Winners and losers of the 2015 Swiss exchange rate shock: Unveiling heterogeneous worker responses

Patrick Arni[1], Peter Egger[2,6,7], Katharina Erhardt[3,6], Matthias Gubler[4], Philip Sauré [5,6,7]

[1]University of Bristol, [2]ETH Zurich, [3]DICE, University of Duesseldorf, [4]Swiss National Bank [5]JGU Mainz, [6]CESifo, [7]CEPR

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Motivation: Unequal welfare consequences of trade

- Trade integration affects domestic firms **unequally** through their **differential exposure** to three (first-order) effects of international integration:
    1. Competition in domestic market (import competition)
    2. Competition in foreign markets (export market access)
    3. Access to cheaper inputs (imported input access)

- Trade affects workers **unequally**:
    - Workers are employed at firms that are **differentially affected by trade**.
    - **Workers' responses** to a given trade shock are **heterogeneous**:
        - due to **costs of adjustment**. (Autor et al., 2014)
        - due to **cost of breaking-up** productive worker-firm relationships. (Card et al., 2013)

$\implies$ To understand the welfare consequences of trade, we have to

- take into account the full set of channels through which trade affects firms. (trade perspective)
- assess how workers respond heterogeneously to these various exposures. (labor perspective)

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This paper in a nutshell

Our project offers a **worker-level perspective** on the effects of a major trade shock that

... exploits an episode of an **unusually clean exogenous trade shock**:

On January 15, 2015 the Swiss National Bank (SNB) **unexpectedly** discontinued its minimum exchange rate policy $\rightarrow$ sharp appreciation.

... leverages particularly detailed data on **firm-level exposure** to the shock and **workers' employment trajectories** to understand the consequences of this shock **at various levels**.

- Preview of results:

  1. We document heterogeneous firm-level exposure within sectors leading to heterogeneous worker outcomes within sectors.
  2. Important heterogeneity across workers within firms suggests losses are mainly borne by the highest quartile of the within-firm wage distribution.
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Literature

In **international trade**, several studies document

- how trade shocks impact labor market outcomes.

  Autor, Dorn, Hanson (2013), Dauth, Findeisen, Suedekum (2016) Acemoglu et al. (2014),
  Caliendo et al (2019), Adao, Arkolakis, Esposito (2019, 2020), Galle, Rodriguez-Clare, Yi
  (2020), Borusyak, Hull, Jaravel (2021)

- and which labor market segments gain or lose under trade shocks.

  Autor, Dorn, Hanson, Song (2014), Dauth, Findeisen, Suedekum (2021), Dix-Carneiro,
  Kovak (2016), Malgouyres (2017), Utar (2018), Costa, Dhingra, Machin (2019), Colella
  (2021)

In **labor economics**, the literature studies

- the role of firm/workplace heterogeneity for individual earnings inequality.

  Abowd, Kramarz, Margolis (1999), Card et al. (2012, 2016, 2018)

- long-run outcomes of workers affected by adverse shocks.

  Gulyas and Pytka (2020), Schmieder, von Wachter, Heining (2022)

The exchange rate shock – Unusually sharp and clean

EURCHF exchange rate
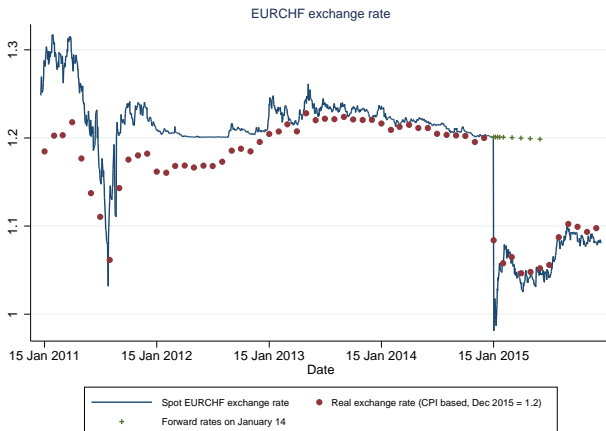
Source: Bonadio et al. 2019.

