

Earnings Insurance across Countries

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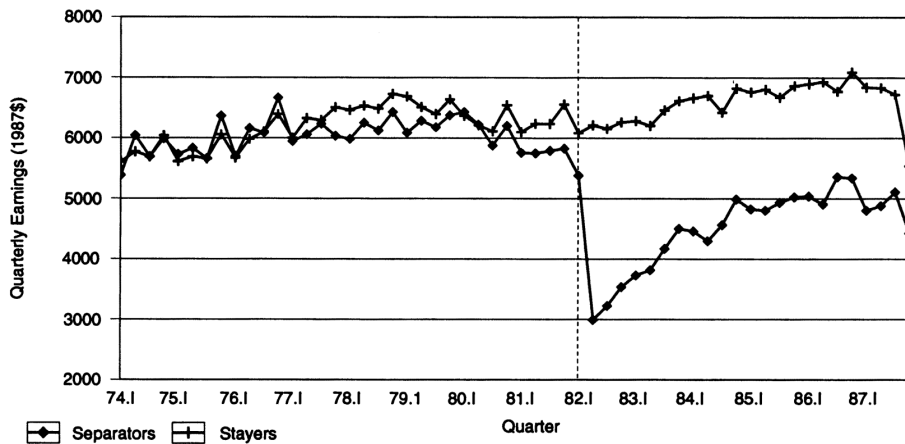
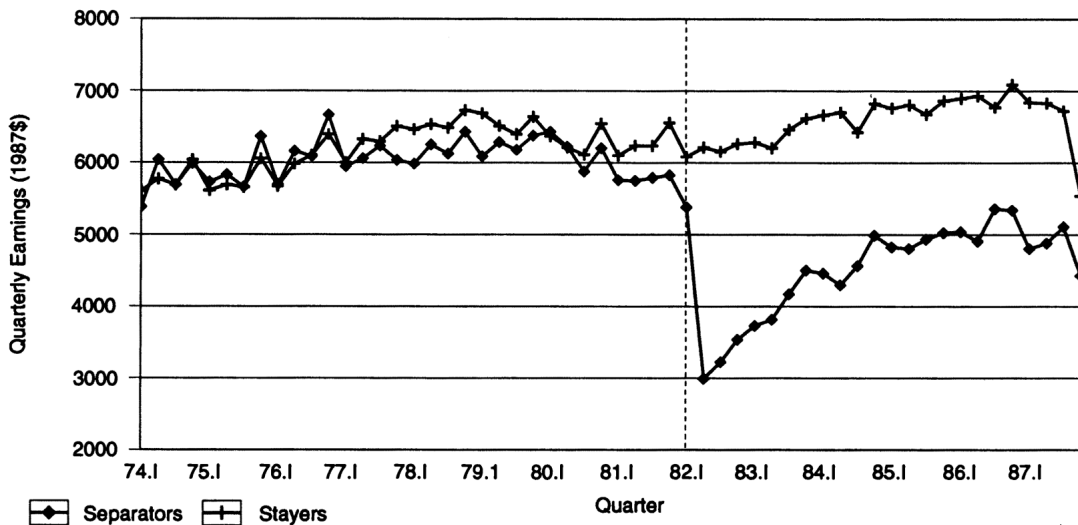


FIGURE 1. QUARTERLY EARNINGS (1987 DOLLARS) OF HIGH-ATTACHMENT WORKERS SEPARATING IN QUARTER 1982:1 AND WORKERS STAYING THROUGH QUARTER 1986:4

The figure that launched 1,000 Dissertations (h/t Pat Kline)



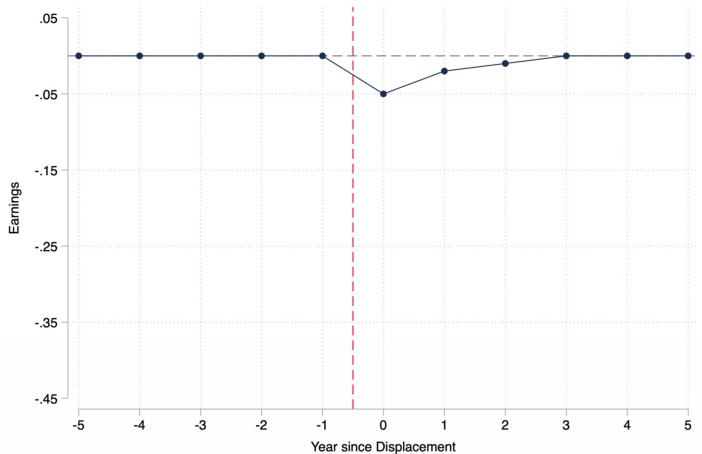
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- Earnings trajectories of displaced workers are indicative of how well a labor market is functioning

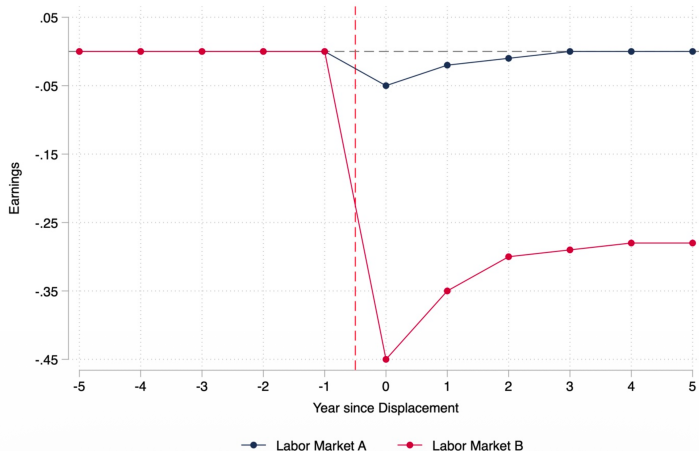
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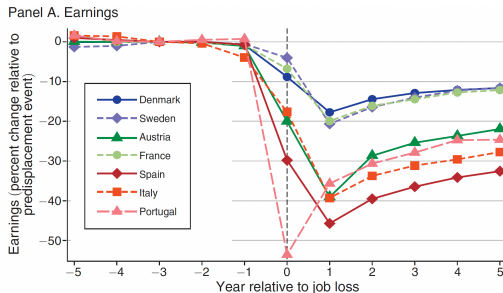
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- Compare how *firm-level shocks* propagate to workers' earnings across countries
 - Follow *all* workers at shocked firms — leavers *and* stayers — not just the displaced.
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- $\phi \rightarrow$ how shielded are workers' earnings from firm shocks in Italy vs. Sweden?

Beaudry-Di Nardo (1991); Guiso-Pistaferri-Schivardi (2005); Balke and Lamadon (2022); Friedrich-Laun-Meghir-Pistaferri (2026);

Bhuller-Delgado-Prieto-Hermo-Lorentzen (2026)

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 2. By letting displaced workers find equivalent jobs $\rightarrow \phi_{\text{displaced}} \approx 0$

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- Oaxaca Decomposition of Differences in ϕ across countries.

Ingredients

Table 1: Characteristics of Data Sources by Country

Characteristic	Denmark	France	Italy	Portugal	Sweden	Hungary	Canada
<i>Time span and population</i>							
Year coverage	2001–19	2002–19	2005–19	2003–19	2000–18	2003–17	2001–19
All jobs per year	Yes	Yes	Yes	No	Yes	No	Yes
Private sector jobs (%)	100	10	50	100	100	50	100
Public sector jobs	Yes	Yes	No	No	Yes	Yes	Yes
<i>Employee Information</i>							
Earnings	Total	Total	Total	Total	Total	Total	Total
Wage	Hourly	Hourly	Daily	Hourly	Daily	Hourly	N/A
Hours worked	Yes	Yes	No	Yes	No	Yes	No
Temp contract	No	Yes	Yes	Yes	No	Yes	No
Occupation (3-digit)	Yes	Yes	No	Yes	Yes	Yes	No
<i>Employer Information</i>							
Sales	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Value-added	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Export and Import	Yes	Yes	Yes	Yes	Yes	No	Yes
Region (2-digit)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry (2-digit)	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Research design

Selection details

Cutoff

- Identify firms whose sales drop suddenly at t^* after a period of stability
 - Shock: sales drop by $\geq 10\%$ between $t^* - 1$ and t^*
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- Compare outcomes of workers whose employer is experiencing a shock to matched control workers employed by a firm not experiencing a shock, before/after t^* .
 - Matching on: treatment year, sex, 1-digit industry, discretized age, tenure, firm size bins and *caliper matching* (20% width): earnings and firm-sales in $t^* - 2$ and $t^* - 3$.

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- For each country, estimate:

$$y_{it} = \alpha_i + \lambda_t + \sum_{k=-5}^5 \gamma_k \mathbf{1}\{t = t_i^* + k\} + \sum_{k=-5}^5 \theta_k \mathbf{1}\{t = t_i^* + k\} \times \text{Treated}_i + X'_{it} \beta + r_{it}$$

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- Extension: look at what happens to positive shocks!

