

# **Discussion of “Immigration (from Ukraine) and labour market in Poland – evidence from Bayesian VAR” by Postek and Walerych**

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Immigration is at the center of the recent political turmoil.

The impact of the immigration on:

- wages of the locals ('displacement effects')
- unemployment rate
- public finances
- house prices
- ...

Can economists contribute to the discussion?

## SVAR models with migration

- Schiman (2021) for Austria
- Furlanetto and Robstad (2019) for Norway
- Smith and Thoenissen (2019) for New Zealand
- d'Albis et al. (2019) for France
- Kiguchi and Mountford (2019) for the United States
- Maffei-Faccioli and Vella (2021) for Germany
- Postek and Walerych (2024) for Poland

Poland is interesting because for a long time, it experienced **negative** net migration

# What this paper does

## Motivated by:

- since 2014, inflow of Ukrainian immigrants to Poland
- big spike in 2022, after the start of the full-scale war

## Main question:

- what is the impact of immigration on labor market in Poland (unemployment and wages)?

## To answer this question, the paper:

- estimates BVAR model from Forni et al. (2018) on Polish data, 2004q1-2023q3
- re-estimates the model after adding immigration measures

## Immigration or net migration?

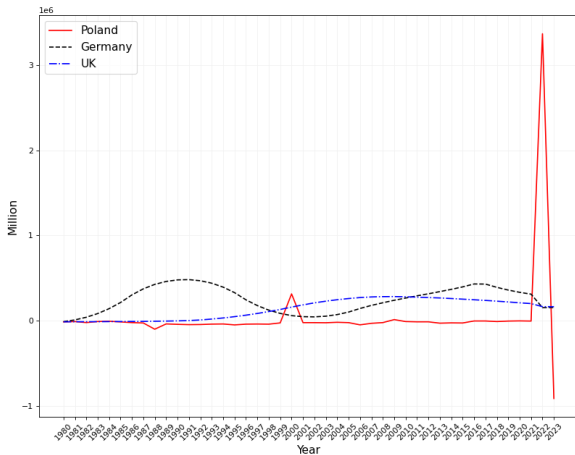
The paper looks at immigration flows **into** Poland.

However, for a long time, Poland had **negative net migration**:

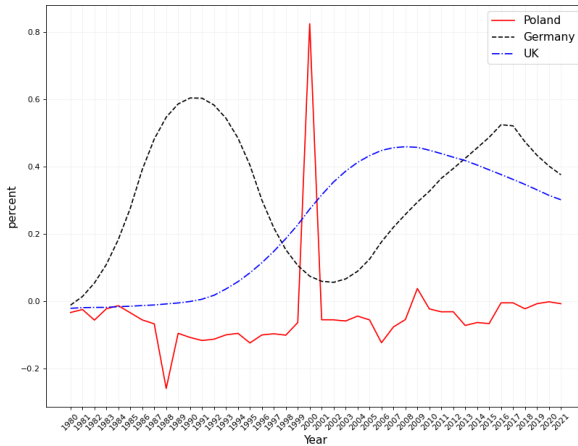
- *The 2004 EU enlargement has triggered large and rapid migration movements from the new to the old member states. The scale of this outflow was unprecedented in the CEE history and its structure was also different from previous emigration waves as it was more heavily biased towards young and educated people. (Walerych 2021)*

At the macro level, looking at net migration may be more interesting?