The exchange rate shock – New perspectives on the effects of trade integration on workers

- The Swiss exchange rate shock allows us to study a trade shock in a novel and understudied context:
  - Plausibly exogenous and strong.
  - No anticipation or gradual unfolding.
  - Shock (also) affects 'healthy' industries typically considered to be on the winning side of globalization.

- The nature of the shock and the granularity of the data allow us to understand the heterogeneous effects of the trade shock across firms **within industries**:
  - Measurement at the firm-level.
  - Shock helps us to identify 'treated' firms within industries through direction of shock and firm-level heterogeneity in treatment.

Context: Swiss labor market institutions

Unemployment Insurance

- Benefit duration: usually 400 work days
- Benefit level: 70% or 80% of insured earnings
- + Support: caseworker meetings, active labor market programs (job search assistance, short trainings, etc.)
- + Control: monthly job search obligations (# of applications), strict monitoring & sanctions
- ... after UI exhaustion: Social assistance (means-tested, 68% of benefits)

In-work Support

- Weak employment protection
  (OECD EPL indicator (2019) for collective & individual dismissals: 1.61 – vs OECD avg 2.27)
- No general national minimum wage
  (only a few sectoral ones, and recently few cantonal ones)
- Short maternity leave support (women 14 weeks, men 2 weeks)

Data

- **Firm-level trade data**:
  - Universe of imports and exports of Swiss firms from 2012–2017:
    - Quarterly data
    - Value and quantities by 2-digit product categories and country of origin/destination. ▸ Descriptives

- **Linked employer-employee data**:
  - Individual monthly employment trajectories from 2000–2018 with information on wages and worker characteristics:
    - Age, gender, education, residence status...
  - **Important**: Employers are known for workers who have at least one spell involving unemployment agencies in their employment history (also going backward).
  - Coverage of 1/3 of total labor force, fairly representative. ▸ Descriptives

Heterogeneous firm exposure to the exchange rate shock

1. **Import competition**: How vulnerable are firms in a sector s to increased competition from abroad? Negative treatment

$$ImportCompetition_s = log\left(\frac{1}{NoEmployees_{s,pre}}\sum_p \theta_{ps,pre}Imports_{p,pre}\right),$$

where $\theta_{ps,pre}$ denotes the share of Swiss exports sales of product p originating from sector s.

2. **Foreign market access**: How strongly does firm f depend on sales in export markets? Negative treatment

$$ExportMarketExposure_f = \frac{\overline{ExportValue}_{f,pre}}{\overline{WageSum}_{f,pre}},$$

3. **Imported input access**: How strongly does firm f rely on imported inputs? Positive treatment

$$ImportedInputExposure_f = \frac{\overline{ImportValue}_{f,pre}}{\overline{WageSum}_{f,pre}},$$

Note: All variables are measured as averages prior to the shock (2012–2014)!

From heterogeneous firm-level exposure to heterogeneous worker exposure

- We measure each worker i's exposure to the exchange rate shock by the exposure of the firm f^{2014} this worker is employed at in 12/2014.

    - Exposure measures are **time invariant**.
    - Exposure measures are **independent from potential employer switching** of worker i.

- In the following, we will refer to any outcome y of worker $i(f^{2014})$ – whose shock exposure depends on her employer in 2014, f^{2014}, – employed at firm f in year t as $y_{i(f^{2014})f,t}$.

- Whenever we refer to differences in outcomes pre- and post-shock, we take the difference between the average of outcomes post-treatment (2015-17) and pre-treatment (2012-14): $\Delta y_{i(f^{2014})} = \bar{y}_{i(f^{2014}),post} - \bar{y}_{i(f^{2014}),pre}$