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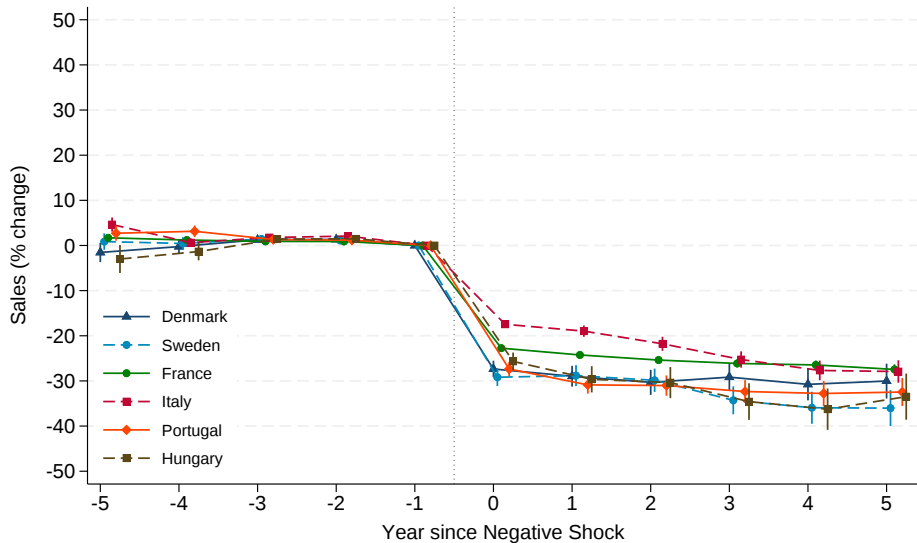
Summary Statistics

		Earnings	Age	Tenure	Male	Sales	Firm size	Manuf.	Serv.	N yrs	N Workers	N Firms
Denmark	Treated	51,976 (21,525)	38.8 (9.1)	6.5 (5.8)	64.9 (47.7)	19,720 (23,916)	84.1 (99.2)	39.5	55.6	11	53,006	2,293
	Control	51,905 (21,794)	38.8 (9.2)	6.4 (5.6)	64.9 (47.7)	19,893 (24,934)	88.1 (112.8)	39.5	55.6	11	53,006	6,919
France	Treated	29,418 (17,165)	37.5 (9.7)	5.0 (4.9)	66.3 (47.3)	20,409 (27,652)	102.4 (162.4)	35.3	56.5	12	123,502	22,765
	Control	29,227 (17,112)	37.5 (9.7)	5.0 (4.9)	66.3 (47.3)	25,448 (30,684)	128.6 (176.6)	35.3	56.5	12	123,502	61,279
Hungary	Treated	6,924 (4,172)	39.5 (9.3)	4.4 (2.3)	59.8 (49.0)	7,494 (10,138)	103.0 (129.5)	42.1	42.9	9	26,392	2,229
	Control	7,010 (4,442)	39.5 (9.4)	4.4 (2.3)	59.8 (49.0)	7,302 (9,983)	106.7 (143.2)	42.1	42.7	9	26,392	4,370
Italy	Treated	30,462 (15,136)	40.6 (8.1)	5.0 (2.5)	72.9 (44.4)	32,822 (34,670)	134.4 (179.3)	69.9	26.0	9	149,756	3,430
	Control	30,791 (15,072)	40.6 (8.1)	5.0 (2.4)	72.9 (44.4)	35,730 (35,126)	142.1 (162.6)	69.9	26.0	9	149,756	9,241
Portugal	Treated	14,364 (11,098)	37.5 (9.1)	10.8 (8.7)	56.1 (49.6)	9,563 (12,777)	83.9 (104.4)	55.9	40.4	11	86,229	3,978
	Control	14,510 (10,485)	37.5 (9.1)	10.3 (8.3)	56.1 (49.6)	10,304 (13,441)	85.6 (88.4)	55.9	40.4	11	86,229	11,024
Sweden	Treated	34,253 (13,732)	38.7 (9.3)	7.9 (6.1)	70.9 (45.4)	20,466 (25,416)	86.3 (102.8)	43.4	52.4	11	87,960	2,508
	Control	34,287 (13,784)	38.7 (9.3)	7.9 (6.1)	70.9 (45.4)	20,128 (25,160)	81.2 (93.2)	43.4	52.4	11	87,960	11,245

Notes: The table reports mean and standard deviation (in parentheses) by country and treatment status, measured at the end of $t - 1$. Earnings are annual earnings (EUR). Sales are firm sales (thousands of EUR). All earnings and sales are expressed in real 2020 euros. Firm size corresponds to the number of employees.

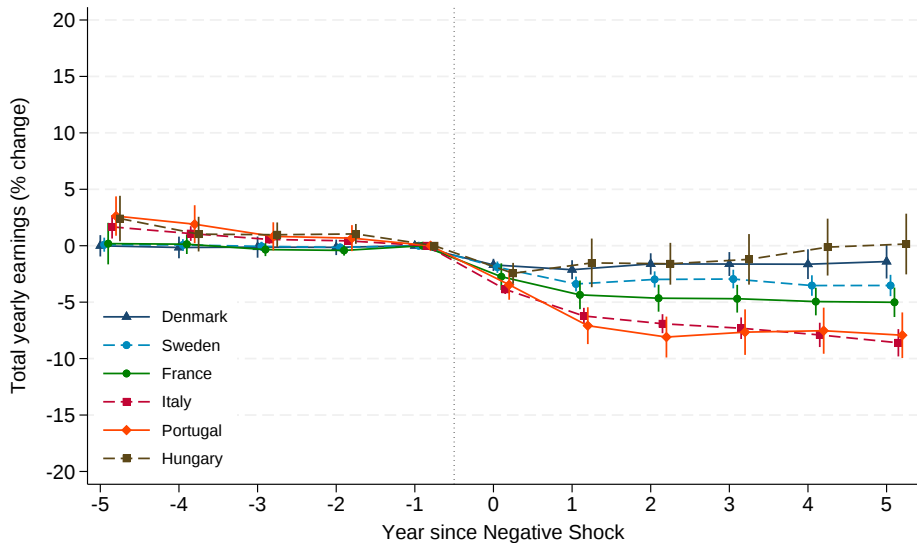
First Stages

Sales averages



ITTs

Averages

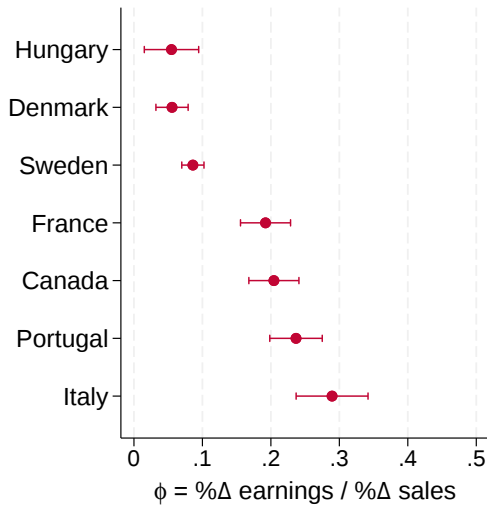


Earnings Insurance across Countries

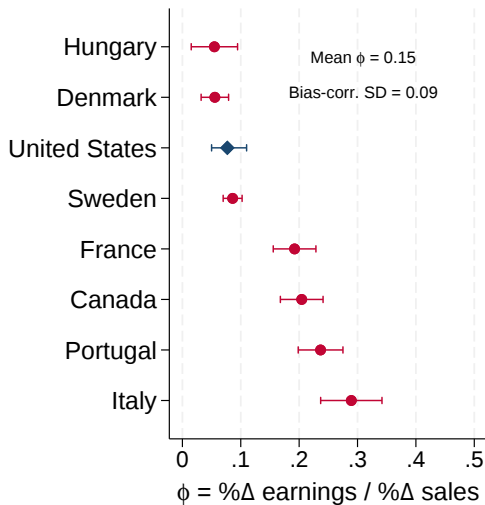
Why is ϕ so low in Hungary?



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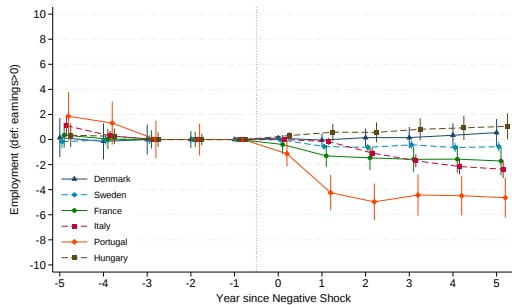


Note: The U.S. estimate is based on our own calculations based on Figure 7, panel (a) in Wang and Young (2026).

How do Markets Insure?

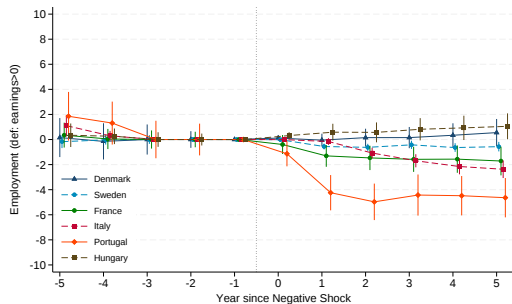
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Employment

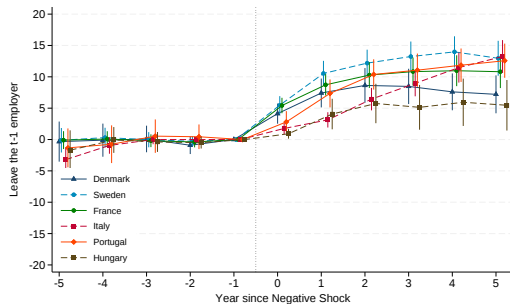


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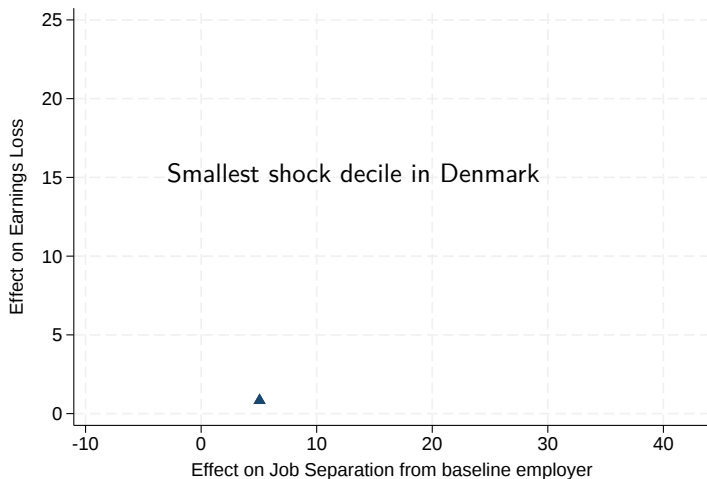


Separations



Do separations explain earnings losses?

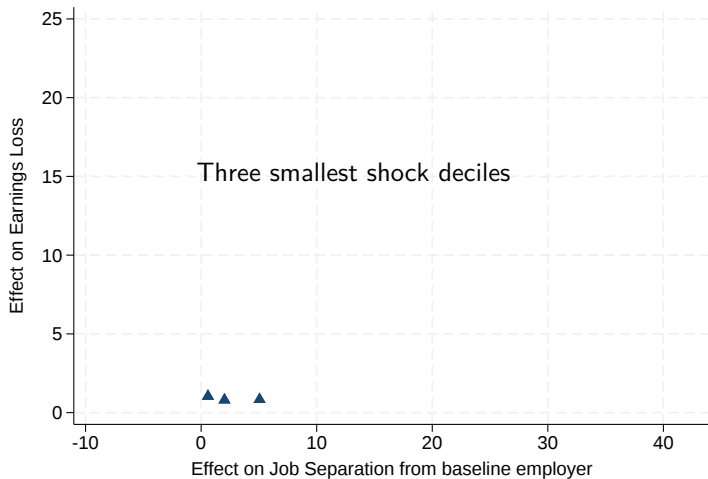
Employment



Horizon: three years after the shock.

