings; Household income

HOW INCOME EVOLVES AROUND THE SWITCH?

Legend:
- Cohort 2016 (□)
- Cohort 2017 (△)
- Cohort 2018 (○)
- Cohort 2019 (+)

Household income + retained earnings

Household income

Y-axis: Log annual household taxable income + retained earnings

X-axis: Years around the switch from employee to owner-manager

▸ Averages by percentile   ▸ Position on the income distribution

HOW WIDESPREAD IS CONSUMPTION THROUGH THE FIRM?

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- Significant declines in household consumption expenditures after individuals become business managers.

- Income shock is ruled-out: only expenditures that lie on the business-consumption borderline adjust while hard-to-shift expenditures to not react to the switch.

- But... Is this of major economic importance?

- To understand whether consumption through the firm is limited to "poor" business managers or is instead a widespread phenomenon, I estimate the effects across the income distribution.

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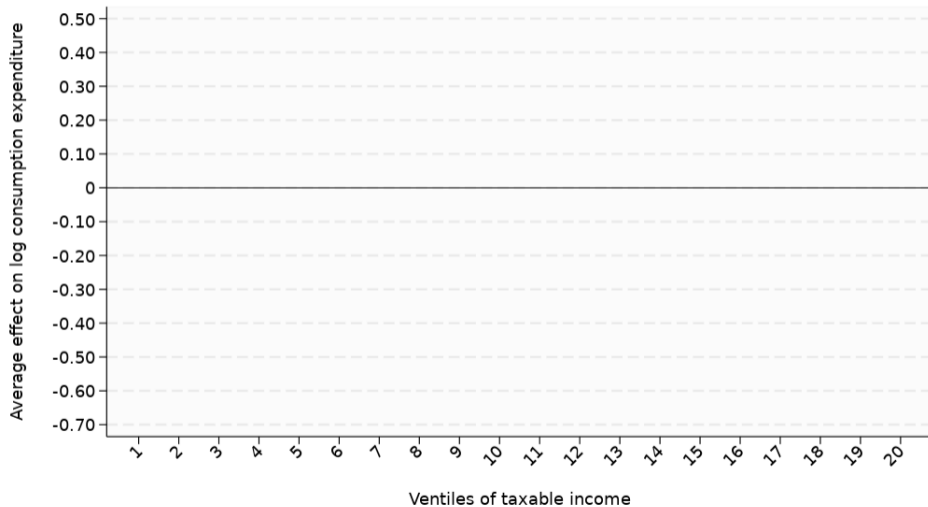
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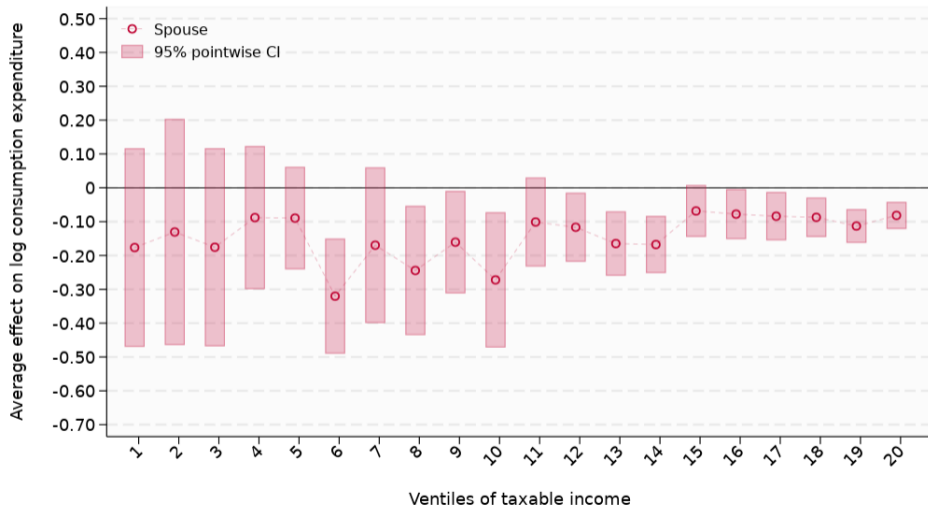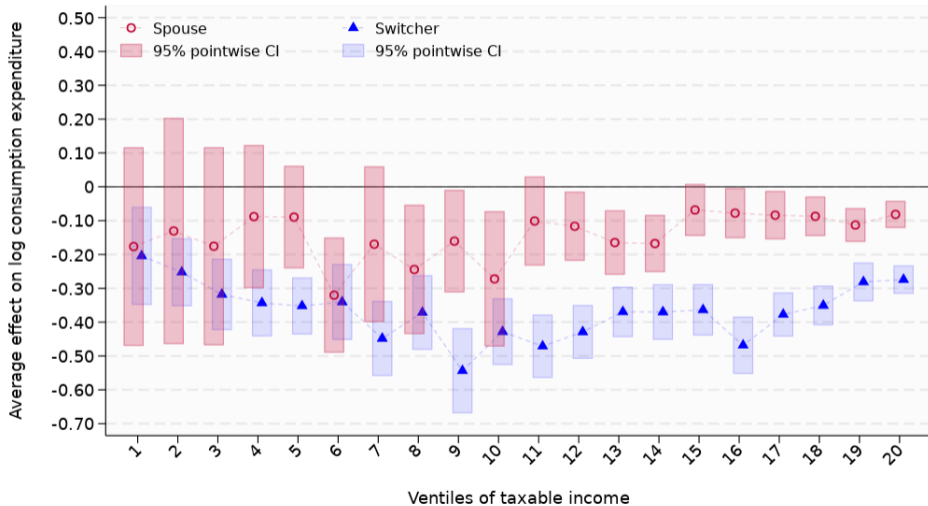
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Average effect on log consumption expenditure

Ventiles of taxable income

Legend: Spouse ○, 95% pointwise CI (red); Switcher ▲, 95% pointwise CI (blue)

▸ By decile   ▸ By percentile

HETEROGENEITY

- Effects by firm size (‣ here)
- Effects by ownership status (‣ here)
- Effects by industry (‣ here)

Additional descriptives on the population of business managers:

- Position in the income distribution (‣ here)
- Distribution by firm size (‣ here)
- Distribution by industry (‣ here)

BUSINESS EXPENDITURES AND LIFE EVENTS

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- Looking at firm's expenditures it is *very hard to distinguish the pure business demand from the goods and services purchased solely for their consumption value*.

- How personal consumption motives affect the pattern of business expenditures? I estimate how monthly business expenditures react to life events of the business owner-manager with the following event study:

$$F_{it} = \sum_{k \in \{-5+,\dots,-1,0,1,\dots5+\}} \beta_k \mathbf{1}(t = k) + \theta_i + \lambda_t + \varepsilon_{it} \tag{2}$$

- Specifically, I estimate how monthly business expenditures on hotels and restaurants evolves around the birthday month of the owner-manager and the spouse.

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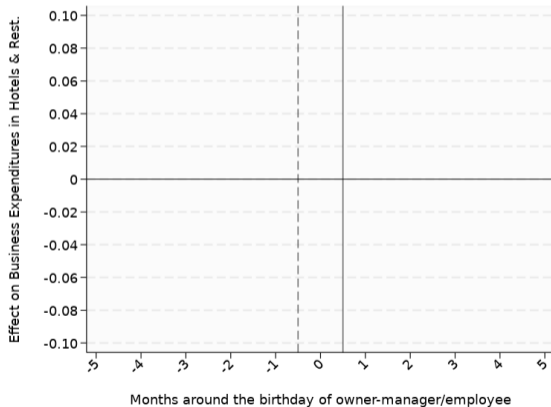
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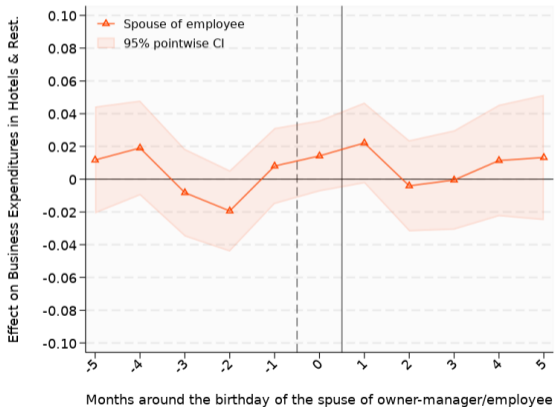‣ Raw averages (Owner-managers)   ‣ Raw averages (Employees)

