



Labor migration from Ukraine since 2014: Changing destinations and growing macroeconomic impact

Matthias Luecke ^{a,b}

David Saha ^b

^a Kiel Institute for the World Economy; ^b German Advisory Group Ukraine

The authors thank Lara Bohnet and Sophie Paul for excellent research assistance.

85th East Jour Fixe

Oesterreichische Nationalbank – September 12, 2019

Introduction

Situation

- Since 2014, Ukraine has faced conflicts in the East and over Crimea, along with a severe economic crisis that saw GDP collapsing in 2014 and 2015 and gradually recovering since 2016.
- Along with the recovery, emigration to Poland has increased sharply, while fewer Ukrainians apparently work in Russia.
- Many employers, including foreign-owned firms, are concerned about shortages of suitably qualified industrial workers and growing wages.

Purposes of this Policy Brief:

- Clarify conflicting information on the number of emigrants and their destination countries
- Better understand the labor market and macroeconomic effects of migration and remittances and reflect on policy implications

Structure

1. How many migrants, and who are they?
(alternative definitions, data sources, socio-economic characteristics, regional patterns of migration)
2. Macroeconomic effects of migration and remittances
(wages, price level, real exchange rate, financial system)
3. Insights and policy implications

1. How many migrants, and who are they?

- Migration is a **multi-faceted** phenomenon: Hence, we need to be clear what question we seek to answer and what type of migration/ definitions/ data sources are relevant.
- This policy paper is about the impact of migration and remittances on the Ukrainian economy since 2014:
 - Seasonal/ **temporary** migration: Many Ukrainian “migrants” belong to a household in Ukraine while they work abroad for part of the year or even continuously (apart from spending holidays at home).
 - **Permanent** migrants are members of a household in their destination country, typically with their core family members. They may send remittances to relatives or friends or contribute to charitable causes in Ukraine as members of the Diaspora.

Data sources and definitions

- UN/ World Bank data: Destination country residents born abroad
 - International standard definition
 - Likely includes both temporary and permanent migrants
 - Includes many individuals in Former Soviet Union countries who were born in Ukraine, but no longer have relevant links there
- Labor Force Survey (available 2012 and 2017): Temporary migrants
 - Any individual who is a member of a Ukrainian household but has worked abroad at one point during the last 12 months.
 - May include irregular migrants
 - Tends to exclude permanent migrants
- Country of destination/ administrative data: Citizenship
 - Examples: visa, local registration, social security
 - Excludes irregular migrants as well as those who have become naturalized citizens of their country of destination but still interact with the Ukrainian economy

Ukrainian migrants' destinations by data source

	World Bank Data		Labour Force Survey		Eurostat Data**	
	2010	2017	2012	2017	2012	2017
Former Soviet Union						
Belarus	141	227	21	22	n.a.	n.a.
Kazakhstan	272	346	n.a.	n.a.	n.a.	n.a.
Russian Federation	3.647	3.272	510	343	n.a.	346**
EU member states						
Czech Republic	34	138	152	123	103	116
Germany	203	212	28	10	112	118
Italy	173	232	156	147	225	235
Poland	333	221	169	507	122	451
Portugal	15	48	21	21	44	32
Spain	88	96	53	n.a.	78	89
Total EU (Eurostat)					779	1.177
Other						
Israel	249	137	n.a.	14	n.a.	n.a.
United States	332	348	n.a.	23	n.a.	n.a.
<i>Not listed countries*</i>	1.038	717	70	93		
TOTAL	6.525	5.995	1.182	1.303	-	-

*Difference between totals and countries listed; Labour Force Survey data include US, Israel in 2012; Spain in 2017

