

# Migration and public finances in the EU

## EUROMOD Research Workshop 2022, Prague

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# Outline

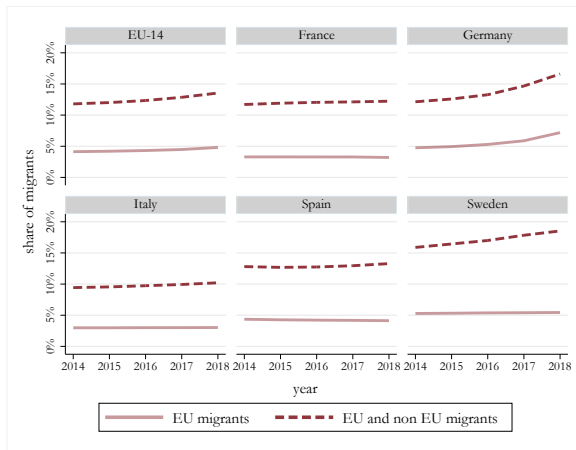
1. Motivation
2. Research Question
3. Method and Data
4. Results
5. Conclusion

# Motivation I

- ▶ Migration flows towards the European Union have been on the rise in recent years:
  - ▶ between 2014 and 2018, foreign-born residents in EU countries increased by about 7 million
  - ▶ migrants accounted for 11.3% of the EU population, up from 9.8% in 2014.
- ▶ Salience of migration in public opinion has increased:
  - ▶ the share of EU residents who think that migration is one of the two most important issues facing the EU increased between 2014 (24%) and 2018 (40%)

# Motivation II

**Figure:** Share of migrants in total population by country of birth



Source: Own calculation using EUROSTAT data (migr\_pop3ctb).

## Motivation III

- ▶ One specific concern is also that the generosity of welfare provision in destination countries encourages migration of welfare-dependent migrants.
- ▶ Migrants are often feared to be a burden on the receiving country's welfare state.
  - ▶ expands the population, bringing in new sources of public revenues BUT
  - ▶ possible new demands for public services.

# Literature

## Two approaches to estimate the net fiscal impact of migration:

- ▶ Model based approaches that aim to provide an assessment of the dynamic fiscal effects of migration over the **life cycle**. See [Storesletten \(2000\)](#) for the US and [Storesletten \(2003\)](#) for Sweden.
- ▶ Data-based but also more static approaches where the results of these studies are heavily context dependent. See [Dustmann et al. \(2010\)](#) and [Dustmann and Frattini \(2014\)](#) for the UK or [Ruist \(2015\)](#) for Sweden.

# Research Questions and Contribution

## ► Research questions:

1. What was the net fiscal contribution of migrants across EU countries over the period of 2014 to 2018?
2. What role do individual characteristics play in explaining the level and evolution of the net fiscal contributions?

## ► Our contribution:

1. We build a novel dataset for the microeconomic analysis of the net fiscal contribution of migrants.
2. We analyze in detail the average annual amount of fiscal revenues and government expenditures that can be traced back to natives and to migrants between 2014 and 2018, focusing on the EU-14.

# Methodology and Data I

**Key data set key: EU-SILC (cross-sectional, 5 consecutive years).**

- ▶ We primarily focus on the EU-14 in aggregate and on five member states, namely, France, Germany, Italy, Spain and Sweden.
- ▶ We poststratify the EU-SILC dataset, taking advantage of the number of natives and migrants by age group, gender and country of birth in each EU country.
- ▶ We define migrants by country of birth (not citizenship).
- ▶ We use the EUROMOD migration extension to include policies that are specific to the migration status.



# Methodology and Data II

## Adding in-kind benefits

- ▶ Health (by age-group)
- ▶ Education (by type of education)
- ▶ Social housing (by identifying people who live in social housing)

**Table:** Aggregate expenditures, 2014–2018 average

Country	Included expenditures (billion €)	Nonincluded expenditures (billion €)	Share included (%)
EU-14	3,626	1,479	71.0
France	853	343	71.3
Germany	949	365	72.2
Italy	538	217	71.2
Spain	303	132	69.6
Sweden	153	67	69.7

Source: Own calculations from EUROSTAT database of general government expenditure by function. Figures are in 2018 euros.

# Methodology and Data III

## Adding indirect taxes

- ▶ We construct a VAT micro-simulation model in the HBS ([Christl et al. \(2022\)](#))
- ▶ We do not include other indirect taxes!

**Table:** Aggregate revenues, 2014–2018 average

Country	Included revenues (billion €)	Nonincluded revenues (billion €)	Share included (%)
EU-14	3,794	695	84.5
France	817	188	81.3
Germany	1,098	93	92.2
Italy	552	149	78.8
Spain	312	58	84.3
Sweden	136	57	70.5

Source: Our calculations from the EUROSTAT database. Public finance revenues refer to direct income taxes, SSCs and VAT. Figures are in 2018 euros.