MONTHLY BUSINESS EXPENDITURES IN HOTELS & RESTAURANTS

Birth month of a randomly selected employee

Birth month of the employee's spouse

MONTHLY BUSINESS EXPENDITURES IN HOTELS & RESTAURANTS
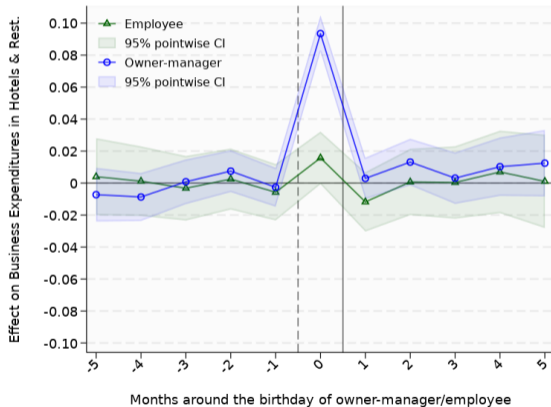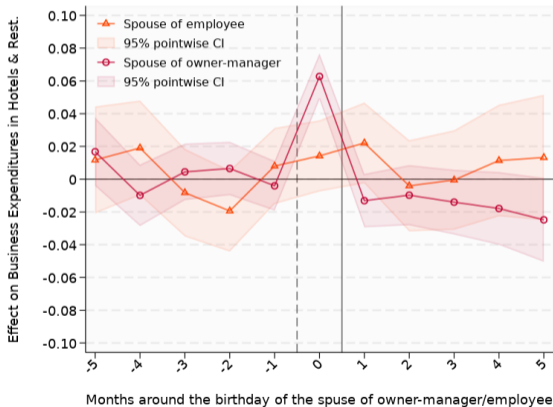
Birth month of a randomly selected employee

Birth month of the employee's spouse

MONTHLY BUSINESS EXPENDITURES IN HOTELS & RESTAURANTS

Birth month of the owner-manager

- Employee
- 95% pointwise CI
- Owner-manager
- 95% pointwise CI

Effect on Business Expenditures in Hotels & Rest.

Months around the birthday of owner-manager/employee

‣ All business expenditures (owner-managers)

Birth month of the owner-manager's spouse

- Spouse of employee
- 95% pointwise CI
- Spouse of owner-manager
- 95% pointwise CI

Effect on Business Expenditures in Hotels & Rest.

Months around the birthday of the spuse of owner-manager/employee

‣ All business expenditures (spouses)

AGGREGATE IMPLICATIONS

BASELINE HOUSEHOLD CONSUMPTION

	Million EUR	% of GDP
Household expenditure (5.3 million households)	53,744	25.07
Owner-managers' household expenditure (287.9 thousand households)	6,119	2.85

ADJUSTING HOUSEHOLD CONSUMPTION

	$\widehat{\delta} = 0.3123$		$\delta = \widehat{\delta}_p$	
	Million EUR	% of GDP	Million EUR	% of GDP
ΔCons. $= \bar{c}/(1 - \hat{\delta}) - \bar{c}$	2,778	1.30	2,672	1.25
	(2,577 2,989)	(1.20 1.39)	(1,238 5,598)	(0.58 2.61)

GOVERNMENT REVENUE LOSS

	$\widehat{\delta} = 0.3123$		$\delta = \widehat{\delta}_p$	
	Million EUR	% of GDP	Million EUR	% of GDP
Aggregate loss in PIT				
Dividends: $\tau = 28\%$	1,080	0.50	1,039	0.48
$\tau/(1-\tau) \cdot \Delta$Cons.	(1,002 1,162)	(0.47 0.54)	(482 2,177)	(0.22 1.02)

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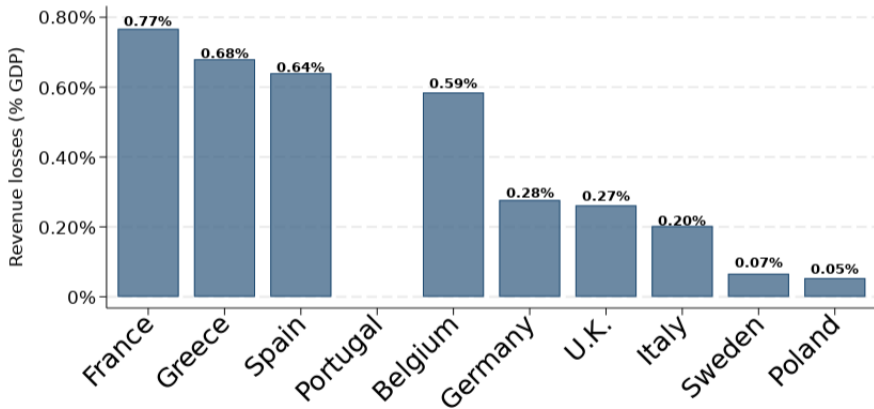|	$\widehat{\delta} = 0.3123$			$\delta = \widehat{\delta}_p$		
	Million EUR		% of GDP	Million EUR		% of GDP
Aggregate loss in PIT						
Dividends: τ = 28%	1,080		0.50	1,039		0.48
$\tau/(1-\tau) \cdot \Delta$Cons.	(1,002 1,162)		(0.47 0.54)	(482 2,177)		(0.22 1.02)
Aggregate loss in PIT and VAT						
Dividends: τ = 28%; VAT: γ = 23%	2,233		1.04	2,148		1.00
$\left[\frac{1}{(1-\gamma)\cdot(1-\tau)} - 1\right] \cdot \Delta$Cons.	(2,071 2,402)		(0.97 1.12)	(995 4,499)		(0.46 2.10)

GOVERNMENT REVENUE LOSS

	$\widehat{\delta}$ = 0.3123		$\delta = \widehat{\delta}_p$	
	Million EUR	% of GDP	Million EUR	% of GDP
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Dividends: τ = 28%	1,080	0.50	1,039	0.48
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THE SCALE OF TAX EVASION IN PERSPECTIVE

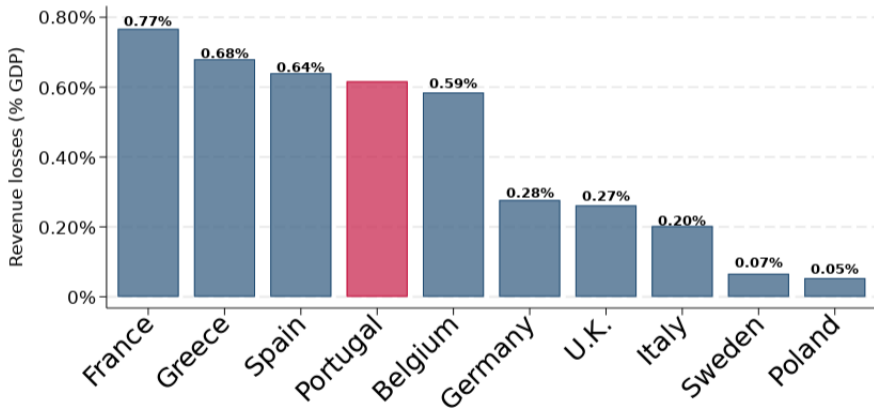## Offshore Tax Evasion by Individuals - Zucman (2017)

Chart: Revenue losses (% GDP) by country — France, Greece, Spain, Portugal, Belgium, Germany, U.K., Italy, Sweden, Poland. Y-axis ranges from 0% to 0.80%.