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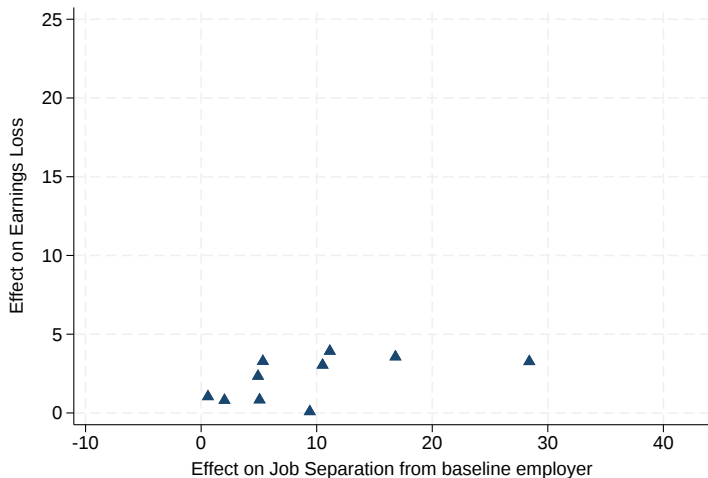
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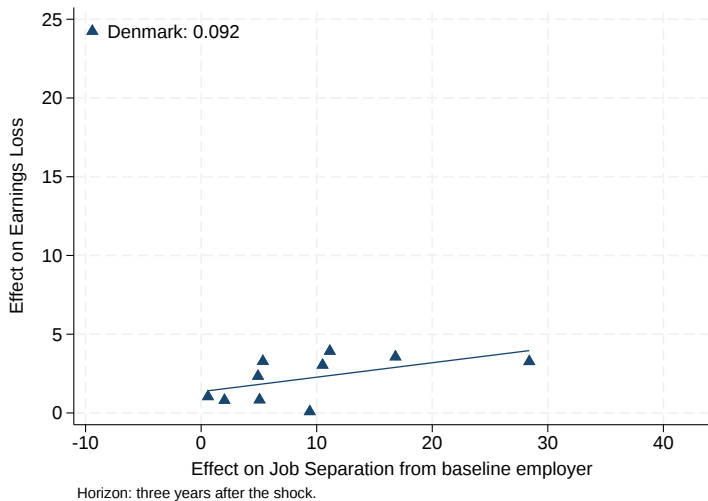
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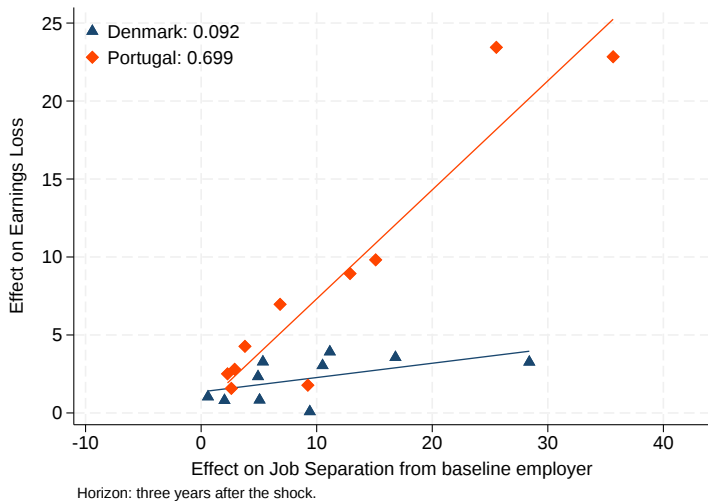
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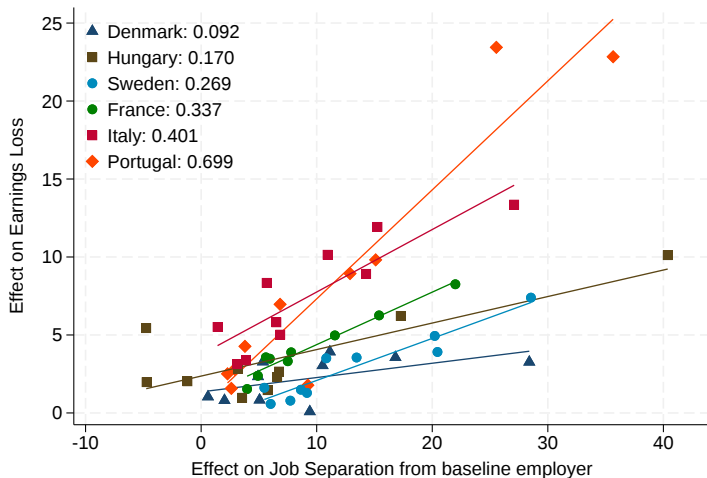
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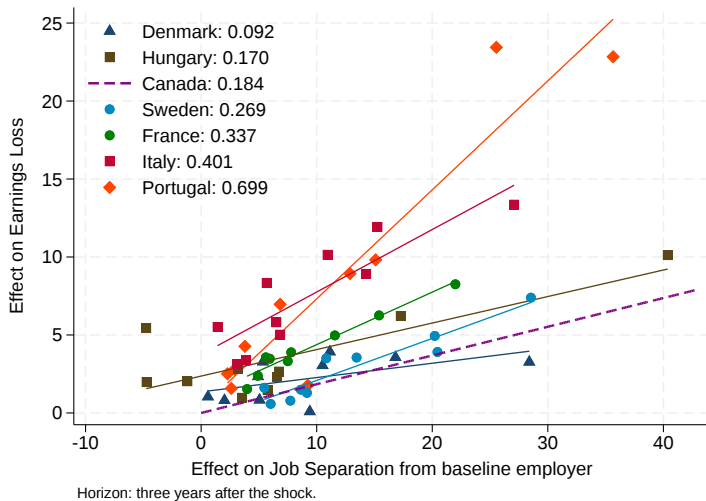
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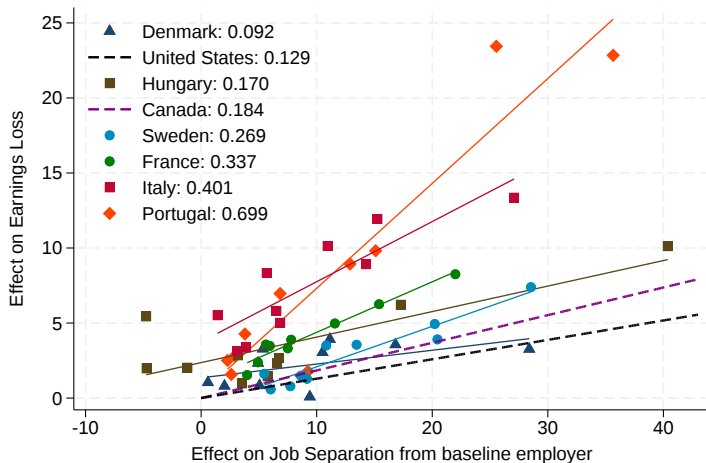
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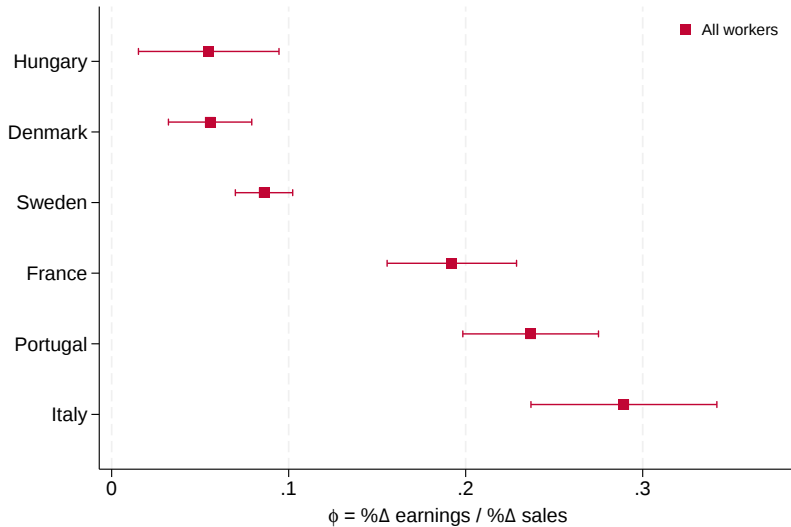
U.S. slope from Rose and Shem-Tov, Figure 3.

What about stayers?