** All EU data from Eurostat, RUS data from Rosstat

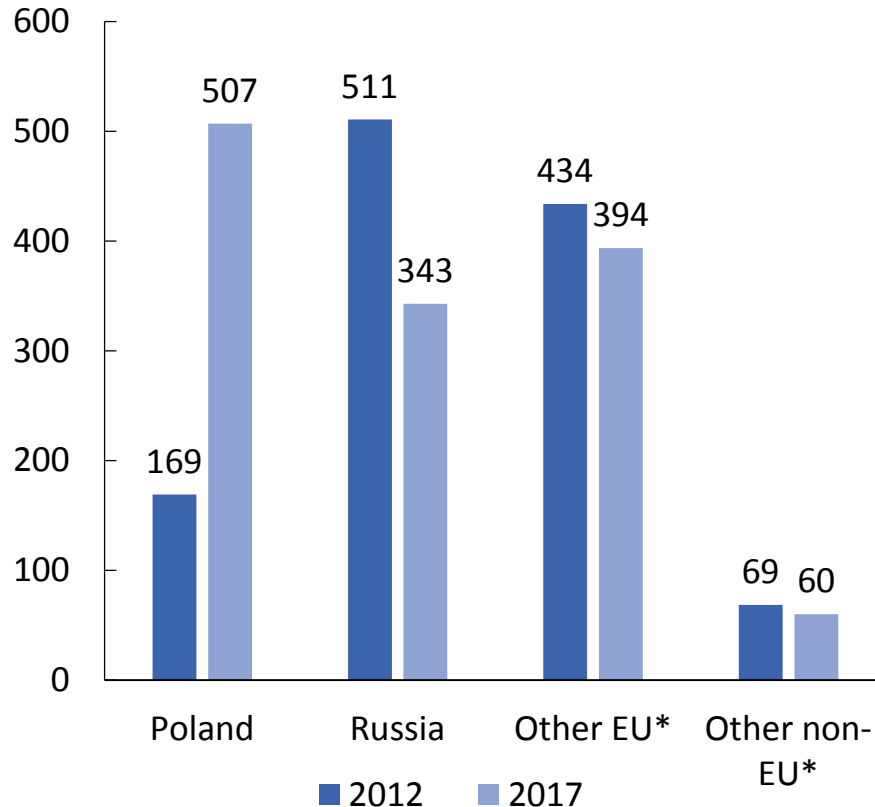
Source: World Bank; Ukrstat, Labour Force Survey migration modules 2012 and 2017; Eurostat; Rosstat

Number of migrants: assessment

- UKR LFS data
 - Most comprehensive source for all destination countries, regional patterns of migration prevalence within Ukraine, and socioeconomic characteristics
 - Covers only temporary migrants, hence underestimates recent migrant flows: e.g. more Ukrainians are officially registered in Italy than shown in LFS
- Eurostat data
 - Exclude likely recent increase in irregular migration to the EU due to visa liberalization in mid-2017
 - Represent lower bound estimate (regular migrants only)
- Conservative estimate of all emigrants (still) interacting with Ukrainian economy in 2017: around 2 million, of whom app. 3/4 are in EU
 - Takes partner country data as lower bound and adds approximately one third of LFS migrant numbers to account for irregular temporary migrants
 - Migration prevalence app. 7 percent of working-age population
- Corresponding estimate for 2012: 1.6 million

Shift in destination countries, 2012-2017

migrants (thousands)