THE SCALE OF TAX EVASION IN PERSPECTIVE

Offshore Tax Evasion by Individuals - Zucman (2017)

Revenue losses (% GDP)

- France: 0.77%
- Greece: 0.68%
- Spain: 0.64%
- Portugal:
- Belgium: 0.59%
- Germany: 0.28%
- U.K.: 0.27%
- Italy: 0.20%
- Sweden: 0.07%
- Poland: 0.05%
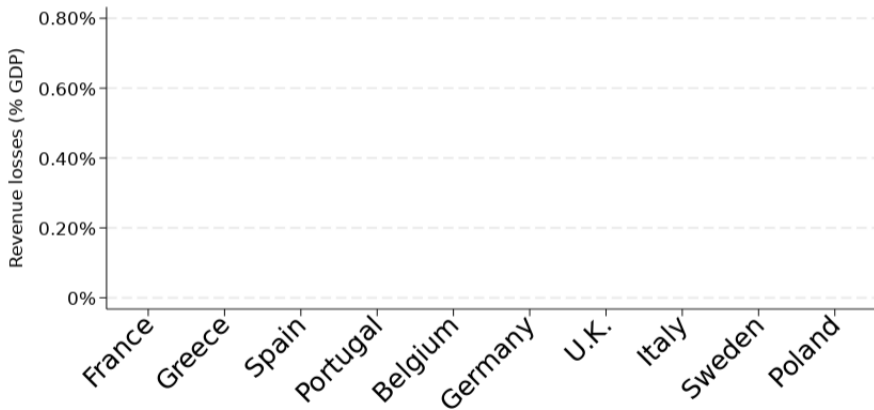
THE SCALE OF TAX EVASION IN PERSPECTIVE

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THE SCALE OF TAX EVASION IN PERSPECTIVE
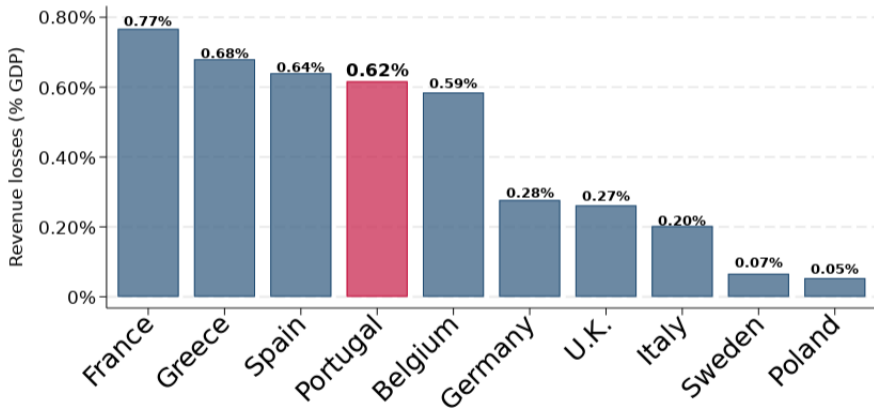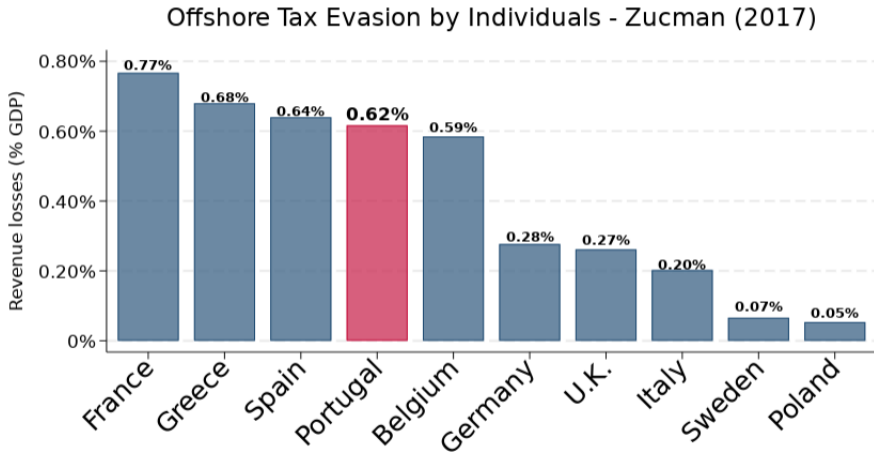

Offshore Tax Evasion by Individuals - Zucman (2017)

Revenue losses (% GDP)

Country	Value
France	0.77%
Greece	0.68%
Spain	0.64%
Portugal	0.62%
Belgium	0.59%
Germany	0.28%
U.K.	0.27%
Italy	0.20%
Sweden	0.07%
Poland	0.05%

THE SCALE OF TAX EVASION IN PERSPECTIVE

Offshore Tax Evasion by Individuals - Zucman (2017)

ADJUSTING HOUSEHOLD INCOME

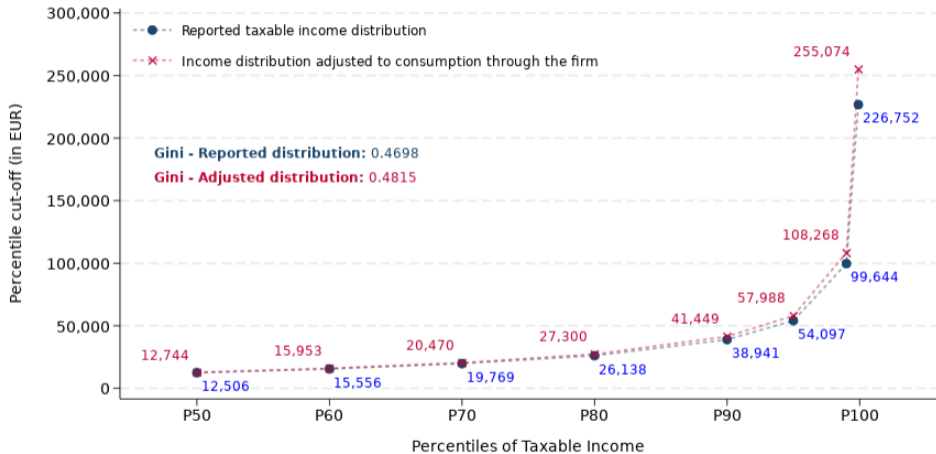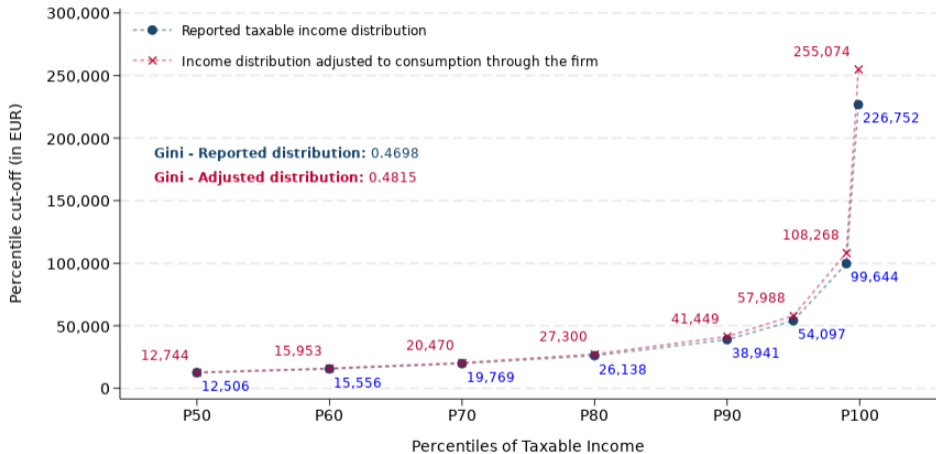|	$\widehat{\delta}$ = 0.3123		$\delta = \widehat{\delta}_p$	
	Million EUR	% of GDP	Million EUR	% of GDP
$\frac{1}{(1-\gamma)\cdot(1-\tau)} \cdot \Delta$Cons.	5,011	2.34	4,820	2.25
	(4,648 5,391)	(2.17 2.51)	(2,233 10,097)	(1.04 4.71)
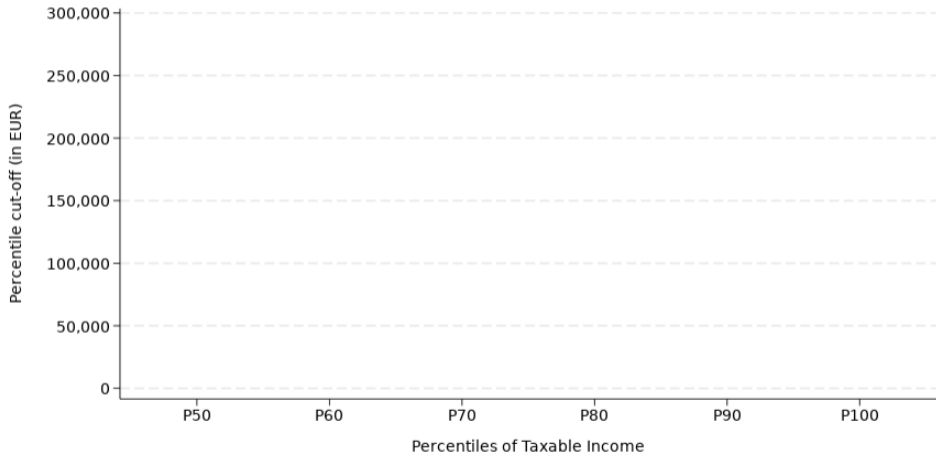
DISTRIBUTIONAL IMPLICATIONS: REPORTED VS. ADJUSTED DISTRIBUTIONS