Stayers descriptives

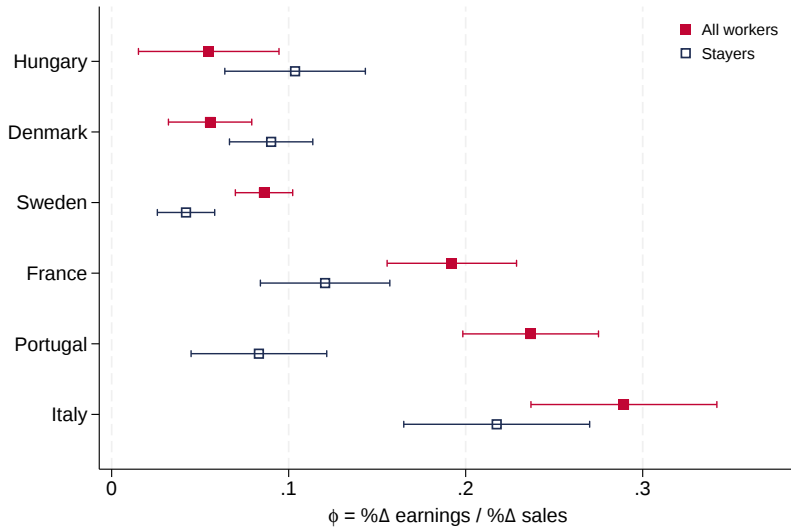
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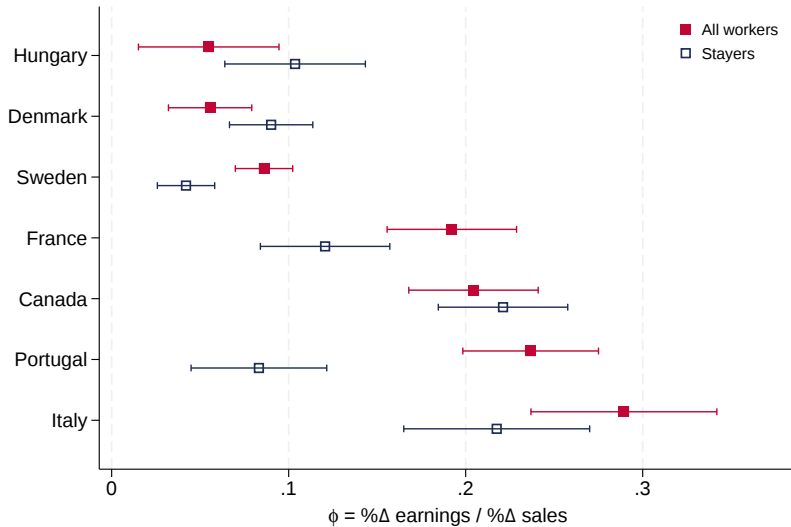
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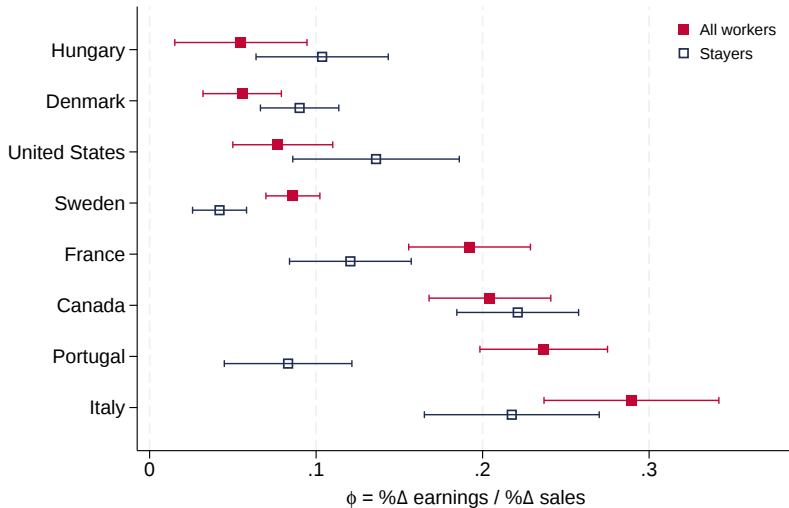
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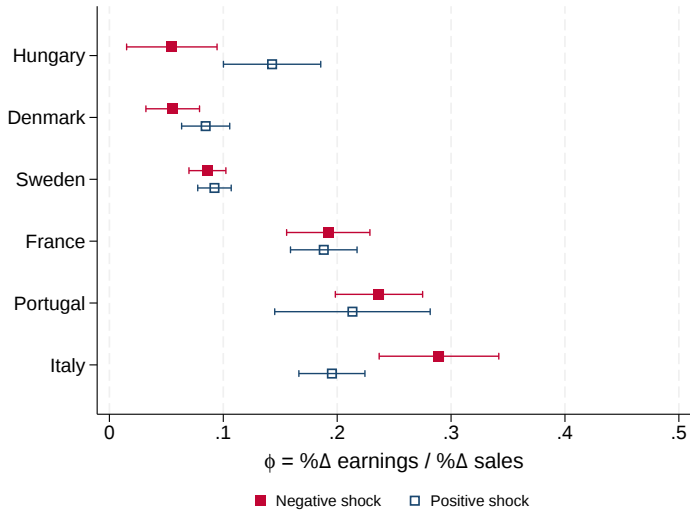
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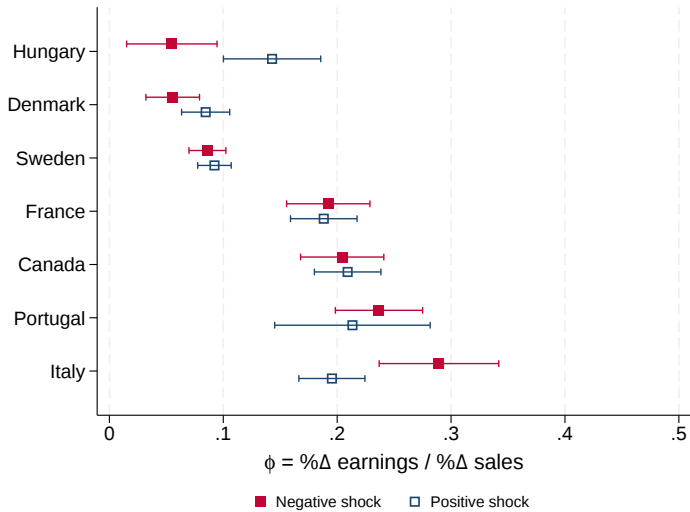
U.S. from Wang and Young (2026), Fig. 7A (all workers) and 7C (stayers).

Is ϕ symmetric?

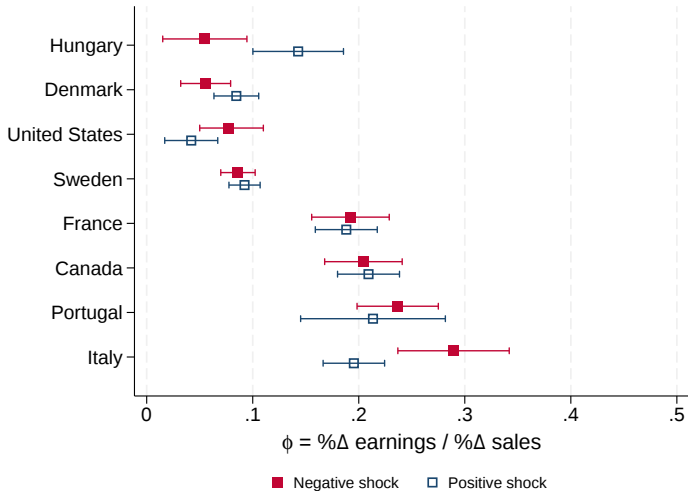
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- Maybe elasticities are different because firm-level shocks are fundamentally different across countries?
 - Analyze Export-Driven shocks during Great Recession. Garin-Silvério (2024)

Conclusions

Is Europe in Economic Decline?

Interrogating the conventional wisdom that Europe is lagging America



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Paul Krugman, iPhones, and the walking around test



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Noahpinion

Yes, Europeans are poorer than Americans

Comfortable, leisurely, pleasant stagnation is just not good enough for the modern age.



NOAH SMITH

MAY 15, 2026

Conclusions

Is Europe in Economic Decline?

Interrogating the conventional wisdom that Europe is lagging America



PAUL KRUGMAN
MAY 10, 2026 · PAID

European stagnation is real

Paul Krugman, iPhones, and the walking around test



PIETER GARICANO AND LUIS GARICANO
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Noahpinion

Yes, Europeans are poorer than Americans

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“If you want to work 80 hour weeks building the future of AI, you should probably live in the U.S. If you want government health insurance and **job security**, I recommend Europe.”

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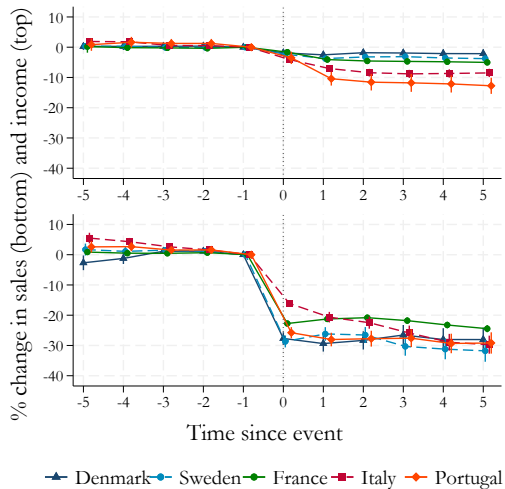
Thank you.

Cross-country earnings-insurance gaps vs. Sweden [Back](#)

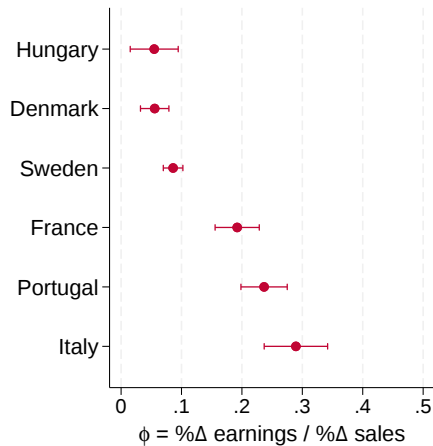
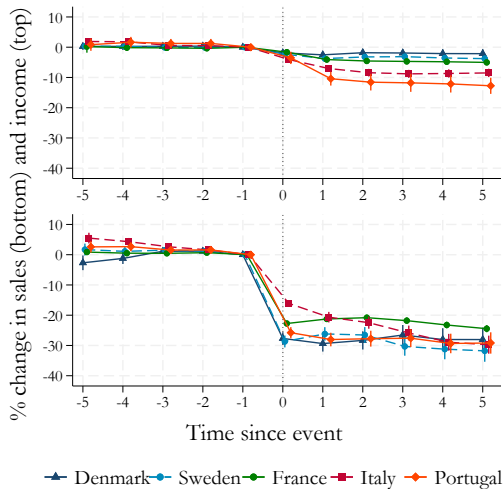
Country	Gap vs. Sweden	Gap unexplained by ΔX				
		(1)	(2)	(3)	(4)	(5)
Denmark	1.34	1.26	1.99	1.26	2.59	3.31
France	-2.04	-1.22	-1.82	-1.20	-1.19	-1.79
Hungary	1.03	1.08	0.49	1.12	0.98	0.47
Portugal	-4.66	-4.02	-5.63	-4.07	-4.12	-5.70

Notes: Oaxaca–Blinder decomposition, negative sales shock, earnings measured at $t^* + 3$. *Gap vs. Sweden* = the country's average total-earnings %-loss minus Sweden's (percentage points; negative = larger loss than Sweden). *Gap unexplained by ΔX* = the part of that gap *not* accounted for by cross-country differences in observables (age, tenure, sex, industry, firm size, sales-shock size, closure rate, firm-productivity quintile, and—where indicated—local unemployment), priced at Sweden's coefficients. Columns: (1) within-country productivity quintiles; (2) + unemployment level; (3) + unemployment change; (4) between-country PPP-comparable productivity quintiles; (5) + unemployment level. Sweden is a single 2005–2015 regression; Italy omitted (no data). Across all specifications the unexplained part is close to the full gap, i.e. observables account for little of the cross-country differences.