Descriptives of pre-shock aggregate worker-level outcomes

	Unemployed			log(Earnings)			
		[Averages 2012-2015]					
	mean	**p50**	**sd**	**mean**	**p50**	**sd**	**N**
Total	0.0401	0.0000	0.1022	10.66	10.85	0.85	1,214,988
Import Competition Quartile	**mean**	**p50**	**sd**	**mean**	**p50**	**sd**	**N**
1	0.0430	0.0000	0.1066	10.53	10.73	0.87	662,516
2	0.0387	0.0000	0.0990	10.73	10.91	0.83	254,813
3	0.0361	0.0000	0.0960	10.81	10.97	0.76	142,320
4	0.0324	0.0000	0.0903	10.98	11.08	0.71	133,464
Export Market Exposure Bin	**mean**	**p50**	**sd**	**mean**	**p50**	**sd**	**N**
0	0.0410	0.0000	0.1035	10.63	10.83	0.86	1,069,175
1	0.0337	0.0000	0.0915	10.79	10.96	0.79	54,208
2	0.0345	0.0000	0.0927	10.84	10.99	0.76	34,028
3	0.0325	0.0000	0.0898	10.94	11.06	0.67	57,577
Imported Input Exposure Bin	**mean**	**p50**	**sd**	**mean**	**p50**	**sd**	**N**
0	0.0417	0.0000	0.1045	10.62	10.82	0.87	969,162
1	0.0331	0.0000	0.0915	10.74	10.92	0.80	110,812
2	0.0343	0.0000	0.0920	10.77	10.96	0.78	60,892
3	0.0342	0.0000	0.0926	10.86	11.01	0.71	74,122

Unemployed: Share of months with unemployment spells per year

log(Earnings): Aggregate earnings in log per year ▸ Distribution of firm-level treatment

After the shock

Variable	Mean	Std. Dev.	Min.	Max.
Δ Unemployed	0.023	0.163	-0.944	0.972
Δ log(Earnings)	0.094	0.635	-6.500	5.976

But these numbers hide **substantial heterogeneity**:

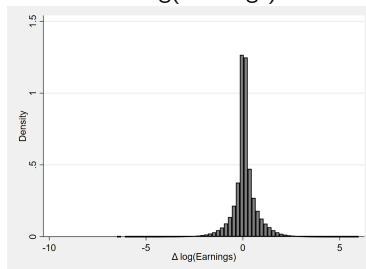$\implies$ Can we explain that heterogeneity?

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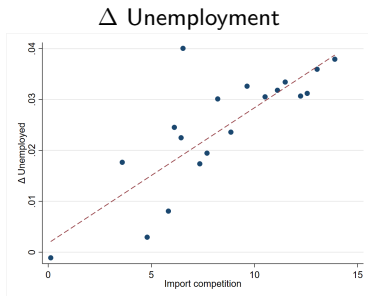| Variable	Mean	Std. Dev.	Min.	Max.
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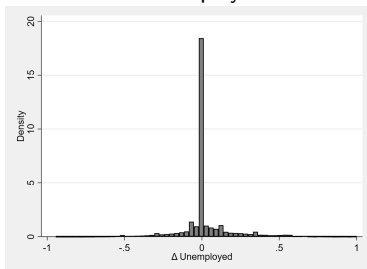
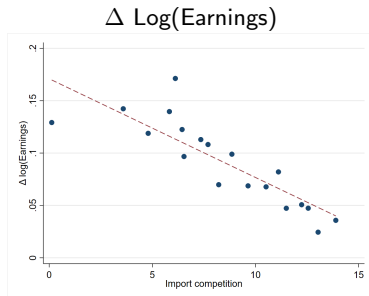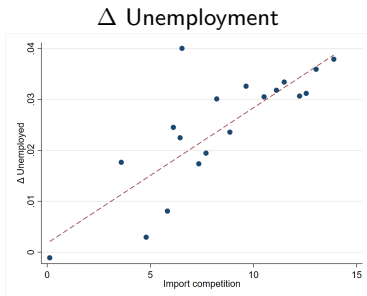$\implies$ Can we explain that heterogeneity?

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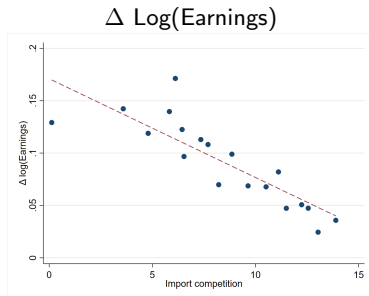
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$\implies$ Hence, the lion's share of variation is **within industries**!