DISTRIBUTIONAL IMPLICATIONS: REPORTED VS. ADJUSTED DISTRIBUTIONS

Reported taxable income distribution

Gini - Reported distribution: 0.4698

Percentile cut-off (in EUR)

Percentiles of Taxable Income

- 12,506
- 15,556
- 19,769
- 26,138
- 38,941
- 54,097
- 99,644
- 226,752

DISTRIBUTIONAL IMPLICATIONS: REPORTED VS. ADJUSTED DISTRIBUTIONS

Gini - Reported distribution: 0.4698
Gini - Adjusted distribution: 0.4815

- ● - Reported taxable income distribution
- ✕ - Income distribution adjusted to consumption through the firm

Percentile cut-off (in EUR)

Percentiles of Taxable Income

DISTRIBUTIONAL IMPLICATIONS: REPORTED VS. ADJUSTED DISTRIBUTIONS

Gini - Reported distribution: 0.4698
Gini - Adjusted distribution: 0.4815

Reported taxable income distribution
Income distribution adjusted to consumption through the firm

Percentile cut-off (in EUR)

Percentiles of Taxable Income

	P50	P60	P70	P80	P90	P100
Adjusted	12,744	15,953	20,470	27,300	41,449	108,268
					57,988	255,074
Reported	12,506	15,556	19,769	26,138	38,941	226,752
					54,097	99,644

▸ Income Shares

MAIN TAKEAWAYS

- Business managers shift approximately 36% of their personal expenditures to the firm and 31% of their combined household expenditures. The shift is driven by expenditures on the border between business and consumption, while hard-to-shift expenditures do not react.

- Scope for consumption through the firm is greater among *small closely held firms*.

- The pattern of business expenditures is affected by personal consumption motives: business expenditures in hotels and restaurants increase 9.8% in the birthday month of the owner-manager and 6.1% in the birthday month of the owner-manager's spouse.

- Government revenue loss in PIT and VAT due to consumption through the firm amounts to **1% of the GDP**. Reallocating to reported income the share of personal consumption hidden within the firm plus the tax savings increases the Gini coefficient by one percentage point.

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Annette Alstadsæter, Wojciech Kopczuk, and Kjetil Telle. Are Closely Held Firms Tax Shelters? *Tax Policy and the Economy*, 28(1):1–32, 2014.

Kirill Borusyak, Xavier Jaravel, and Jann Spiess. Revisiting event study designs: Robust and efficient estimation. 2021.

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Charles T Clotfelter. Tax-induced distortions and the business-pleasure borderline: the case of travel and entertainment. *The American Economic Review*, 73(5):1053–1065, 1983.

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Wojciech Kopczuk and Eric Zwick. Business incomes at the top. *Journal of Economic Perspectives*, 34(4):27–51, 2020. ISSN 19447965. doi: $10.1257/\text{JEP}.34.4.27$.

Helen Miller, Thomas Pope, and Kate Smith. Intertemporal income shifting and the taxation of business owner-managers. *The Review of Economics and Statistics*, pages 1–45, 2020.

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APPENDIX TO

THE FIRM AS TAX SHELTER

MICRO EVIDENCE AND AGGREGATE IMPLICATIONS OF CONSUMPTION THROUGH THE FIRM

ALTERNATIVE ESTIMATORS

Avg. Effect - BJS: -0.3259 (0.0092)

Avg. Effect - C&S: -0.3624 (0.0093)

Avg. Effect - dC&DH: -0.2860 (0.0068)

Borusyak et al. (2021)
Callaway & Sant'Anna (2021)
de Chaisemartin & D'Haultfoeuille (2020)
95% CI
95% CI
95% CI

Average Effect on Log- Monthly Expenditure

‹ Back
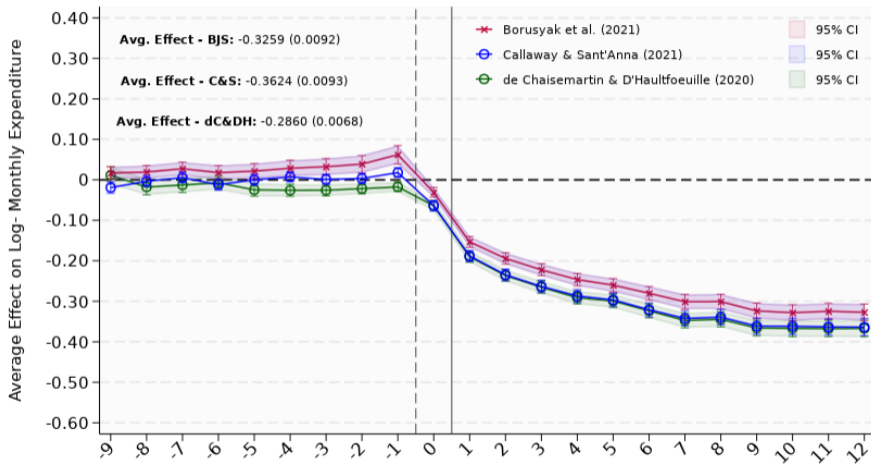
AVERAGE EFFECTS ON ALL EXPENDITURE CATEGORIES — SWITCHER & SPOUSE
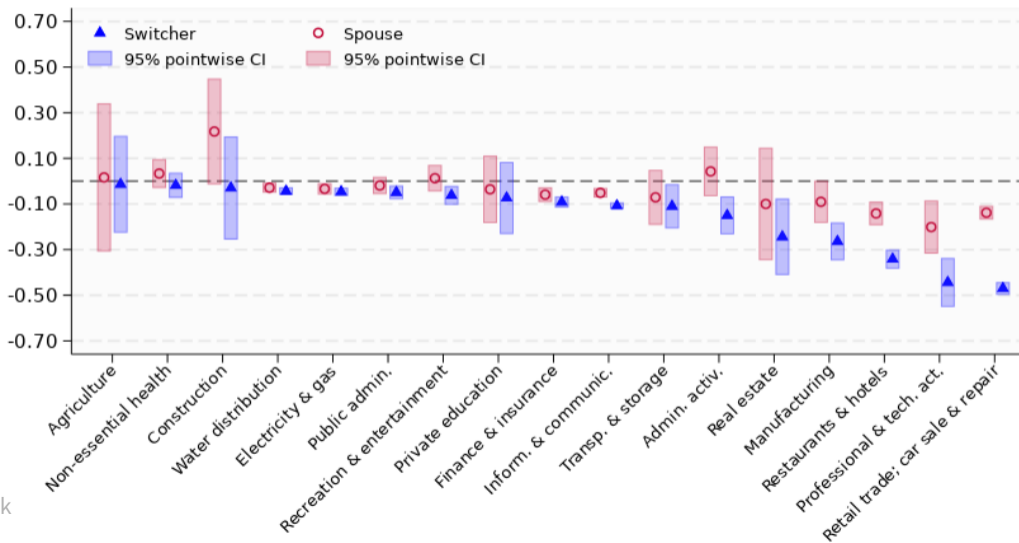
EFFECTS BY DECILE OF HOUSEHOLD TAXABLE INCOME