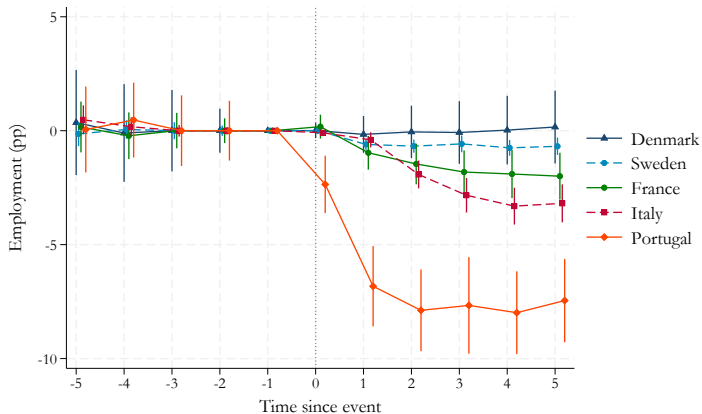
Elasticity of income to sales



Elasticity of income to sales



North–South divide in employment effects



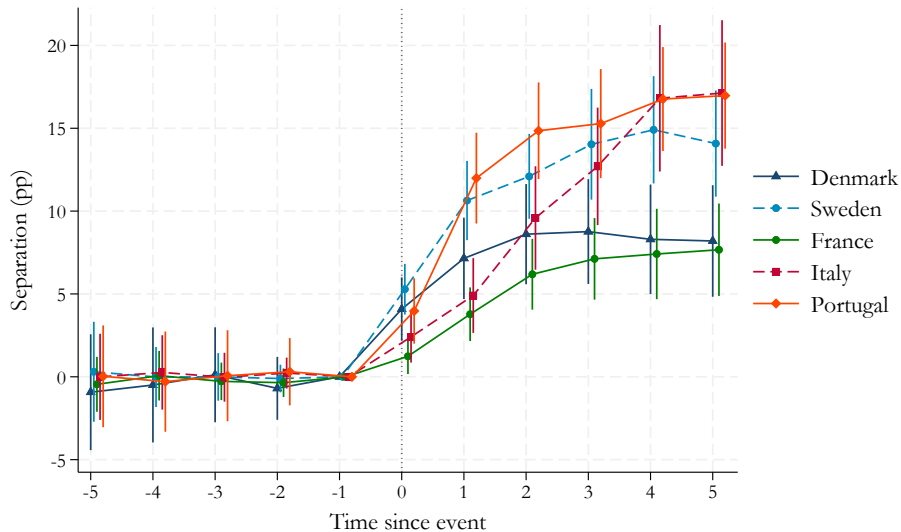
- Currently analyzing intensive margin (months and hours worked) and wages
- Will do sharp bounds on wage effects to account for selective re-employment

Stayers analysis

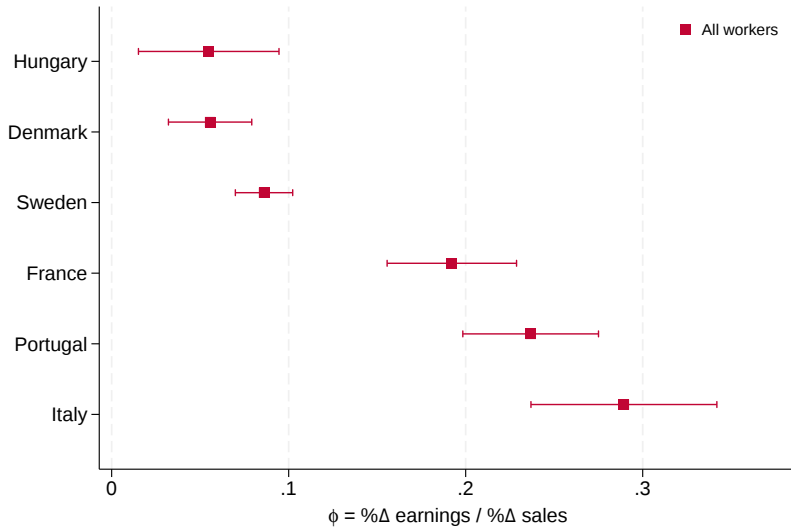
Role of reallocation in explaining differences in cross-country earnings losses:

- Separations
- Stayers vs. all workers
- Relationship between earnings losses and separation margin

No clear North–South divide in separations

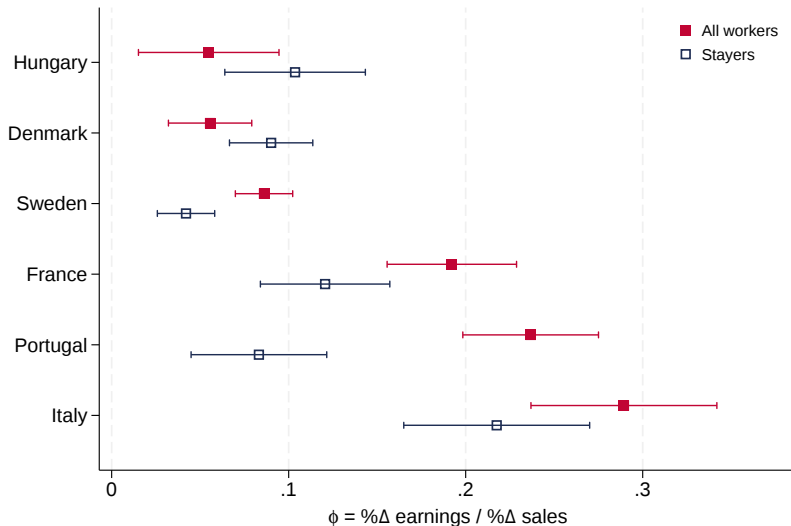


Pass-through ϕ at $t = 3$: all workers



Pass-through ϕ at $t = 3$: all workers and stayers

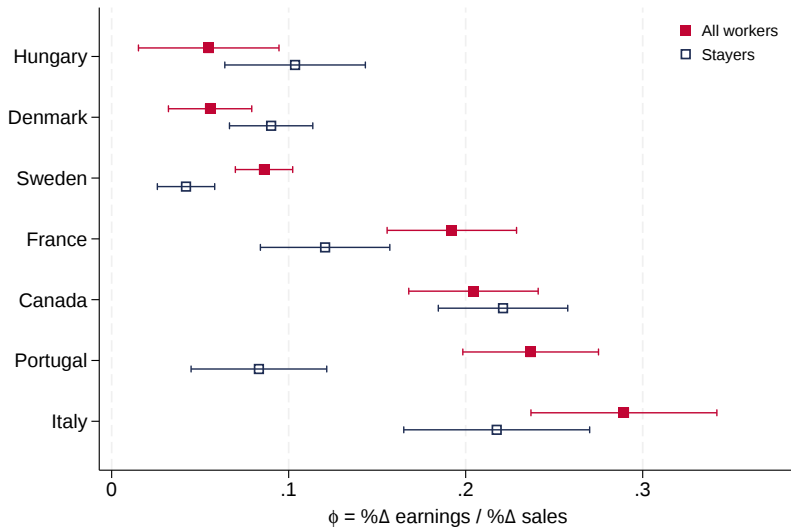
Stayers descriptives

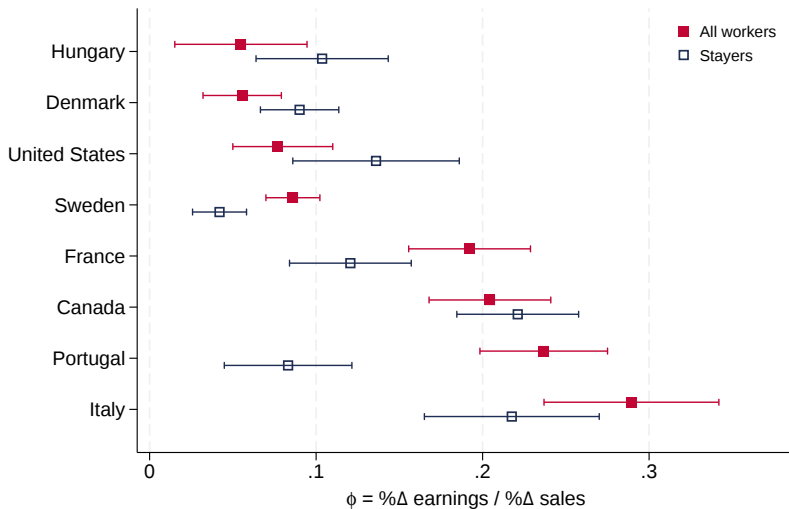


- Stayers face much lower pass-through (especially in the South): leavers drive the

Pass-through ϕ at $t = 3$: all workers and stayers

Stayers descriptives





U.S. from Wang and Young (2026), Fig. 7A (all workers) and 7C (stayers).

Do separations explain earnings losses?

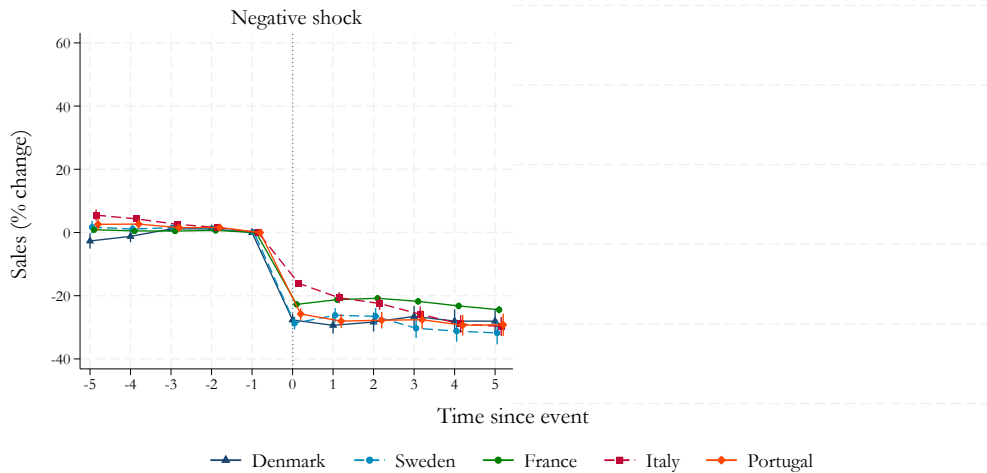
- In each country, bin firm shocks into 10 categories of severity (shock size deciles)
 - For each bin, plot:
 - x-axis: shock effect on separations
 - y-axis: earnings losses due to the shock
 - How do shocks translate into earnings losses? (Rose and Shem-Tov, 2026)
 1. If earnings losses occur mainly due to separations, the points lie on a line through 0
 2. Deviations from this suggest additional channels: Δ wages and/or hours of stayers
 3. Flatter slope $\rightarrow$ smaller earnings losses per separation (faster/better reallocation)
- Test for exclusion restriction of Shock $\rightarrow$ Separation $\rightarrow$ Outcome (x-axis: FS, y-axis: RF)