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Δ Unemployment   Δ Log(Earnings)
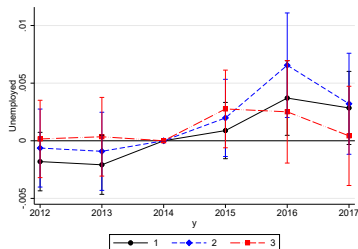
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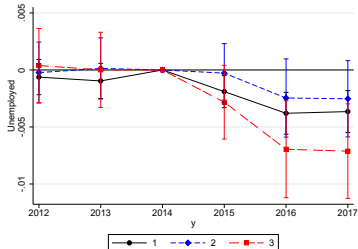
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Smell test: Unemployment propensity by export market exposure and imported inputs exposure bins over time
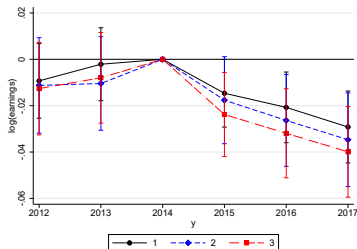
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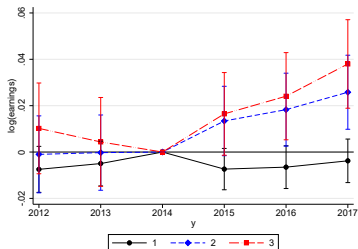
Empirical methodology

- We will compare **differences in worker-level outcomes** pre- and post-shock for **workers subject to different exposure** to the exchange rate shock:

$$\bar{y}_{i(f^{2014}),post} - \bar{y}_{i(f^{2014}),pre} = \sum_{k=0}^{K} \mathbf{1}\left[\text{Imported Inputs Exposure}_{f^{2014}} = k\right]\beta_k$$
$$+ \sum_{k=0}^{K} \mathbf{1}\left[\text{Export Market Exposure}_{f^{2014}} = k\right]\gamma_k$$
$$+ \delta\mathbf{X}_{f^{2014}} + e_{i(f^{2014})}$$

- LHS variable is the difference between the average of outcomes post-treatment (2015-17) and pre-treatment (2012-14).
- Firm-level controls include, i.a., sector(-region)-affiliation.

Heterogeneous effects of the exchange rate shock

	Δ Unemployed				Δ log(Earnings)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Imported Inputs Exposure Bin 1	-0.005***	-0.004***	-0.004***	-0.003***	0.009***	0.002	0.002	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
Imported Inputs Exposure Bin 2	-0.002*	-0.002**	-0.002**	-0.002**	0.018***	0.022***	0.021***	0.024***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)	(0.004)	(0.004)
Imported Inputs Exposure Bin 3	-0.007***	-0.007***	-0.007***	-0.007***	0.016***	0.017***	0.017***	0.020***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.005)	(0.005)	(0.005)
Export Market Exposure Bin 1	0.004***	0.005***	0.005***	0.004***	-0.021***	-0.020***	-0.020***	-0.021***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)	(0.004)	(0.004)
Export Market Exposure Bin 2	0.005***	0.005***	0.005***	0.005***	-0.033***	-0.023***	-0.023***	-0.024***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)	(0.005)	(0.005)	(0.005)
Export Market Exposure Bin 3	-0.000	0.000	0.000	0.001	-0.038***	-0.022***	-0.022***	-0.026***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)	(0.005)	(0.005)	(0.005)
Import Competition	0.005***	0.002***			-0.002**	-0.006***		
	(0.000)	(0.000)			(0.001)	(0.001)		
Import Competition Quartile 2			0.003***				-0.005	
			(0.001)				(0.003)	
Import Competition Quartile 3			0.005***				-0.008*	
			(0.001)				(0.004)	
Import Competition Quartile 4			0.008***				-0.014***	
			(0.001)				(0.005)	
Constant	-0.003*	0.017***	0.020***	0.024***	0.190***	0.150***	0.143***	0.095***
	(0.002)	(0.003)	(0.003)	(0.000)	(0.007)	(0.010)	(0.010)	(0.001)
Obs.	1,192,313	1,192,313	1,192,313	1,220,816	1,185,192	1,185,192	1,185,192	1,213,510
Industry FE	No	2 Digit	2 Digit	4 Digit	No	2 Digit	2 Digit	4 Digit
Industry controls	Yes	Yes	Yes	No	Yes	Yes	Yes	No