Switcher & Spouse

Household

‹ Back
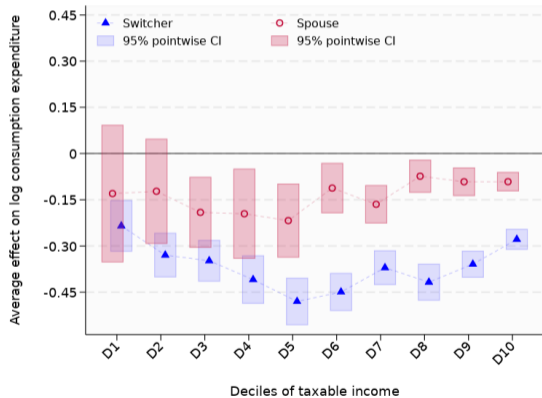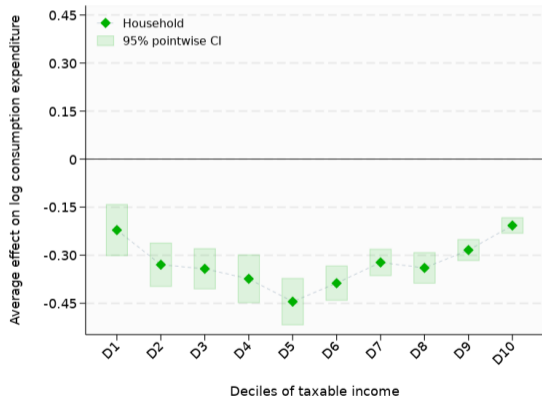
EFFECTS BY PERCENTILE OF TAXABLE INCOME — SWITCHER
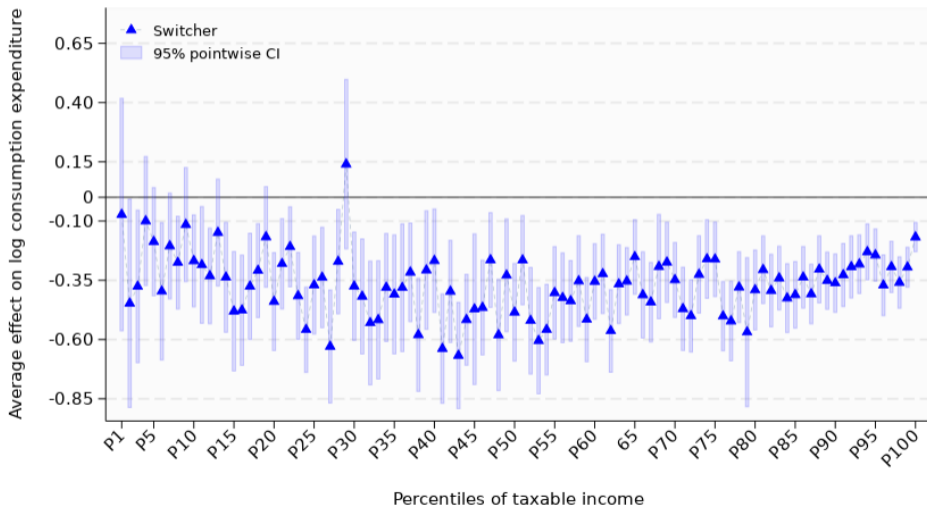
EFFECTS BY PERCENTILE OF TAXABLE INCOME — SPOUSE
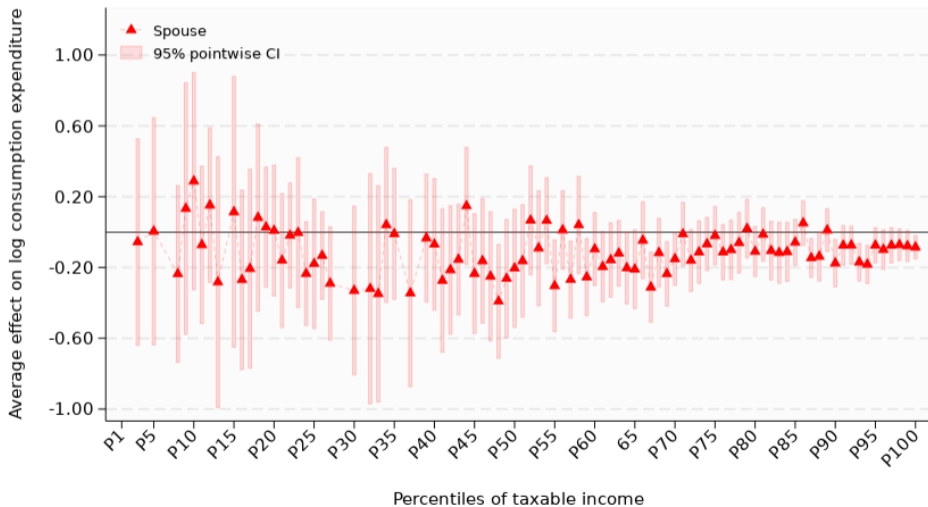
EFFECTS BY PERCENTILE OF TAXABLE INCOME — HOUSEHOLD
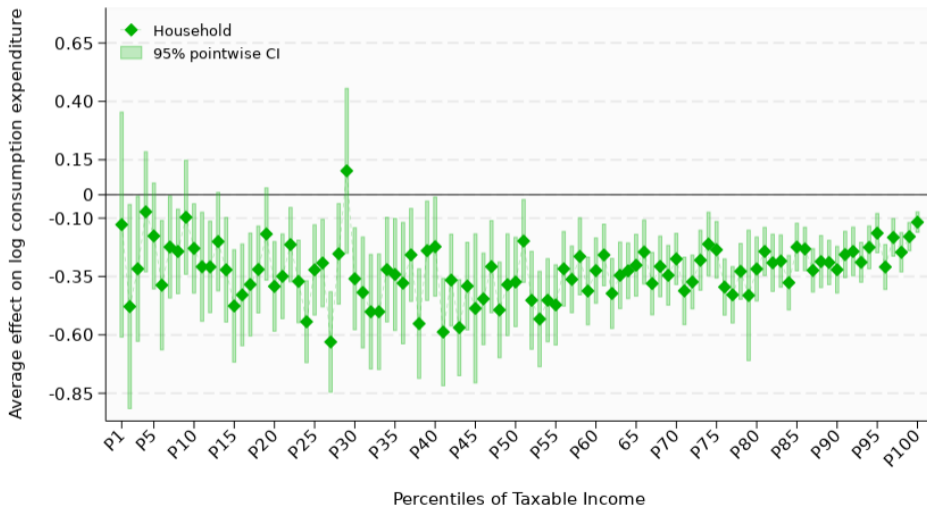
EFFECTS BY FIRM SIZE: SMALL, MEDIUM AND LARGE FIRMS — SWITCHER

Small firms (<10 workers)
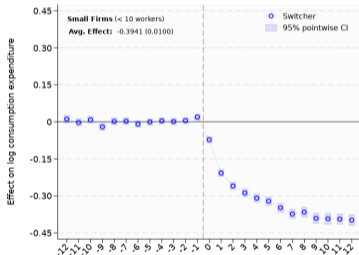
Med firms (10 to 50 workers)
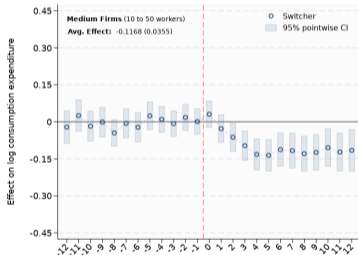
Large firms (> 50 workers)
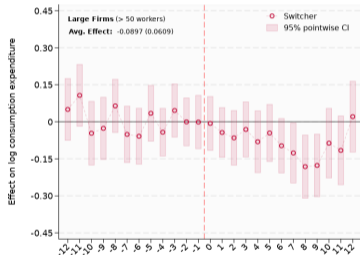
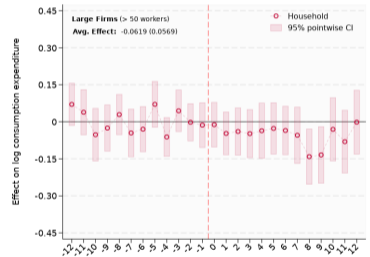# EFFECTS BY FIRM SIZE: SMALL, MEDIUM AND LARGE FIRMS — SPOUSE