Balance Table, positive shocks

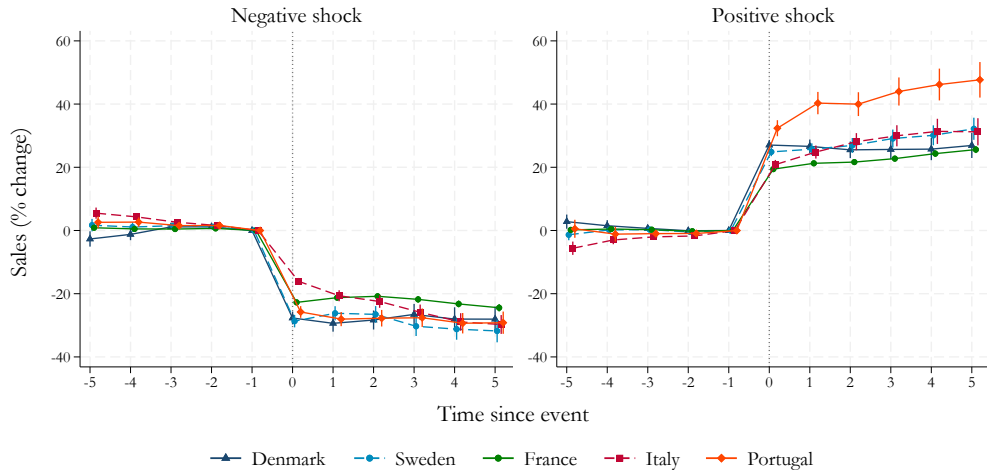
		Earnings	Age	Tenure	Male	Sales	Firm size	Manu.	Serv.	N yrs	N Workers	N Firms
Denmark	Treated	53,127 (21,124)	39.0 (8.7)	6.8 (5.6)	68.6 (46.4)	32,085 (28,047)	155.0 (151.5)	49.7	45.7	9	45,201	2,034
	Control	52,562 (20,707)	39.0 (8.7)	6.9 (5.6)	68.6 (46.4)	33,048 (30,354)	154.8 (142.6)	49.7	45.7	9	45,201	5,144
France	Treated	28,973 (17,194)	37.4 (9.6)	5.0 (4.7)	65.0 (47.7)	31,997 (30,507)	193.6 (244.3)	33.5	57.8	8	78,375	14,262
	Control	28,673 (15,931)	37.4 (9.6)	5.1 (4.9)	65.0 (47.7)	32,713 (32,536)	195.3 (247.4)	33.4	57.9	8	78,375	40,437
Italy	Treated	30,494 (14,892)	40.5 (7.9)	5.8 (2.3)	71.6 (45.1)	42,219 (28,986)	233.0 (267.3)	74.0	24.9	5	71,115	1,123
	Control	30,241 (14,695)	40.5 (8.0)	5.9 (2.3)	71.6 (45.1)	42,142 (29,487)	234.4 (264.7)	73.0	25.9	5	71,115	4,223
Portugal	Treated	14,015 (12,844)	36.4 (9.0)	9.0 (8.2)	55.7 (49.7)	16,077 (15,931)	235.0 (328.2)	26.9	72.7	6	64,348	1,655
	Control	14,069 (13,945)	36.5 (9.0)	9.2 (8.4)	55.7 (49.7)	16,556 (17,088)	232.6 (326.6)	26.9	72.8	6	64,348	6,979
Sweden	Treated	33,081 (13,319)	38.4 (9.3)	7.2 (5.6)	69.2 (46.2)	35,849 (35,092)	197.6 (264.9)	41.3	54.7	9	88,044	3,046
	Control	32,889 (13,388)	38.4 (9.3)	7.2 (5.6)	69.2 (46.2)	36,948 (37,794)	194.8 (262.6)	41.4	54.6	9	88,044	8,825

Notes: The table reports mean and standard deviation (in parentheses) by country and treatment status, measured at the end of $t - 1$. Earnings are annual earnings (EUR). Sales are firm sales (thousands of EUR). Firm size corresponds to the number of employees.

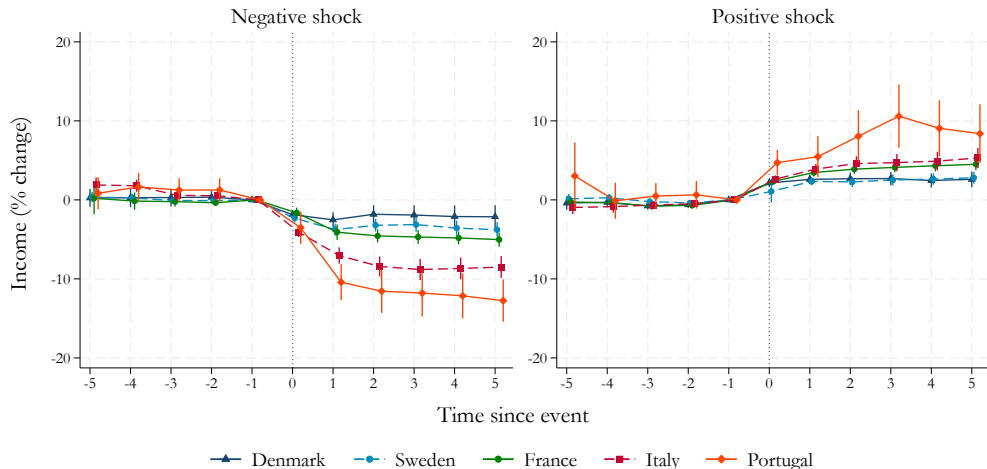
Negative sales shock ...



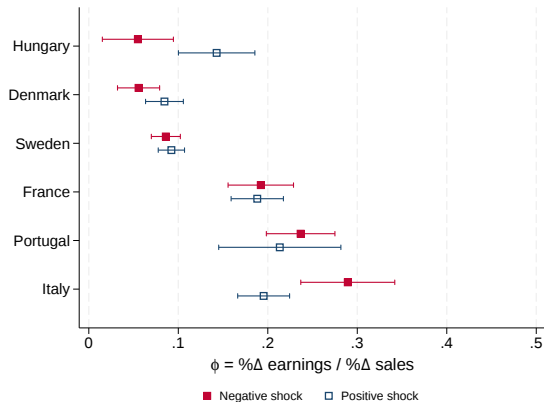
Negative and positive sales shocks



Earnings $\% \Delta$: smaller heterogeneity with positive shocks Averages

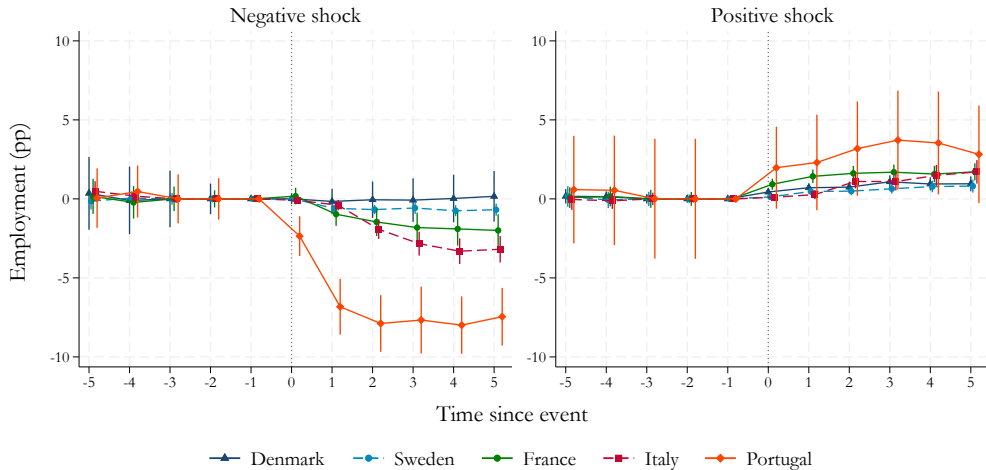


Income elasticity to sales

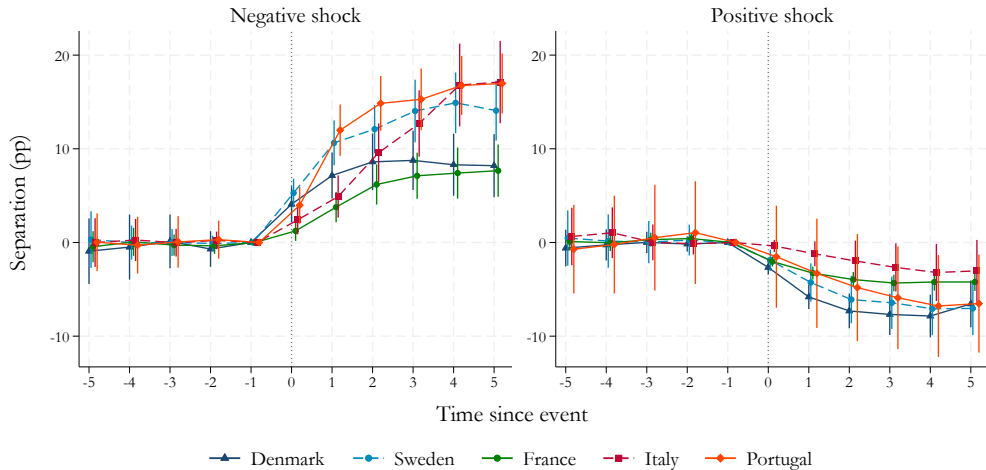


- Southern workers benefit less from positive shocks
- Striking symmetry in other countries