Standard errors clustered at the industry-level in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

▶ Net effects

Aggregate evidence

- Positively treated workers:
    - Unemployment ↓, earnings ↑.
- Negatively treated workers:
    - Unemployment ↑, earnings ↓.
- How do these results come about?
    1. Do workers reallocate?
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Worker-level outcome variables

	Panel variation	
Intensive Margin Response		
Δ log(Earnings)	$y_{i(f^{2014})f,t}$	Aggregate earnings in log in year t
Δ log(Wage)	$y_{i(f^{2014})f,t}$	Average monthly wage in log in year t
Extensive Margin Response		
Δ Unemployed	$y_{i(f^{2014})f,t}$	Share of months with unemployment spells in year t
Δ Firm Switch	$y_{i(f^{2014})f,t}$	Dummy variable that is one whenever previous year's employer was different
Δ Industry Switch	$y_{i(f^{2014})f,t}$	Dummy variable that is one whenever previous year's industry was different
Type of reallocation		
Δ log(No Empl.)	$y_{i(f^{2014})f(f_{pre}),t}$	Variable indicating the log(No Empl.) of i's employer in year t where employer characteristic is time-invariant
Δ log(Avg. Wage)	$y_{i(f^{2014})f(f_{pre}),t}$	Variable indicating the log(Avg. Wage) of i's employer in year t where employer characteristic is time-invariant

Note: In order to measure the **type of reallocation**: We denote by $y_{i(f^{2014})f(f_{pre}),t}$ characteristics of the firm a worker is employed at in t but measure these **firm-level** characteristics **prior to the shock**.

Worker-level responses to the exchange rate shock

	Intensive Margin Response		Extensive Margin Response			Type of reallocation	
	(1) Δ log(Earnings)	(2) Δ log(Wage)	(3) Δ Unemployed	(4) Δ Firm Switch	(5) Δ Industry Switch	(6) Δ log(No Empl.)	(7) Δ log(Avg. Wage)
Imported Inputs Exposure Bin 1	-0.000 (0.002)	0.001 (0.002)	-0.003*** (0.001)	-0.000 (0.002)	-0.001 (0.001)	-0.022*** (0.008)	-0.006*** (0.001)
Imported Inputs Exposure Bin 2	0.024*** (0.004)	0.016*** (0.003)	-0.002** (0.001)	-0.009*** (0.002)	-0.009*** (0.002)	0.056*** (0.012)	0.009*** (0.002)
Imported Inputs Exposure Bin 3	0.020*** (0.005)	0.016*** (0.004)	-0.007*** (0.001)	-0.023*** (0.003)	-0.020*** (0.003)	0.086*** (0.014)	0.021*** (0.002)
Export Market Exposure Bin 1	-0.021*** (0.004)	-0.014*** (0.003)	0.004*** (0.001)	0.013*** (0.002)	0.010*** (0.002)	-0.062*** (0.011)	-0.009*** (0.002)
Export Market Exposure Bin 2	-0.024*** (0.005)	-0.016*** (0.004)	0.005*** (0.001)	0.020*** (0.003)	0.016*** (0.003)	-0.076*** (0.015)	-0.019*** (0.002)
Export Market Exposure Bin 3	-0.026*** (0.005)	-0.016*** (0.004)	0.001 (0.001)	0.017*** (0.003)	0.013*** (0.003)	-0.098*** (0.016)	-0.019*** (0.002)
Constant	0.095*** (0.001)	0.040*** (0.001)	0.024*** (0.000)	-0.028*** (0.000)	-0.022*** (0.000)	0.016*** (0.002)	0.009*** (0.000)
Obs.	1,213,510	1,215,645	1,220,816	988,494	987,880	1,151,551	1,150,931
4 Digit Industry FE	yes	yes	yes	yes	yes	yes	yes

Standard errors clustered at the industry-level in parentheses
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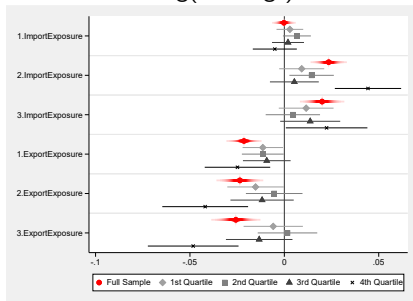
Recap: What do we know by now?