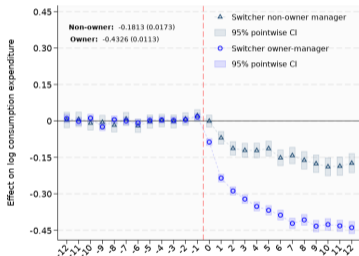## Small firms (<10 workers)

Med firms (10 to 50 workers)

Large firms (> 50 workers)

‹ Back

EFFECTS BY FIRM SIZE: SMALL, MEDIUM AND LARGE FIRMS — HOUSEHOLD

Small firms (<10 workers)

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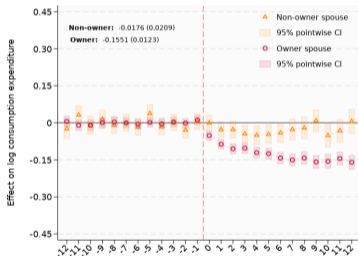

Large firms (> 50 workers)

‹ Back

EFFECTS BY FIRM OWNERSHIP: OWNER VS. NONOWNER BUSINESS MANAGER
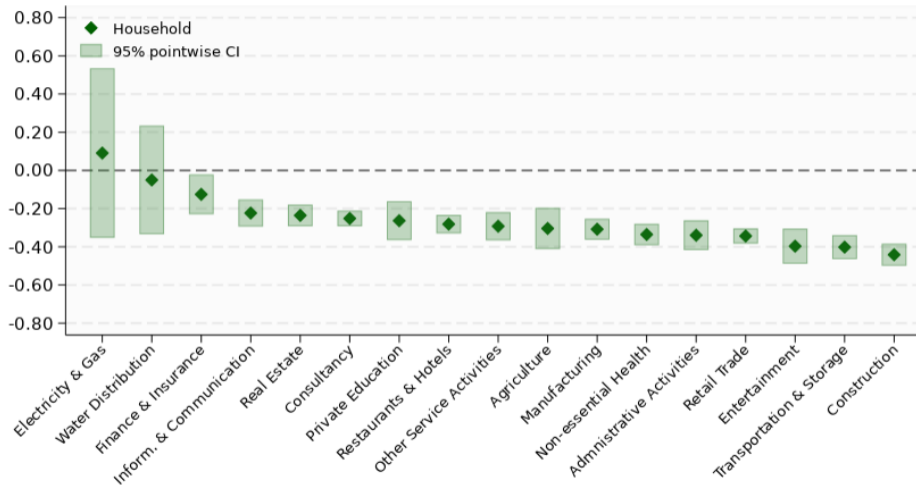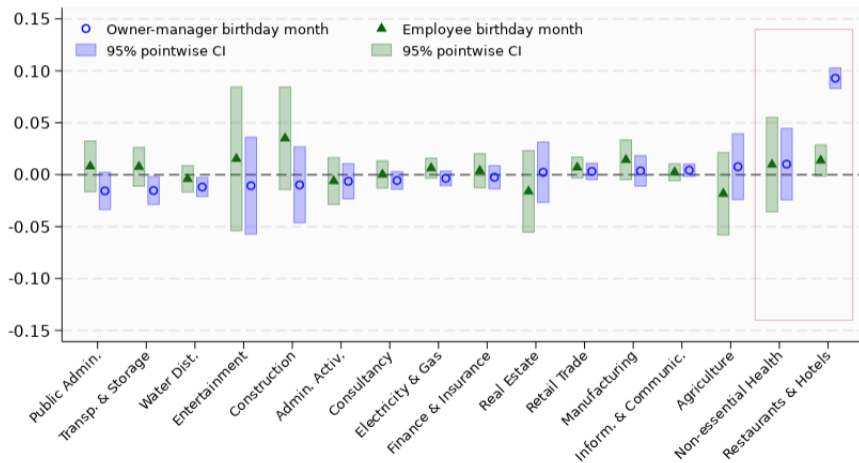
Switcher

Spouse

Household

‹ Back
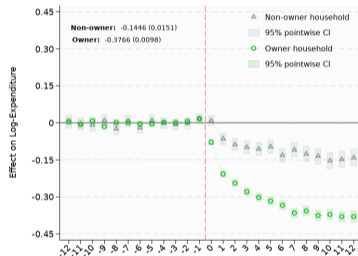
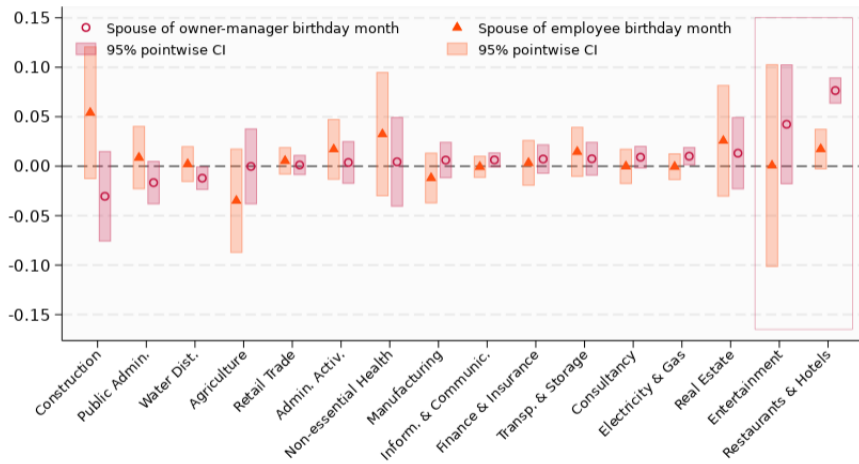# AVERAGE EFFECTS BY INDUSTRY — SWITCHER AND SPOUSE
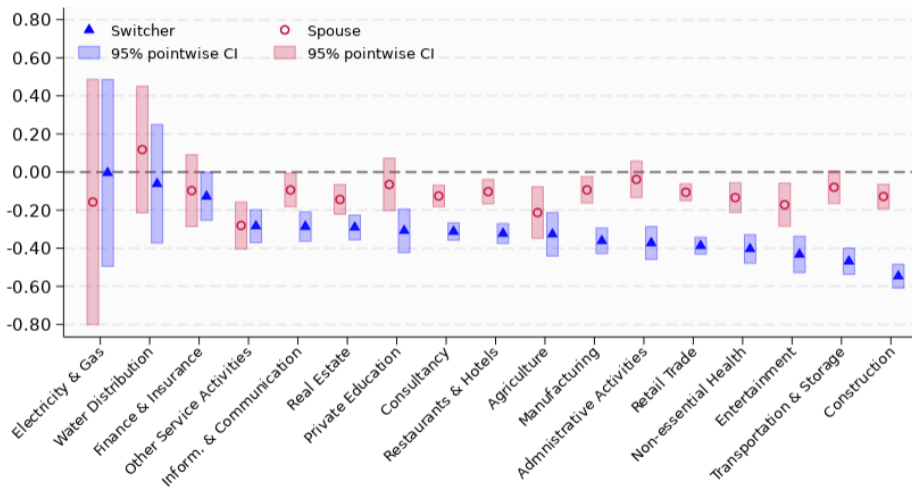
AVERAGE EFFECTS BY INDUSTRY — HOUSEHOLD

EFFECTS ON BUSINESS EXPENDITURES AT BIRTHDAY MONTH —
OWNER–MANAGERS VS. EMPLOYEES

‹ Back

EFFECTS ON BUSINESS EXPENDITURES AT BIRTHDAY MONTH — SPOUSES

IMPLICATIONS FOR TOP INCOME SHARES

| | 2018 | | 2019 | |
	Reported	Adjusted	Reported	Adjusted
Bottom 50%	19.10	18.45	19.32	18.67
50%–90%	45.23	44.82	45.32	44.94
Top 10%	35.68	36.73	35.37	36.39
Top 5%	23.56	24.41	23.31	24.13
Top 1%	8.59	9.09	8.50	8.96
Top 0.1%	2.14	2.37	2.17	2.37