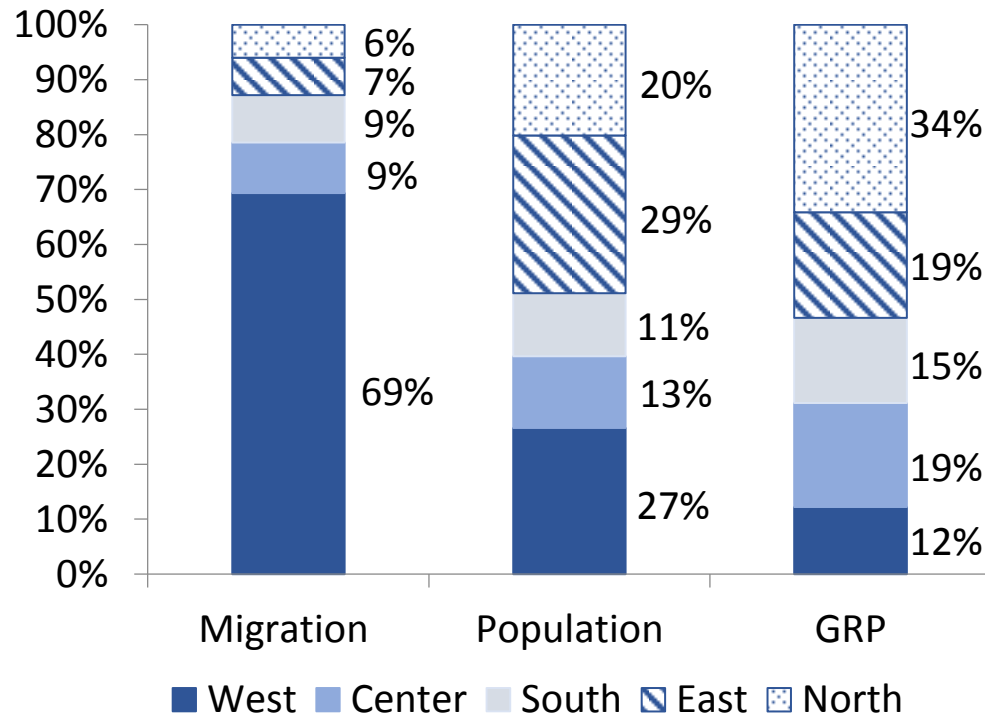


- Sharp increase in Poland vs. decline in Russia
- National data for Poland suggest an even higher number of Ukrainian immigrants in 2017:
 - close to 8K Ukrainians with permanent residence permits, 70K with temporary stay permits, 193K with work visa
 - 1.7 million short-term work authorizations for Ukrainians, of which 719K went to individuals with permits or work visa
 - Hence, other temporary immigrants must have received close to 1 million short-term (mostly 3-6 months) authorizations (often more than 1 per individual).

*Finland is included in non-EU in 2012, but in EU in 2017 (approx. 13 thds.)

Source: Ukrstat, LFS 2012 & 2017

Migrants, population and gross regional product, by economic region, 2017



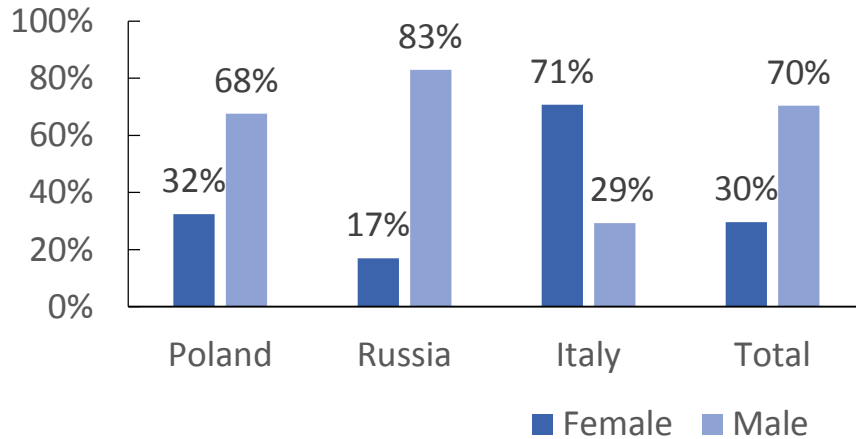
Source: Ukrstat, LFS 2017

Note: GRP denotes Gross Regional Product

- 69% of migrants stem Western Ukraine, vs only 27% of total population.
- Western Ukraine is also the region with lowest per capita GRP.
- GRP per capita in the North may be overstated due to company registrations in Kyiv.