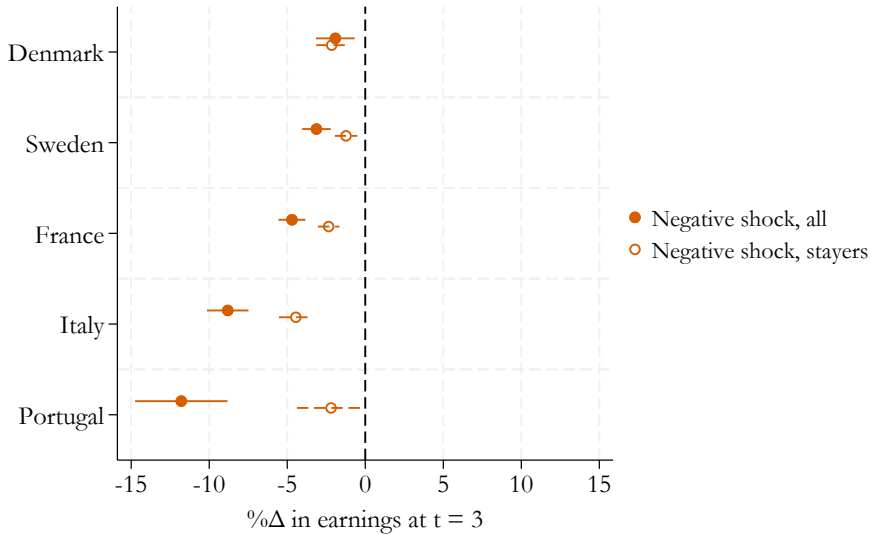
Employment change (pp), negative and positive shocks



Separations change (pp), negative and positive shocks

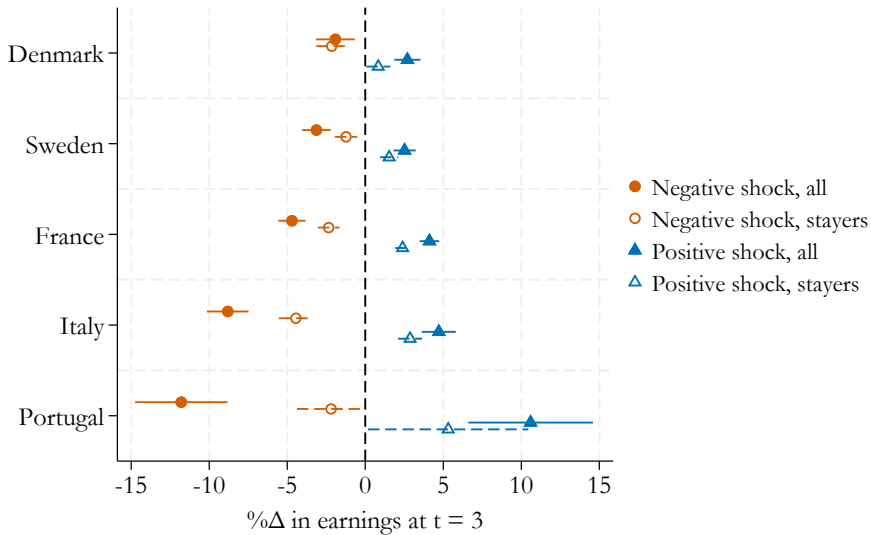


Earnings losses in $t = 3$: negative shock

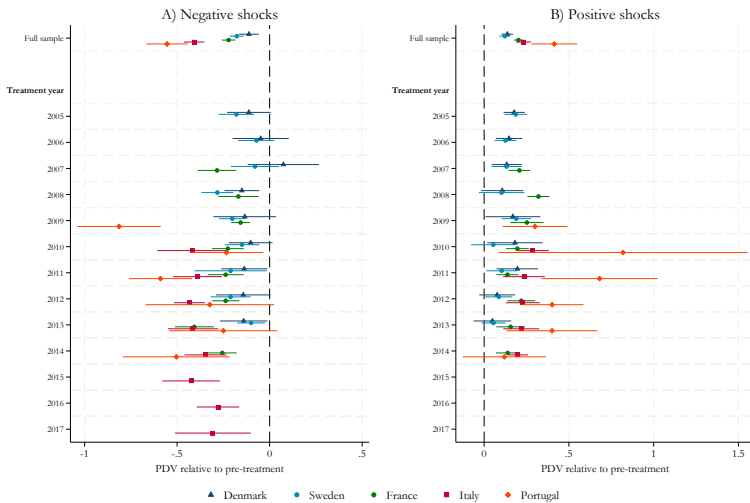


Earnings losses in $t = 3$: negative and positive shocks

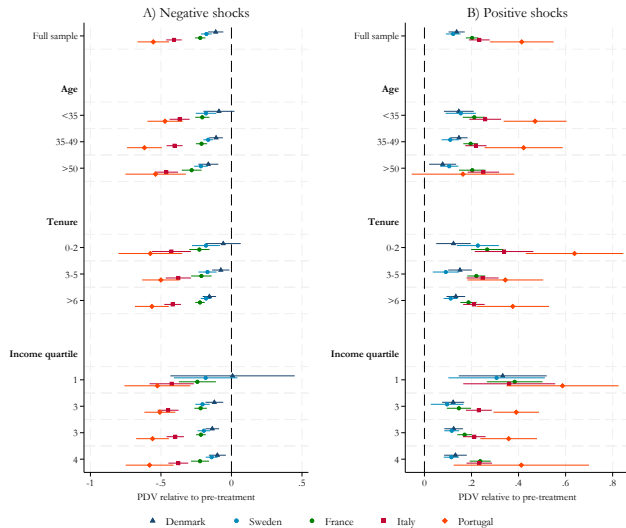
Stayers descriptives



Heterogeneity over time PDV



Lack of worker heterogeneity



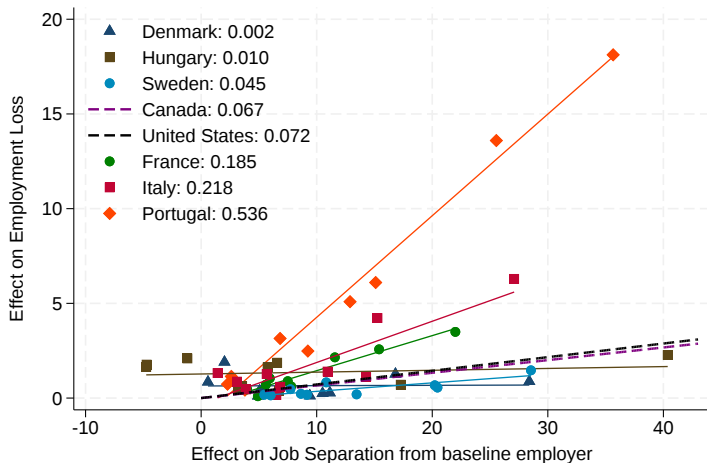
Conclusions

1. Larger pass-through in South compared to North Europe. France in the middle.
 - Cross-country heterogeneity in line with Bertheau et al. (2023)
2. Symmetric pass-through. Less so in Hungary and Italy (due to movers).
3. Reallocation seems to be important in explaining the North–South disparities
 - separations occur everywhere, but are more often followed by good economic opportunities in the North
4. Surprisingly, no notable worker heterogeneity

Way ahead

1. Do compositional differences explain differential elasticities? Cross-country Oaxaca
2. Positive shocks
 - Test for equality of pos. vs. neg. elasticities
 - Understanding rent sharing for positive shocks (stayers vs newcomers)
3. Shock definition:
 - Idiosyncratic vs. market-level shocks: exports data (Garin-Silvério, 2024)
 - Variation over the business cycle
 - Temporary vs. permanent shocks
4. Institutions:
 - Effects on (and by) temporary contract and full-time employment
 - Correlate year-country income losses with indicators (e.g. ALMP spending) Institutions

Separations → Employment Loss across countries

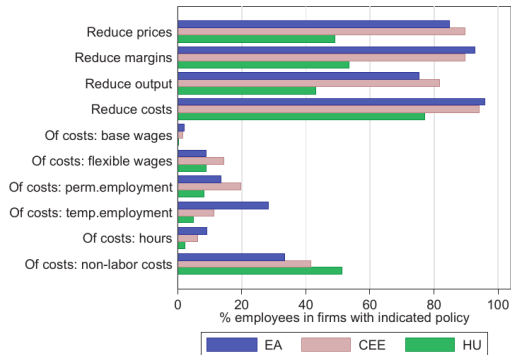
[Back](#)

Horizon: three years after the shock.

U.S. slope from Rose and Shem-Tov, Figure 3.

Why is ϕ so low in Hungary? [Back](#)

Figure 17: Adjustment to a demand shock



Survey evidence: Hungarian firms absorb adverse shocks off the labor margin.

- Hit by a demand shock, Hungarian firms (HU) mostly cut *non-labor costs* (i.e. investment/capital), not labor
- Adjusting *temporary employment* is common in the Euro Area but *not* in CEE → muted separation margin
- “Firms are reluctant to cut labor-related costs. . . employers provide insurance to their workers”

Kézdi & Kónya (2011), ECB WP 1378; see also Kátay (2008/2016).

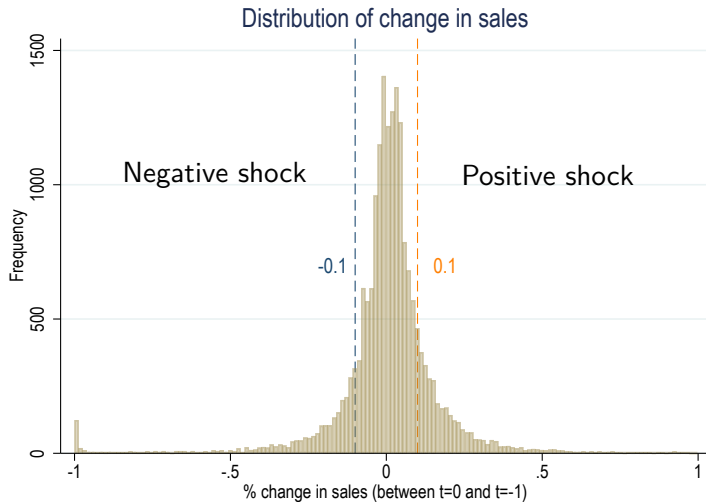
Firm selection

- Shock (treatment): sales drop by $\geq 10\%$ between $t^* - 1$ and t^*
- Stability: positive sales in $t^* - 1$, $t^* - 2$, and within 10% of $t^* - 3$
- Firms: ≥ 30 employees in $t^* - 1$; can enter with multiple t^* ; firm closures captured; drop mergers ($>30\%$ of workers co-moving)

Worker selection

- Restrictions in $t^* - 1$: private-sector employees; positive earnings; age 20–54
- Treated: employed in $t^* - 1$ at a firm hit by a shock in t^* (keep first treatment)
- Controls: stable firms, never shocked in t^* or later; matched 1:1 without replacement
 - *exactly* on: treatment year, sex, 1-digit industry, discretized age, tenure, firm size
 - *caliper* (20% width) on: earnings and sales in $t^* - 2$ and $t^* - 3$

Finding firm-level shocks: cutoff

[Back](#)

Industry Grouping

Exact matching within following groups:

- Manufacturing and electricity, gas, steam, air conditioning supply
- Water supply, sewerage, waste management
- Construction
- Wholesale and retail trade
- Transportation and storage
- Accommodation and food services
- Information and communication
- Financial and insurance
- Real estate
- Professional, scientific, technical activities
- Public administration and defence
- Education, health, social work, arts, entertainment, other service

Who are the stayers? Negative shocks [Back](#)

	Status	Earnings	Age	Tenure	Male	Sales	Firm size
DK	Leavers	49,039 (22,148)	37.1 (9.4)	5.2 (4.8)	62.7	20,545 (25,220)	91.5 (115.5)
DK	Stayers	55,857 (20,337)	41.1 (8.2)	8.1 (6.3)	67.8	22,600 (26,580)	93.4 (115.3)
FRA	Leavers	26,217 (17,877)	35.3 (9.9)	3.9 (4.2)	63.9	24,542 (30,694)	129.3 (188.6)
FRA	Stayers	33,162 (15,334)	40.3 (8.7)	6.4 (5.4)	69.3	27,486 (31,780)	135.7 (185.9)
HUN	Leavers	6,396 (4,085)	38.4 (10.0)	3.9 (2.1)	54.5	7,831 (10,444)	114.1 (149.4)
HUN	Stayers	7,544 (4,452)	40.6 (8.5)	4.9 (2.3)	65.0	7,750 (10,256)	113.1 (150.2)
ITA	Leavers	29,022 (16,362)	40.5 (8.7)	4.6 (2.4)	69.7	36,297 (35,470)	148.7 (172.8)
ITA	Stayers	31,386 (14,410)	40.7 (7.8)	5.2 (2.5)	74.5	35,605 (35,166)	142.1 (169.5)
PRT	Leavers	13,510 (13,132)	36.2 (9.4)	8.9 (8.5)	53.6	10,372 (13,561)	88.5 (97.6)
PRT	Stayers	15,610 (10,363)	38.9 (8.4)	12.5 (8.2)	59.0	11,036 (13,929)	89.8 (98.4)
SWE	Leavers	32,709 (14,812)	36.7 (9.5)	6.3 (5.3)	67.5	21,286 (26,560)	87.7 (102.1)
SWE	Stayers	35,800 (12,452)	40.8 (8.6)	9.5 (6.4)	74.2	21,758 (26,585)	86.8 (101.6)

Notes: Means with standard deviations in parentheses, for treated workers split by whether they leave (Leavers) or stay (Stayers) with the $t - 1$ employer through $t + 5$, measured at the end of $t - 1$. Earnings are annual; Sales are firm sales in thousands; both in real 2020 euros. Firm size is the employment-weighted number of employees. Male is the percent male.

Who are the stayers? Positive shocks [Back](#)

	Status	Earnings	Age	Tenure	Male	Sales	Firm size
SWE	Leavers	31,487 (14,520)	36.3 (9.4)	5.7 (4.9)	65.8	35,524 (37,220)	213.7 (312.8)
SWE	Stayers	34,377 (12,006)	40.3 (8.7)	8.5 (5.9)	72.4	37,211 (35,745)	179.9 (206.8)
PRT	Leavers	13,029 (15,248)	34.8 (9.1)	6.8 (7.7)	53.4	17,034 (17,818)	286.7 (394.5)
PRT	Stayers	15,132 (10,985)	38.2 (8.5)	11.5 (8.2)	58.2	15,545 (14,964)	177.0 (221.1)
FRA	Leavers	25,529 (18,002)	34.9 (9.8)	3.8 (4.1)	62.6	30,198 (30,878)	197.0 (267.0)
FRA	Stayers	32,124 (14,266)	39.9 (8.6)	6.3 (5.2)	67.4	34,516 (32,045)	192.0 (222.7)
DK	Leavers	50,666 (21,800)	37.5 (9.0)	5.7 (4.9)	67.5	31,606 (28,685)	155.7 (143.6)
DK	Stayers	55,620 (19,387)	41.0 (8.0)	8.4 (6.1)	69.9	33,791 (29,858)	153.9 (151.5)
ITA	Leavers	28,593 (16,309)	39.9 (8.7)	5.1 (2.4)	69.3	42,939 (29,876)	284.0 (339.7)
ITA	Stayers	30,983 (14,179)	40.7 (7.7)	6.1 (2.2)	72.3	41,917 (29,009)	216.3 (232.6)

Notes: Means with standard deviations in parentheses. Earnings in euros. Sales in thousands of euros.

Present discounted value (PDV) [Back](#)

We use $t - 1$ as reference point in our DiD regressions. Then, PDV (earnings as outcome) is

$$PDV_{lev} = \frac{\beta_t}{1.03} + \frac{\beta_{t+1}}{1.03^2} + \frac{\beta_{t+2}}{1.03^3} + \frac{\beta_{t+3}}{1.03^4} + \frac{\beta_{t+4}}{1.03^5} + \frac{\beta_{t+5}}{1.03^6}$$

and we use delta method to get CI_{lv}^{lower} and CI_{lv}^{upper} .

To get a relative (%) estimate we do then

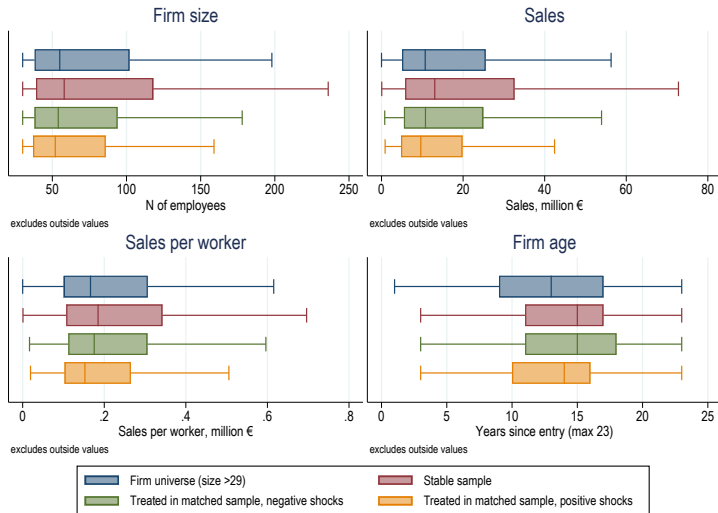
$$PDV_{rel} = \frac{PDV}{ME_{t-1}}$$

and

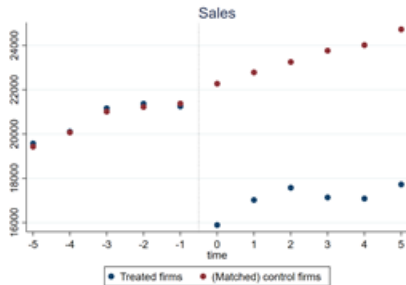
$$CI_{rel}^i = \frac{CI_{lev}^i}{ME_{t-1}} \forall i \in \{lower, upper\}$$

where ME_{t-1} is the mean earnings at $t - 1$ in the estimation sample.

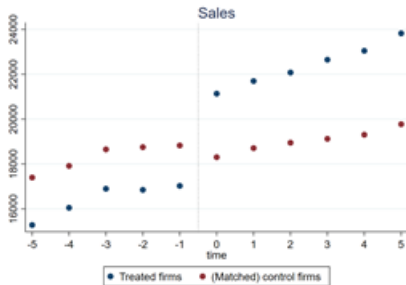
Firm Sample Comparisons in SWE

[Back to sales results](#)

Sales averages [Back](#)



Negative shocks in Sweden



Positive shocks in Sweden

It looks fairly similar across countries.

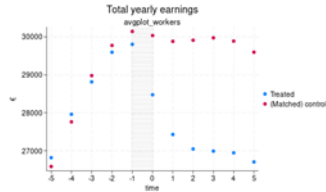
Group averages in earnings, negative shocks [Back](#)



Denmark



Sweden



Italy

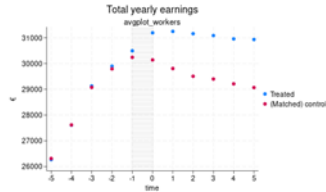
Group averages in earnings, positive shocks [Back](#)



Denmark



Sweden



Italy

Do compositional differences explain cross-country income differences?

- Compute displaced worker i 's earnings loss relative to her "twin" comparison j :

$$\Delta_{did}^c y_{it^*} \equiv (y_{i,t^*+3} - y_{i,t^*-3}) - (y_{j,t^*+3} - y_{j,t^*-3}), \quad \forall (i, j) \text{ matched pair}$$

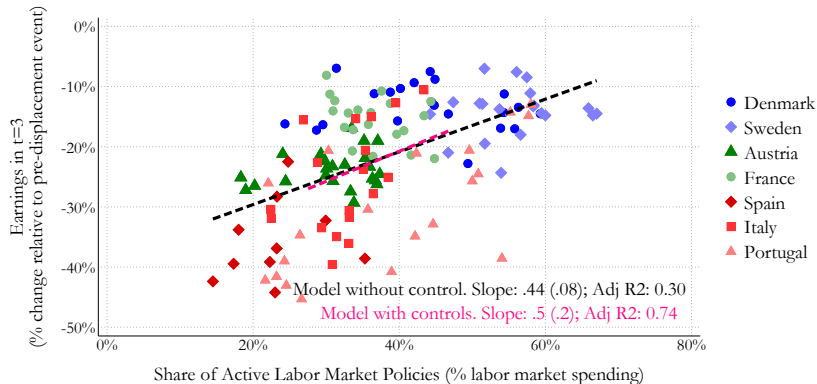
- For each country c , regress the individual-level income losses on observables X :

$$\Delta_{did}^c y_{it^*} = X_{cit^*} \beta_c + \varepsilon_{cit^*}$$

- Compute average income loss gap between country c and Sweden (reference), $\Delta^c \equiv E[\Delta_{did}^c y_{it^*}] - E[\Delta_{did}^{swe} y_{it^*}]$, and rearrange the RHS to get:

$$\Delta^c = \underbrace{\sum_{x \in X} (E[x^c] - E[x^{swe}]) \beta_x^c}_{\text{Composition}} + \underbrace{\sum_{x \in X} E[x^{swe}] (\beta_x^c - \beta_x^{swe})}_{\text{Unexplained}}$$

Correlation between income losses and ALMPs spending



Source: Bertheau et al. (2023)

- 10 pp incr. in spending on ALMPs is associated with a 5% decrease in earnings losses
- X's: country FEs, unemployment rate, GDP_{pc} , Gini ratio, firm size, workers' tenure and demographics