DESCRIPTIVES FOR THE PANEL OF MONTHLY EXPENDITURES OF SWITCHERS

	Cohort 2016	Cohort 2017	Cohort 2018	Cohort 2019	Panel 2016–19
Age	39.80	40.02	39.81	39.72	39.84
Male	0.66	0.68	0.68	0.69	0.68
Married	0.57	0.56	0.53	0.50	0.54
Household size	2.47	2.41	2.33	2.27	2.37
Mean	25,659	26,859	26,370	25,659	25,587
P10	4,770	4,934	5,040	4,770	4,899
P50	14,981	14,999	14,686	14,981	14,625
P90	53,067	53,713	53,794	53,067	52,062
Top 1%	175,148	192,713	180,623	175,148	173,726

DESCRIPTIVES FOR THE PANEL OF MONTHLY EXPENDITURES OF SWITCHERS

	Role as employee	Role as manager
Non-existing firm	-	0.75
Time operating	16.22	2.12
Same firm	-	0.05
Limited liability company	0.62	0.73
Single member company	0.13	0.20
Non-profit organization	0.03	0.04
Join-stock company	0.17	0.02
Others	0.05	0.01

DESCRIPTIVES FOR THE PANEL OF MONTHLY EXPENDITURES OF SWITCHERS

	Role as employee	Role as manager
Average Number of Workers	113.95	7.31
< 10 Workers	0.58	0.96
≥ 10 and < 50 Workers	0.23	0.03
≥ 50 Workers	0.18	0.01
Mean of Sales	13,762.39	659.01
Mean of Assets	19,814.19	1,766.86
Mean of Profits	392.19	42.13

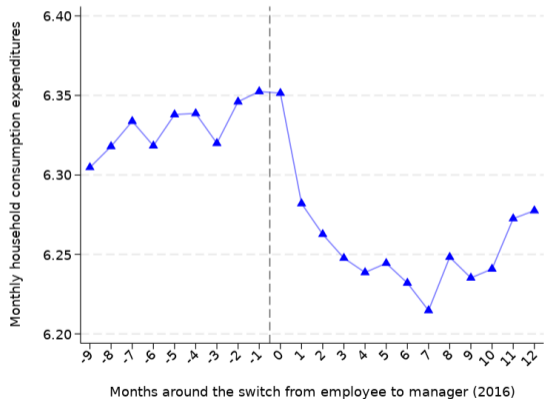## DESCRIPTIVES FOR THE PANEL OF MONTHLY EXPENDITURES OF SWITCHERS

	Role as employee	Role as manager
Retail Trade	0.21	0.19
Hotels & Restaurants	0.11	0.13
Construction	0.11	0.10
Manufacturing	0.13	0.08
Consultancy	0.08	0.09
Transportation	0.05	0.07
Human Health	0.05	0.05
Admnistrative Activities	0.06	0.04
Other Service Activities	0.03	0.05
Real Estate	0.03	0.05
Inform. & Communication	0.04	0.04
Entertainement	0.02	0.04
Other Sectors	0.08	0.06

HOUSEHOLD CONSUMPTION SHARES OF THE SWITCHERS

Share in Total Expenditure

Legend: Main Activities, Others, × Employees, ● Managers

Categories: Retail Trade, Finance & Insurance, Information & Communication, Water, Electricity & Gas, Human Health, Education, Hotels & Restaurants, Entertainment, Other services, Consultancy, Transportation, Administrative activities, Public Administration, Manufacturing, Real estate, Construction, Agriculture, Mining

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RAW EVENT: 2016 AND 2017 COHORTS

2016 Cohort

2017 Cohort
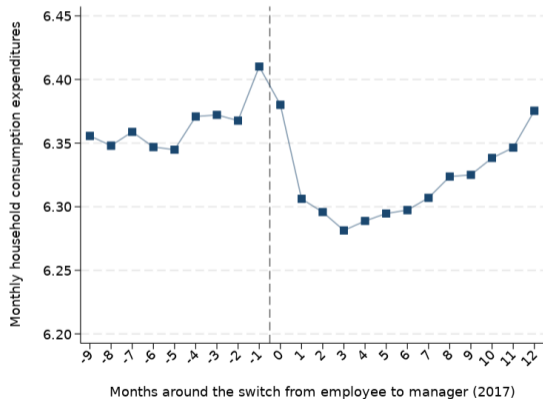
RAW EVENT: 2018 AND 2019 COHORTS

2018 Cohort

Monthly household consumption expenditures vs. Months around the switch from employee to manager (2018)

2019 Cohort

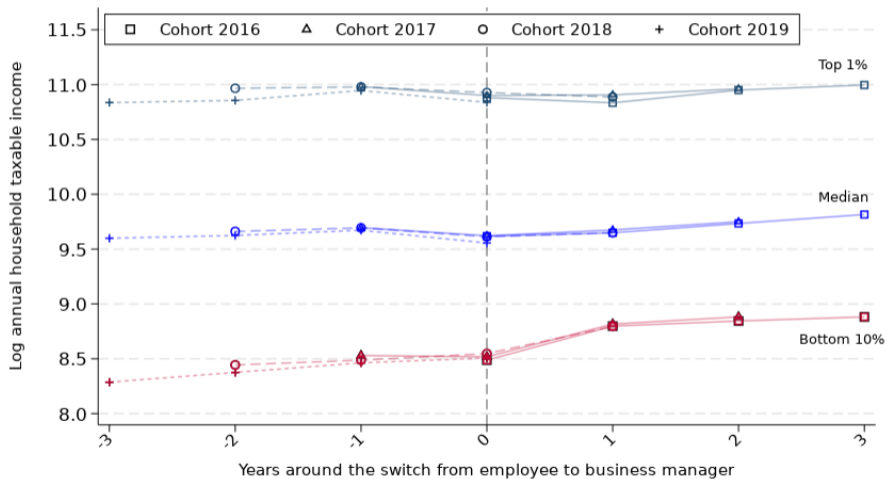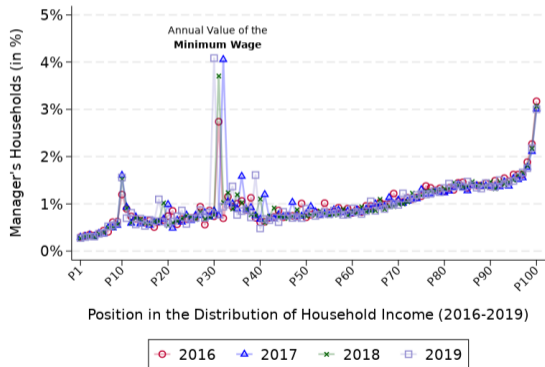Monthly household consumption expenditures vs. Months around the switch from employee to manager (2019)
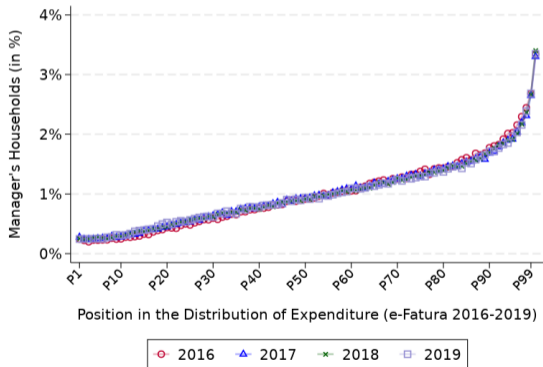
‹ Back
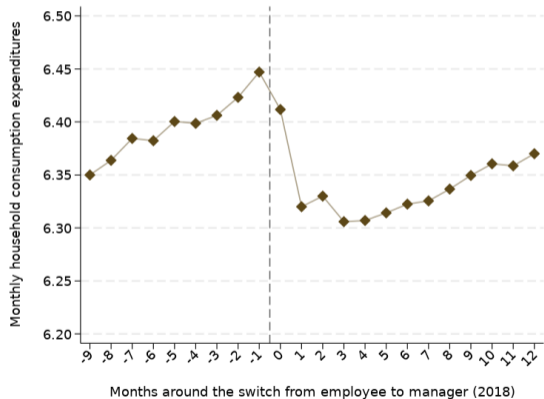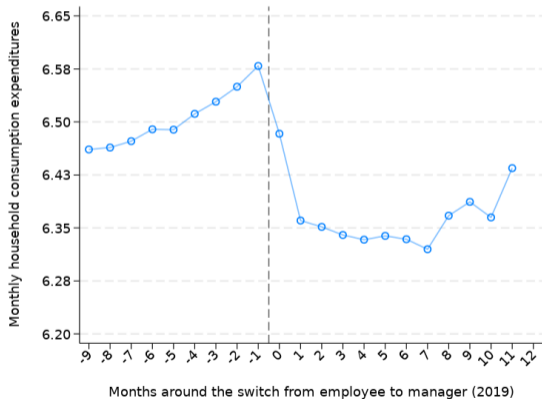
EVOLUTION OF THE TOP 1%, MEDIAN AND BOTTOM 10%