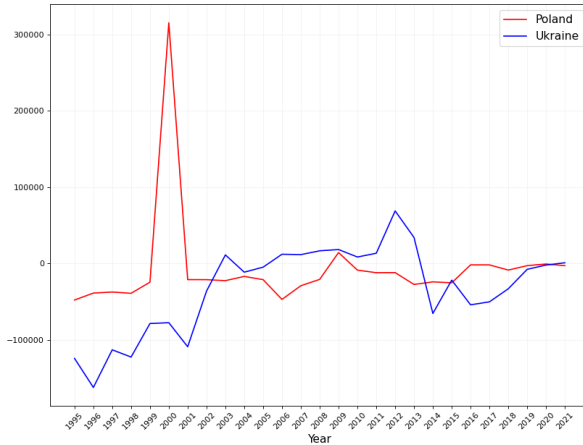
# Net Migration to Poland



# Net migration to Poland before 2022



# Net migration: Poland and Ukraine





# Net Migration to Poland

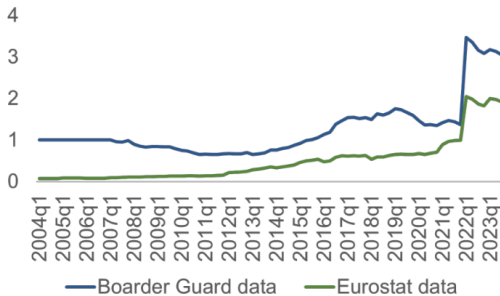
- Relatively modest in size before 2022
- Negative net migration until 2016 (Brexit?)
- How important is immigration from Ukraine before 2022?
- Large influx in 2022 is a large structural break:
  - non-linear effects?

## Data: Immigration proxies

1. Quarterly proxy based on the Polish Border Guard data on the cumulative number of Schengen Area border crossings (**both ways**)
  - does this include tourists?
  - the sum of inflows and outflows?
2. Annual proxy based on Eurostat data on population, residence permits and temporary protection
  - only inflows?

# Immigration proxies

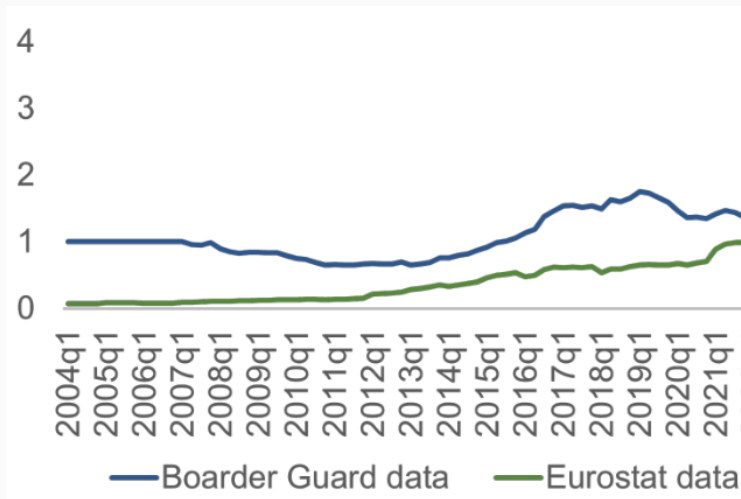
Figure 5: Immigration proxies (in millions)



Notes: Exact levels are not important - from the perspective of VAR modelling the proxy should satisfy:

$$true \approx a + b \cdot proxy$$

## Immigration proxies before 2022



# Immigration proxies

- Two proxies measure conceptually different things
- What “true” measure do we want?
- What is the correlation between the two proxies?
- Do the sign restrictions make sense for the sum of inflows and outflows?

## Results without immigration

- Qualitatively similar to Forni et al. (2018)
- Some differences, e.g. in response to labor supply shock:
  - increase in GDP is about twice smaller than in Forni
  - prices fall persistently, while in Forni they fall only temporarily, and then increase
  - increase in unemployment is very persistent, while in Forni it is very temporary
- Is this surprising? What do we learn from this exercise?
- Why not include participation rate? Forni use it identifying labour supply and wage bargaining shocks.

## Adding immigration: identification

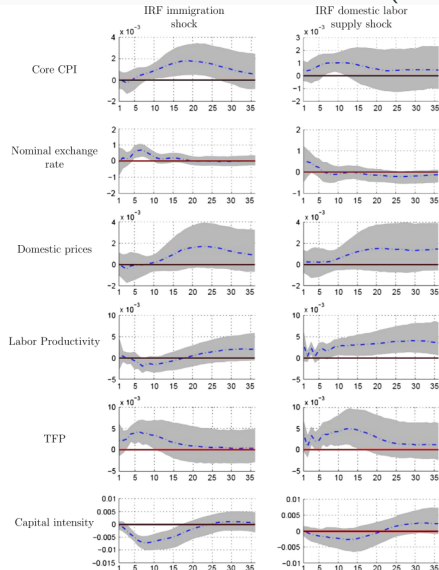
Immigration shocks: combination of demand and labour supply shocks?