- Positively treated workers:

  1. Unemployment ↓, earnings ↑.
  2. Reallocation ↓: Workers are less likely to switch employer and industry.
  3. If they reallocate, reallocation towards bigger, and higher-wage firms.

- Negatively treated workers:

  1. Unemployment ↑, earnings ↓.
  2. Reallocation ↑: Workers are more likely to switch employer and even industry!
  3. Reallocation towards smaller, and lower-wage firms.

- But which workers are reallocating?

  - In order to (causally) measure heterogeneous worker responses, we will leverage firm-level variation of our trade-shock exposure:

    - To that end, we measure the **wage quartile of workers within the firm** they are employed at in 2014.
    - Since any worker in that firm is exposed to the same firm-level shock: This **ex-ante measure is by construction uncorrelated with the shock**.
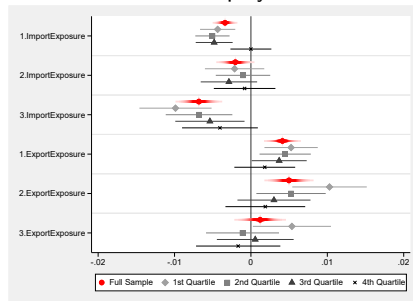
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Worker-level heterogeneity across labor-market outcomes

Δ log(Earnings)

Δ Unemployed

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Firm-level regressions

- We will compare **differences in firm-level outcomes** pre- and post-shock for **firms subject to different exposure** to the exchange rate shock:

$$\bar{y}_{f(f^{2014}),post} - \bar{y}_{f(f^{2014}),pre} = \sum_{k=0}^{K} \mathbf{1} \left[\text{Imported Inputs Exposure}_{f2014} = k \right] \beta_k$$
$$+ \sum_{k=0}^{K} \mathbf{1} \left[\text{Export Market Exposure}_{f2014} = k \right] \gamma_k$$
$$+ \delta \mathbf{X}_{f2014} + e_{i(f^{2014})}$$

- LHS variable is the difference between the average of outcomes post-treatment (2015-17) and pre-treatment (2012-14).
- Firm-level controls include, i.a., sector(-region)-affiliation.

Firm-level outcome variables

	Panel variation	
Hiring		
Δ log(No Empl)	$y_{f(f^{2014}),t}$	Log number of employees in firm f in december of year t.
Δ New Share	$y_{f(f^{2014}),t}$	Share of employees that has not been employed at firm f in previous year. Can be split up in share of new employees by wage group within firm.
Δ log(Avg Pre-shock Wage)	$y_{f(f^{2014}),t}$	Variable indicating the log(avg pre-shock wage) of workers employed at f in t where worker characteristic is time-invariant and measured pre-shock. Allows us to measure the types of workers employed.
Wage setting		
Δ log(Avg Wage)	$y_{f(f^{2014}),t}$	Log average wage in firm f in december of year t.
Δ log(Wage_p90)	$y_{f(f^{2014}),t}$	Log wage at 90th percentile in firm f in december of year t.
Δ Wage Growth	$log(y_{f(f^{2014}),t}) - log(y_{f(f^{2014}),t-1})$	Average wage growth of workers employed at firm f in december of year t relative to their wage in december of year $t-1$.

Note: In order to measure the **type of reallocation**: We denote by $y_{f(f^{2014}),t}$ characteristics of the average worker employed in f in t but measure these **worker-level** characteristics **prior to the shock**.