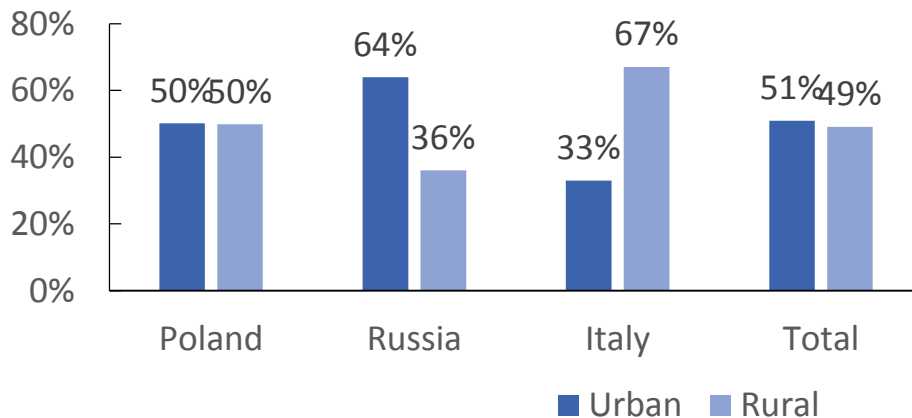
Gender pattern in destination decisions of migrants

Destinations by gender in 2017



Source: Ukrstat, LFS 2017

Destinations by geographic origin in 2017

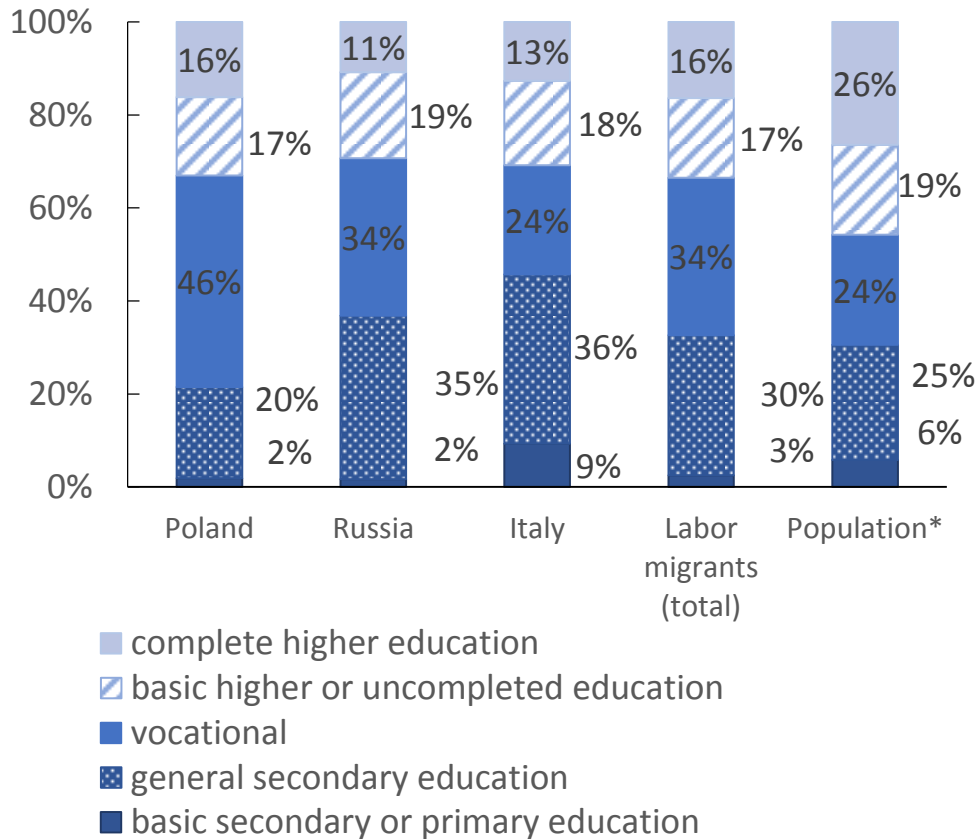


Source: Ukrstat, LFS 2017

- Men account for more than 2/3 of all migrants.
- The gender distribution in Poland is similar to the overall distribution, whereas Russia has more men (83 percent) and Italy has more women (71 percent; many work as caregivers).
- Overall, the rural-vs-urban distribution of the migrant population is evenly balanced.
- Russia has more urban immigrants (64 percent), whereas Italy has more immigrants from rural background (67 percent).