Table 2: Identification scheme via sign restrictions

	Shocks				
	demand	technology	labour supply	wage bargaining	immigration
output	+	+	+	+	+
prices	+	-	-	-	+
real wages		+	-	-	-
unemployment	-		+	-	
immigrants	+		-		+

# Labour supply vs immigration shocks

IRFs from Furlanetto and Robstad (2019):





## Immigration shocks

Maffei-Faccioli Vella (2021):

- *(sign restrictions schemes) typically rely on the assumption that immigrants enter the labor force rapidly, restricting the impact response of variables such as output, wages, participation and employment to migration shocks. While these assumptions are sensible in the case of job-related migration, they are likely violated when immigrants access the destination country via family reunification or as asylum seekers*

Alternative: *narrative sign restrictions* ( Antolín-Díaz and Rubio-Ramírez (2018)) impose that around selected historical events structural shocks and/or historical decompositions agree with some narrative information

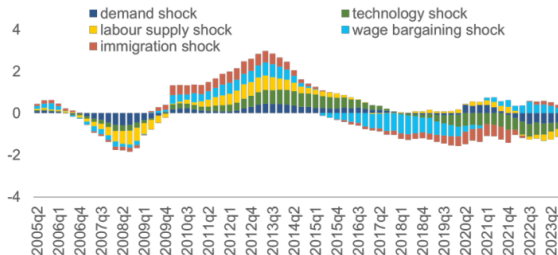
Immigration shock:

- little effect on unemployment
- positive effect on output
- positive effect (increases) prices
- reduces real wages

- IRFs w.r.t. immigration shocks are similar for both immigration proxies
  - is this surprising?
  - two proxies co-move in 2022-2023, but not so much before
  - are the results driven by data in 2022-2023?
- Does migration react dynamically to other shocks?
- Would be interesting to see identified immigration shocks

## Immigration reduced unemployment in 2016-2021?

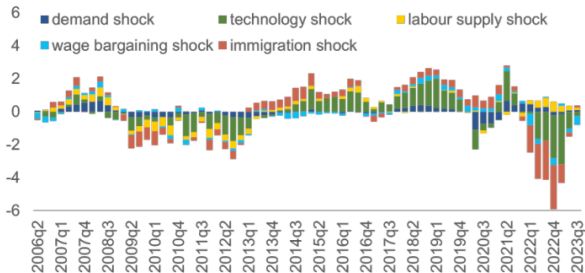
Figure 7: Historical decomposition of unemployment rate (in pp.)



# Real wage

Modest impact of immigration before 2022, large reduction in 2022

Figure 8: Historical decomposition of real wage growth (annual % change)



Was it mostly 'non-working immigration' in 2022?

- Are these two different “regimes”?
  - *definitely the 2022 russian invasion of Ukraine being the most important structural break in immigration to Poland not only in terms of number of immigrants but, above all, in terms of non-economic type of this immigration*
- Adding energy prices aims to capture big changes in 2022?
- Are results very sensitive to omitting 2022-2023 data?

# Poland vs Germany

Table 2. War refugees from Ukraine in Poland and Germany, 2023

Tabela 2. Uchodźcy wojenni z Ukrainy w Polsce i Niemczech, 2023

	Poland / Polska	Germany / Niemcy
No. of war refugees (TPD) / Liczba uchodźców wojennych (TPD)	1 m	1.1 m
Share of women / Udział kobiet	70%	67%
Share of children / Udział dzieci	40%	33%
Share using organised accommodation / Udział osób korzystających ze zorganizowanych miejsc pobytu	5-7%	8%
Share with higher education / Udział osób z wykształceniem wyższym	67%-75%	68%
Good language knowledge / Dobra znajomość języka	10% (written)	4%
Reception/integration strategy / Strategia recepcyjna/integracyjna	Rapid integration on the labour market (with possible mismatches) / Szybka integracja na poziomie rynku pracy (z możliwymi niedopasowaniami)	Long-term integration strategy (language and occupational preparation → labour market) / Długookresowa strategia integracyjna (przygotowanie językowe i zawodowe → rynek pracy)
Share in work / Udział pracujących	71%	18%
Share working remotely / Udział pracujących	28%	2%

Sources: Own elaboration based on data from the CMR/CESS 2023 survey and data from IAB (Germany). /

Źródła: Opracowanie własne na podstawie danych z sondażu OBM/CESS 2022 oraz danych IAB (Niemcy)

Source: Górny and Kaczmarczyk (2024)

# Conclusion

- Very interesting paper
- Immigration (from Ukraine) or net migration?
- How good are the immigration proxies?
- Before / after 2022