Firm-level hiring responses

	Extensive hiring margin		Type of Hiring		
	(1) Δ log(No Empl)	(2) Δ New Empl Share	(3) Δ New Empl Share ($<$ Median)	(4) Δ New Empl Share ($\geq$ Median)	(5) Δ log(Avg Pre-shock Wage)
Imported Inputs Exposure Bin 1	-0.015** (0.007)	0.041*** (0.004)	0.022*** (0.006)	0.020*** (0.004)	-0.017*** (0.005)
Imported Inputs Exposure Bin 2	0.031*** (0.008)	0.025*** (0.005)	0.018** (0.007)	-0.001 (0.005)	0.004 (0.006)
Imported Inputs Exposure Bin 3	0.105*** (0.009)	0.022*** (0.006)	0.013 (0.009)	0.002 (0.007)	0.025*** (0.007)
Export Market Exposure Bin 1	-0.087*** (0.010)	0.043*** (0.007)	0.028*** (0.008)	0.027*** (0.006)	-0.020*** (0.007)
Export Market Exposure Bin 2	-0.058*** (0.011)	0.024*** (0.007)	0.003 (0.010)	0.024*** (0.007)	-0.019** (0.008)
Export Market Exposure Bin 3	-0.058*** (0.012)	0.013 (0.008)	0.009 (0.011)	0.016** (0.008)	-0.019** (0.009)
Constant	-0.046*** (0.002)	-0.118*** (0.001)	-0.082*** (0.002)	-0.093*** (0.001)	0.002* (0.001)
Obs.	129,656	129,656	64,263	88,914	126,340
Industry FE	4 Digit	4 Digit	4 Digit	4 Digit	4 Digit

Standard errors clustered at the industry-level in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Firm-level wage-setting responses

	Wage profiles		Wage profiles across stayers and non-stayers		
	(1) Δ log(Avg Wage)	(2) Δ log(Wage_p90)	(3) Δ log(Avg Wage) Stayers	(4) Δ log(Avg Wage) New hires	(5) Δ Wage Growth
Imported Inputs Exposure Bin 1	-0.006 (0.006)	-0.010 (0.006)	0.002 (0.006)	-0.008 (0.010)	-0.001 (0.005)
Imported Inputs Exposure Bin 2	0.005 (0.007)	0.011 (0.007)	-0.002 (0.007)	0.030** (0.012)	-0.002 (0.006)
Imported Inputs Exposure Bin 3	0.031*** (0.009)	0.048*** (0.009)	0.006 (0.009)	0.061*** (0.016)	0.010 (0.007)
Export Market Exposure Bin 1	-0.020** (0.009)	-0.035*** (0.009)	-0.012 (0.009)	-0.019 (0.015)	0.003 (0.007)
Export Market Exposure Bin 2	-0.020** (0.010)	-0.031*** (0.010)	-0.005 (0.010)	-0.027 (0.017)	-0.011 (0.008)
Export Market Exposure Bin 3	-0.007 (0.011)	-0.015 (0.012)	0.004 (0.011)	-0.001 (0.019)	-0.001 (0.009)
Constant	0.013*** (0.001)	0.004*** (0.002)	0.009*** (0.001)	-0.010*** (0.003)	-0.019*** (0.001)
Obs.	127,266	127,266	107,471	91,385	118,738
Industry FE	4 Digit	4 Digit	4 Digit	4 Digit	4 Digit

Standard errors clustered at the industry-level in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Taking stock

- High exposure to positive trade shock leads to strong positive earning responses:
  - Earnings response is driven by newly hired workers, nevertheless positive earnings response is rooted in pool of positively-treated workers.
  - Workers must reallocate to reap gains from positive shock.
  - Earnings response is almost entirely driven by top earners.

- High exposure to negative trade shock leads to strong negative earning responses:
  - Earnings response is driven by workers leaving high-wage jobs and being unable to find similar high-wage jobs elsewhere.
  - Earnings response is almost entirely driven by top earners.

Conclusion

- This paper leverages an **unusually clean trade shock** that allows us to examine **individual workers' responses to heterogeneous shock** exposure.

- Aggregate outcomes:
  - Positive earning response, negative employment responses for workers that are positively treated.
  - Negative earning response, positive employment responses for workers that are negatively treated.