Education level by destination country, 2017

Education of migrants in destination countries

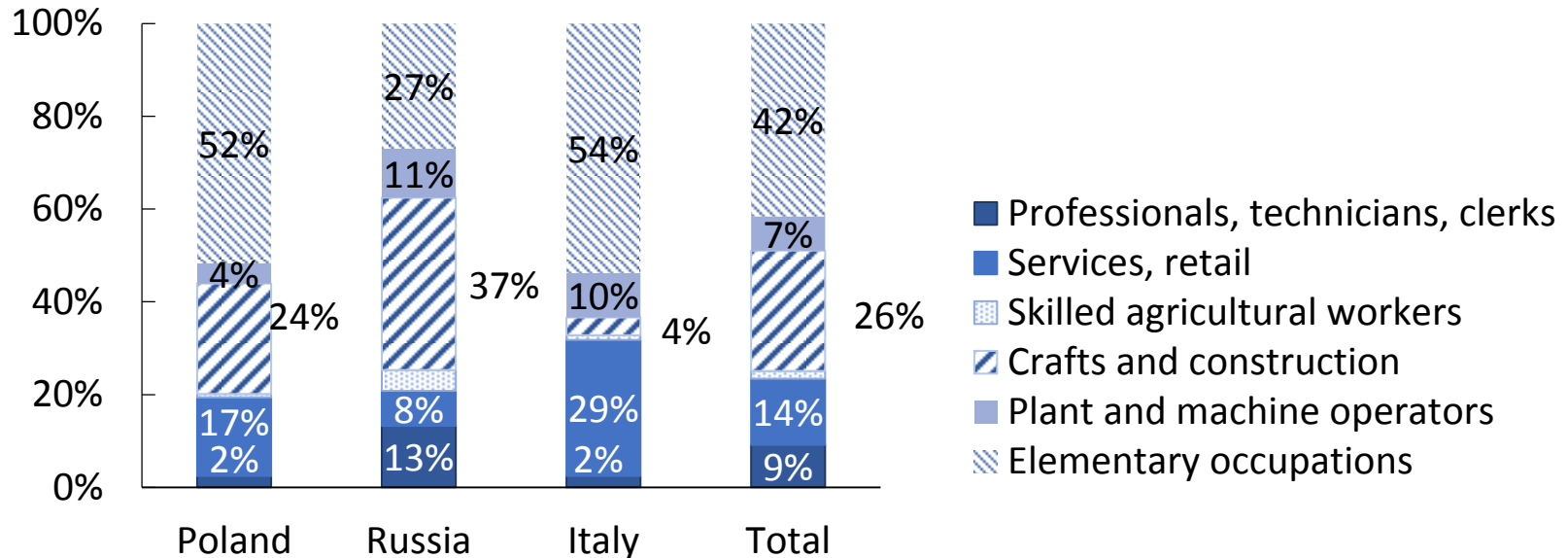


- Relative to the working-age population, migrants are less likely to be tertiary-educated, but more likely to have a vocational or upper secondary education.
- In particular, Poland attracts workers with a vocational education.
- With rising emigration to Poland, the reported shortages of industrial workers in Ukraine could become more pertinent.

* Population refers to working age population in Ukraine

Source: Ukrstat, LFS 2017 & "Economic Activity of Population 2017"

Migrants by occupation and destination country, 2017



Source: Ukrstat, LFS 2017. Note: "Professionals..." denote the most complex occupations, "Elementary occupations" include various simple tasks in service and agriculture sectors

- Poland: Mainly simple occupations, below-average share of crafts/construction
- Russia: Concentration in crafts/construction, highest share of professionals
- Italy: Most in simple occupations (including domestic and care work)
- This matches LFS statistics on "overeducation" in jobs not requiring any education:
 - 46% of migrants in PL, 56% in IT
 - Only 21% in RU
- Shift to EU caused by high wage differentials despite non-complex jobs?