# Methodology and Data IV

- We define the net fiscal contribution (NFC) as the difference between public revenues generated (i.e., taxes paid)  $R$  and public expenditures occupied (i.e., benefits received)  $E$ :

$$NFC_{i,c,j,t} = R_{i,c,j,t} - E_{i,c,j,t} \quad (1)$$

# Results – Net Fiscal Contributions (NFC)

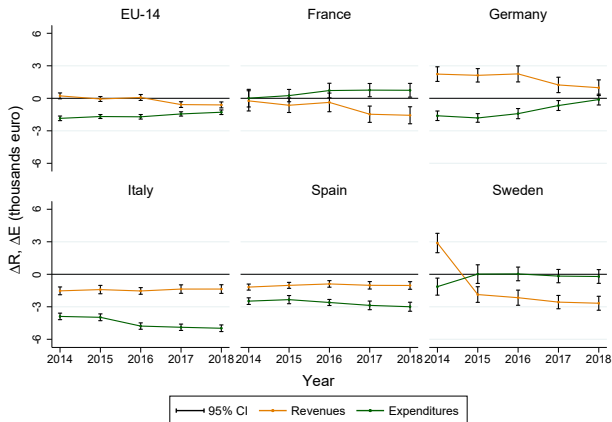
**Table:** Per capita average aggregates, by selection EU-14, 2014–2018.

Country of residence	Country of birth	Reven. (€)	Expend. (€)	NFC (€)	Taxable income (€)
EU-14	Natives	9,623	9,590	32	13,327
EU-14	Migrants	9,684	8,174	1,510	14,996
France	Natives	11,339	10,998	341	13,227
France	Migrants	10,290	11,457	-1,167	12,285
Germany	Natives	10,313	9,874	439	17,021
Germany	Migrants	12,504	8,800	3,705	21,373
Italy	Natives	9,062	9,078	-16	10,969
Italy	Migrants	7,233	4,376	2,857	11,089
Spain	Natives	5,598	6,412	-814	8,860
Spain	Migrants	4,537	3,744	793	8,153
Sweden	Natives	15,068	13,252	1,816	17,786
Sweden	Migrants	13,580	12,957	623	17,370

Notes: Our calculations from EU-SILC data with sampling weights. NFC stands for net fiscal contribution; see definition (1). Figures are in 2018 euros.

# Differences in Revenues and Expenditures

**Figure:** Annual migrant–native difference in per capita revenues and expenditures



Source: Our calculations from the EU-SILC dataset and EUROMOD. Figures are in 2018 euros.

# The role of individual characteristics

What role do individual characteristics play in explaining the level and evolution of migrant–native differences in net fiscal contributions?

- We address this question by estimating a regression of the type:

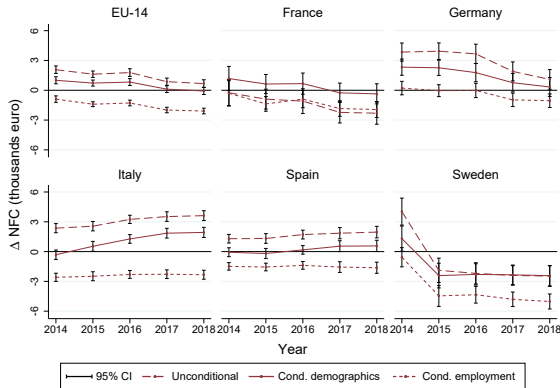
$$NFC_{i,c,t} = \alpha_{c,t} + \beta_{c,t}I_{i,c,t} + X'_{i,c,t}\delta + \epsilon_{i,c,t} \quad (2)$$

where  $i$  indexes individuals,  $c$  the country of residence and  $t$  the year of observation.  $I$  is a dummy variable that identifies migrants vs natives, and  $X$  is a vector of individual characteristics.

- $\beta_{c,t}$  measures the average difference in NFCs between migrants and natives living in country  $c$  in year  $t$ , conditional on the variables included in  $X$ .

# Differences in NFCs, (un)conditional

**Figure:** Migrant–native differences in NFCs, conditional on different sets of variables



Source: Our calculations from the EU-SILC dataset and EUROMOD. Figures are in 2018 euros.

# Conclusion I

- ▶ We construct a comprehensive data set (including taxes, cash benefits, in-kind benefits, as well as VAT) to analyze the fiscal impact of migration.
- ▶ On average, across the EU-14, **migrants make larger net fiscal contributions than natives.**
  - ▶ Natives made net contributions to public coffers over this period of on average EUR 32 per capita each year
  - ▶ migrants' net yearly contribution totals an average of EUR 1,510 per capita.



## Conclusion II

- ▶ Controlling for demographic characteristics is very important
- ▶ Evidence that **migrants are favourably selected on characteristics** that make them net fiscal contributors.
- ▶ When conditioning on demographics and employment status the migrant–native gap in NFC becomes negative.

# References

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# Thank you



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