- Firm-level reallocation: Positively treated go to (relatively) better firms, negatively treated to (relatively) worse firms!

- Digging deeper reveals heterogeneous worker responses:
  - **Negative earnings response mainly borne by top-quartile** of earnings distribution within firms.
  - **Positive earnings response** by positively treated workers **stemming from reallocation**.

- Reallocation after a trade shock is **costly for workers** (and, likely, firms) with these costs being **distributed heterogeneously across workers**.

Thank you for your attention!

Comments are very welcome.

Worker-level data (employed in 12/2014)

Variable	Sample mean (Our data)	Overall mean (Official data)
Manu. food/beverages	0.018	0.018
Manu. pharmaceuticals/chemicals	0.011	0.015
Manu. computers/electronics/machinery	0.050	0.047
Construction	0.068	0.071
Wholesale/retail	0.136	0.135
Logistics	0.084	0.022
Accomodation/food service	0.069	0.052
Financial services	0.037	0.050
Public administration	0.044	0.042
Health care	0.105	0.112
Primary educ.	0.186	0.147
Secondary educ.	0.581	0.480
Tertiary educ.	0.212	0.371
PhD	0.021	
Female	0.476	0.457
Age	38.445	
Age 15-39	0.552	0.454
Older than 55	0.076	0.184
Swiss	0.625	0.752
Earnings (monthly) in CHF	5,293	5,583
Observations	1,220,816	4,555,407

Note: Cross-sectional averages in 12/2014. Source: own computations, linked register dataset. Swiss average: SAKE, Swiss Statistical Office.

Firm-level data

Variable	Mean	Std. Dev.	Min.	Max.
Total (monthly) wage sum (in 1,000 CHF)	49.418	1462.375	0	503,086
Number of employees	9.124	262.547	1	91,107
Importer (0/1)	0.161	0.367	0	1
Import value in mio. CHF	0.488	49.713	0	16,235
Exporter (0/1)	0.077	0.266	0	1
Export value in mio. CHF	0.68	71.703	0	17,981
Female workforce share	0.475	0.389	0	1
Young workforce ($\leq$ 35) share	0.449	0.351	0	1
High education workforce share	0.182	0.293	0	1
Observations		136,574		

Note: All numbers refer to 2014. This is the set of firms matched to employers in 12/2014.
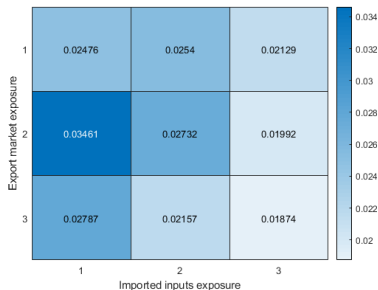
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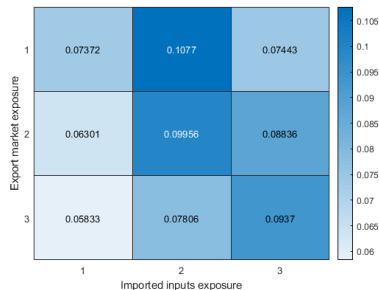# Distribution of workers across treatments in %
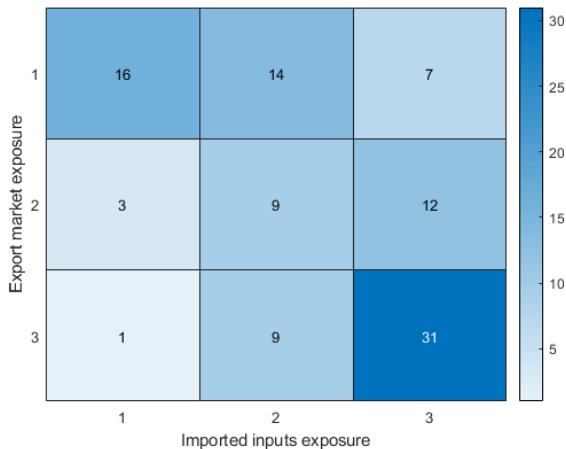
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What about net effects?

Predicted change in unemployment propensity

Predicted change in log(earnings)

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