2. Macroeconomic effects of migration and remittances

A wide variety of possible effects have been discussed in the literature; we focus on a limited number relevant for Ukraine:

- **Reduced domestic labor supply:** In a transition economy under restructuring, emigration tends to reduce unemployment and increase wages (possibly in particular labor market segments).
- **Higher domestic labor demand:** Remittances benefit not only the households that receive them (microeconomic effects: less poverty, higher expenditures on food/ health care/ education, etc.). They also raise **demand for (and the relative prices of) locally produced goods and services (“non-tradables”)**. As a result, remittances also raise domestic labor demand, wages, and employment.
- Remittances help to **finance the current account balance**.
- The **domestic financial system** may be strengthened by handling remittances which are typically transferred in foreign currency.

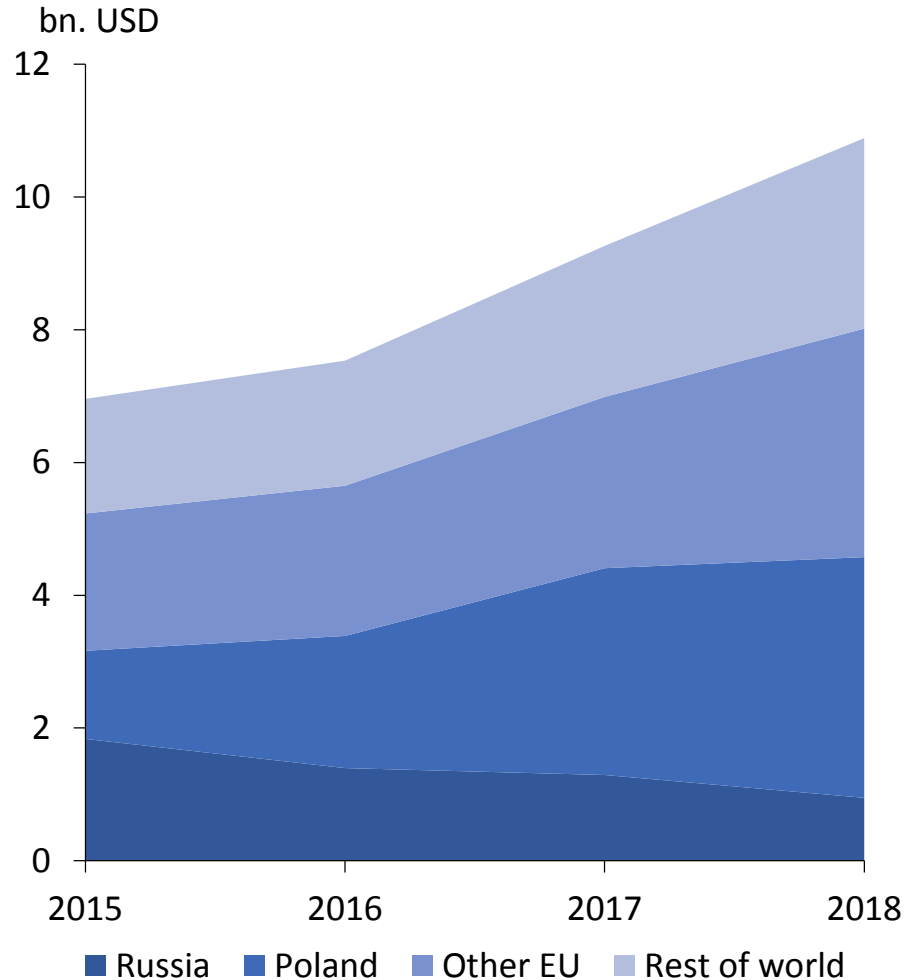
Remittances, wages, and the real exchange rate: How international competitiveness may be affected