POSITION OF BUSINESS MANAGERS IN THE POPULATION'S DISTRIBUTION OF INCOME AND EXPENDITURE
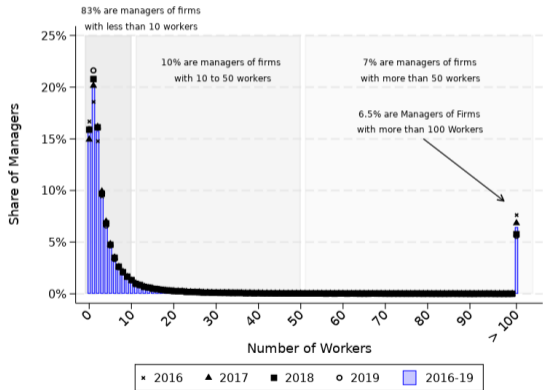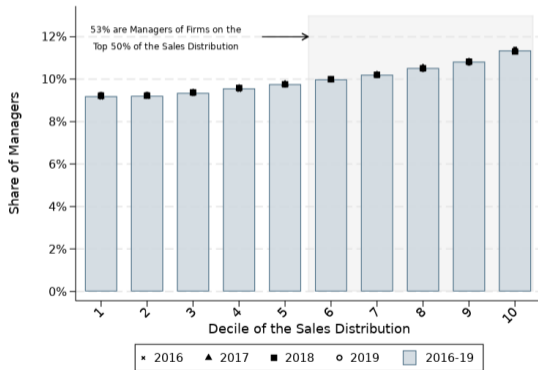
Income distribution

Position in the Distribution of Household Income (2016-2019)

Expenditure distribution

Position in the Distribution of Expenditure (e-Fatura 2016-2019)

‹ Back to "Evolution of Income" ‹ Back to "Heterogeneity"

DISTRIBUTION OF THE POPULATION OF BUSINESS MANAGERS BY FIRM SIZE

Number of workers

83% are managers of firms
with less than 10 workers

10% are managers of firms
with 10 to 50 workers

7% are managers of firms
with more than 50 workers

6.5% are Managers of Firms
with more than 100 Workers

× 2016   ▲ 2017   ■ 2018   ○ 2019   ☐ 2016-19

Volume of sales

53% are Managers of Firms on the
Top 50% of the Sales Distribution →

× 2016   ▲ 2017   ■ 2018   ○ 2019   ☐ 2016-19
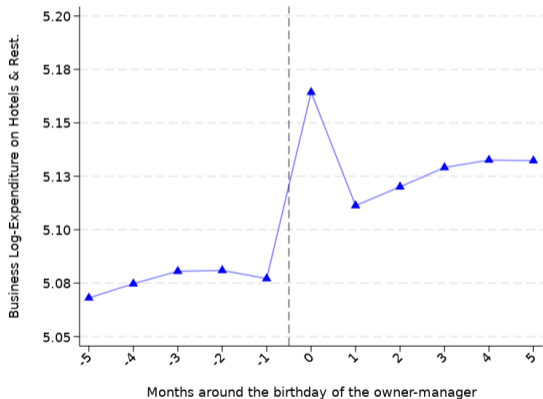
‹ Back

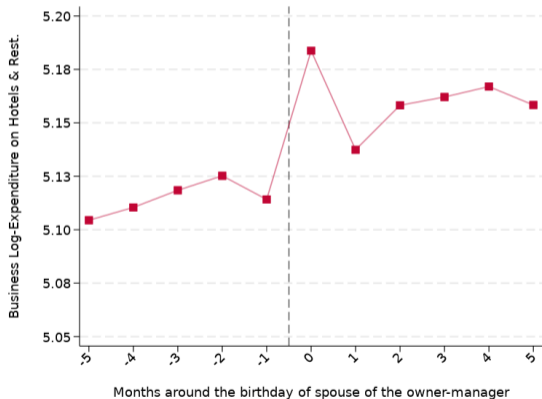# DISTRIBUTION OF THE POPULATION OF BUSINESS MANAGERS BY INDUSTRY
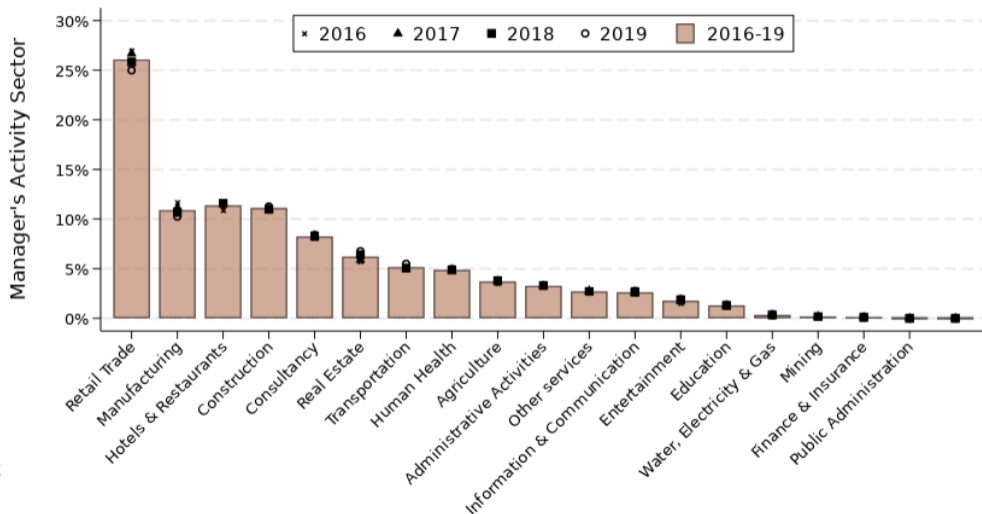
BUSINESS EXPENDITURES IN HOTELS & RESTAURANTS: OWNER-MANAGERS

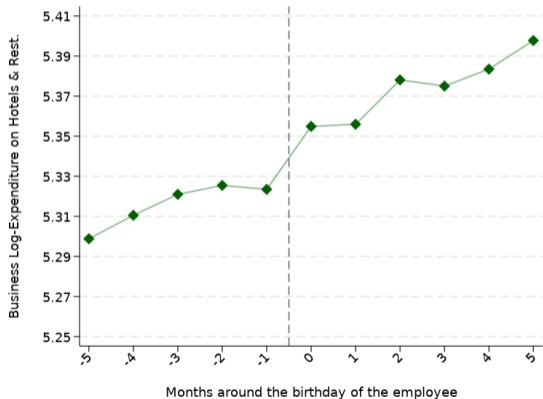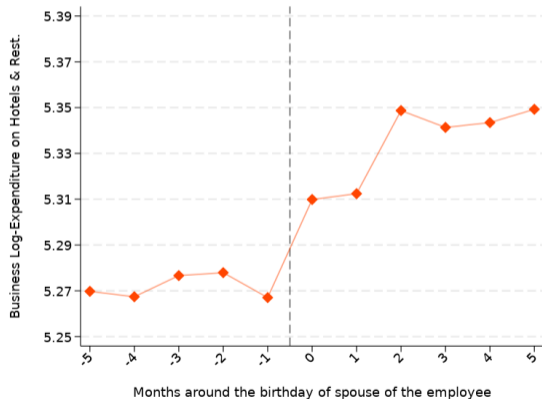## Birth month of the owner-manager

Birth month of the owner-manager's spouse

BUSINESS EXPENDITURES IN HOTELS & RESTAURANTS: EMPLOYEES

Birth month of the employee

Birth month of the employee's spouse

‹ Back

ANECDOTAL EVIDENCE COLLECTED FROM PRESS RECORDS

- **United States**: *New York Times*, *ABC News*

- **France**: *Libération* (in French)

- **Spain**: *The Guardian*

- **Portugal**: *Expresso* (in Portuguese)