- Ukrainians (like other recipients of remittances) spend migrant remittances not only on imports, but also on non-tradable goods and services.
- Higher demand leads to **higher prices for non-tradable goods and services (including wages) relative to tradables.**
- This implies a **real appreciation** of the Ukrainian currency: the prices of non-tradables in Ukraine's CPI increase (along with the CPI as a whole), while the prices of tradable goods and services and the nominal exchange remain broadly constant.
- Reduced labor supply through emigration may combine with higher labor demand by producers of non-tradables to produce labor shortages at prevailing wages. This may affect the **competitiveness of tradable goods industries.** If permanent, this will change the **sector structure** of the Ukrainian economy (similar to a **Dutch Disease** effect).

What if? Remittances-induced real appreciation and appropriate policy responses

- Remittances would need to be **large** to cause a real appreciation: typically, a rise in the CPI through higher prices for non-tradables while the nominal exchange rate remains constant. This is a price level effect similar to the Balassa-Samuelson effect in transition economies.
- A standard response by the central bank is to **accommodate the price level change** on top of the inflation target: “The appropriate policy response, therefore, is not to sterilize these flows, but to learn to live with them” (Ratha & Mohapatra, 2007)
- Next, we explore the relevance of these effects in Ukraine since 2014.

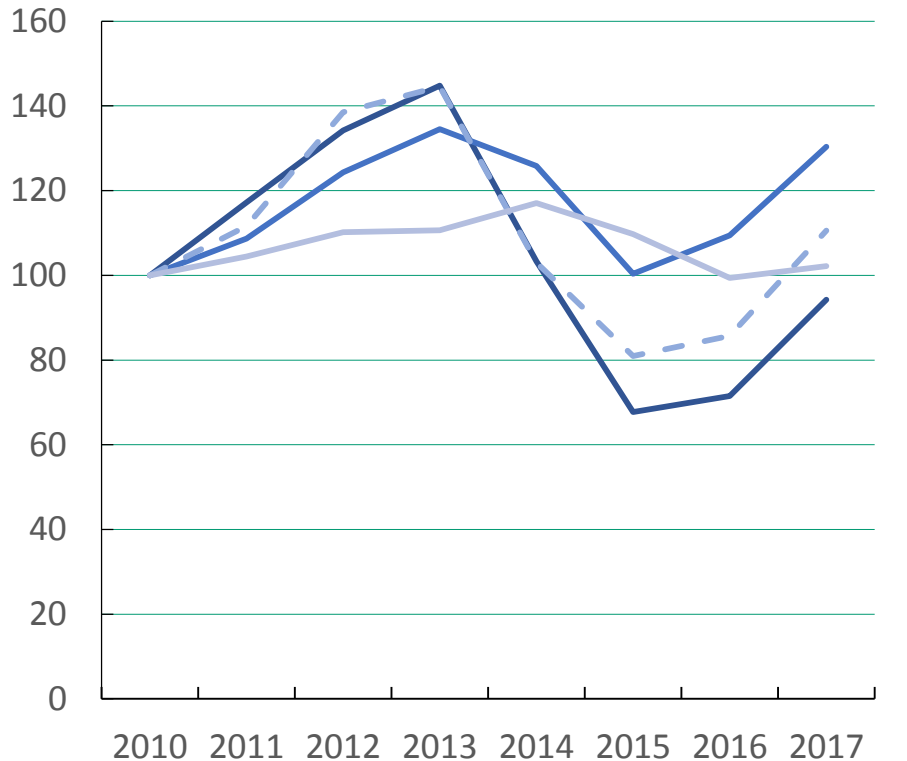
Net personal remittances by source countries



- The ratio of remittances to GDP was roughly constant at 8 percent from 2015 to 2018.
- Thus, remittances were a major source of foreign exchange earnings for Ukraine (the current account deficit was less than 3 percent in recent years).
- Poland has replaced Russia as the largest single source country, accounting for 1/3 of remittances in 2018.
- In total, EU member states now account for more than 2/3 of remittances.

Source: National Bank of Ukraine

Real wages and GDP per capita, 2010-2017

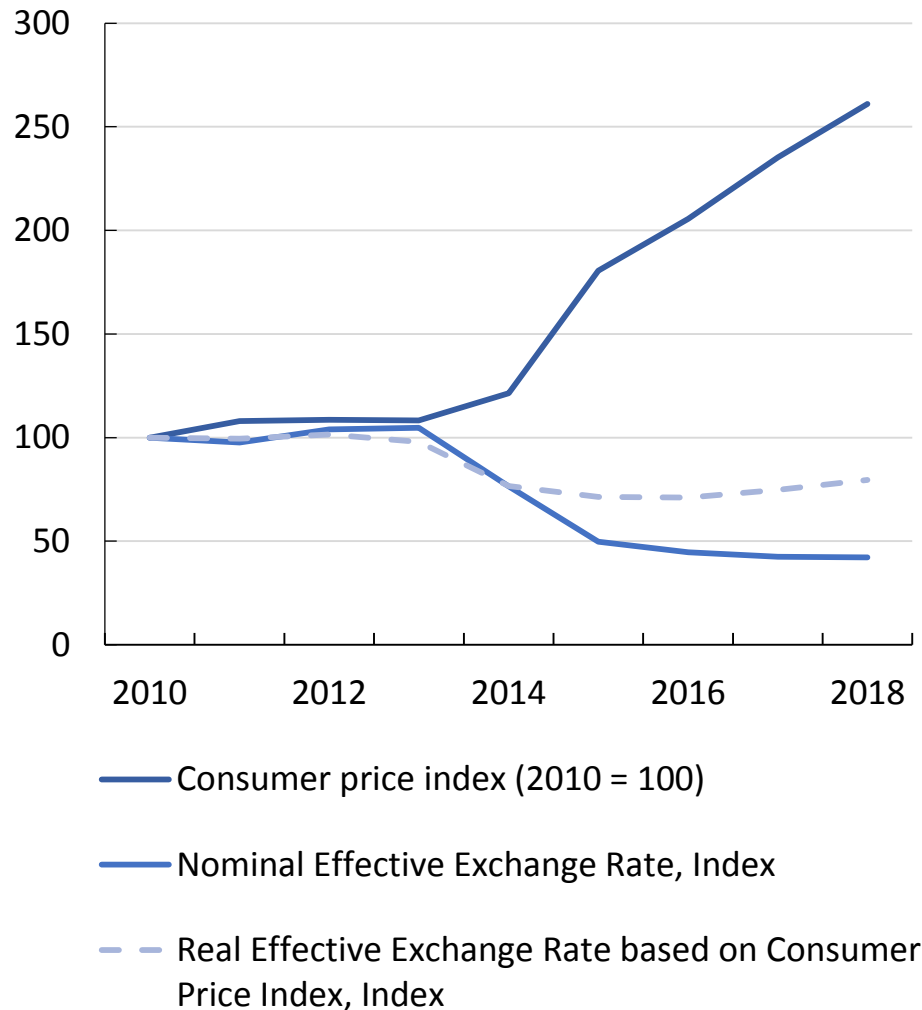


- Wages (US\$, at current Exchange Rates), Index (2010 = 100)
- Wages (2010 UAH), Index (2010 = 100)
- - - Wages (EURO, at current Exchange Rates), Index (2010 = 100)
- GDP per capita (2010 UAH), Index (2010 = 100)

Source: UNECE, IMF, State Statistics Service of Ukraine

- Wages grew rapidly until 2013, then collapsed due to the crisis and recovered from 2015 on.
- The CPI-adjusted real wage has recovered all the way to its previous maximum in 2013.
- By contrast, the wage in US\$ (an indicator of international competitiveness) was halved from 2013 to 2015 and is still far below its 2014 peak; the euro wage followed a similar pattern.
- While real wages have grown since 2015, the dollar and euro monthly wages suggests little threat to industrial competitiveness.

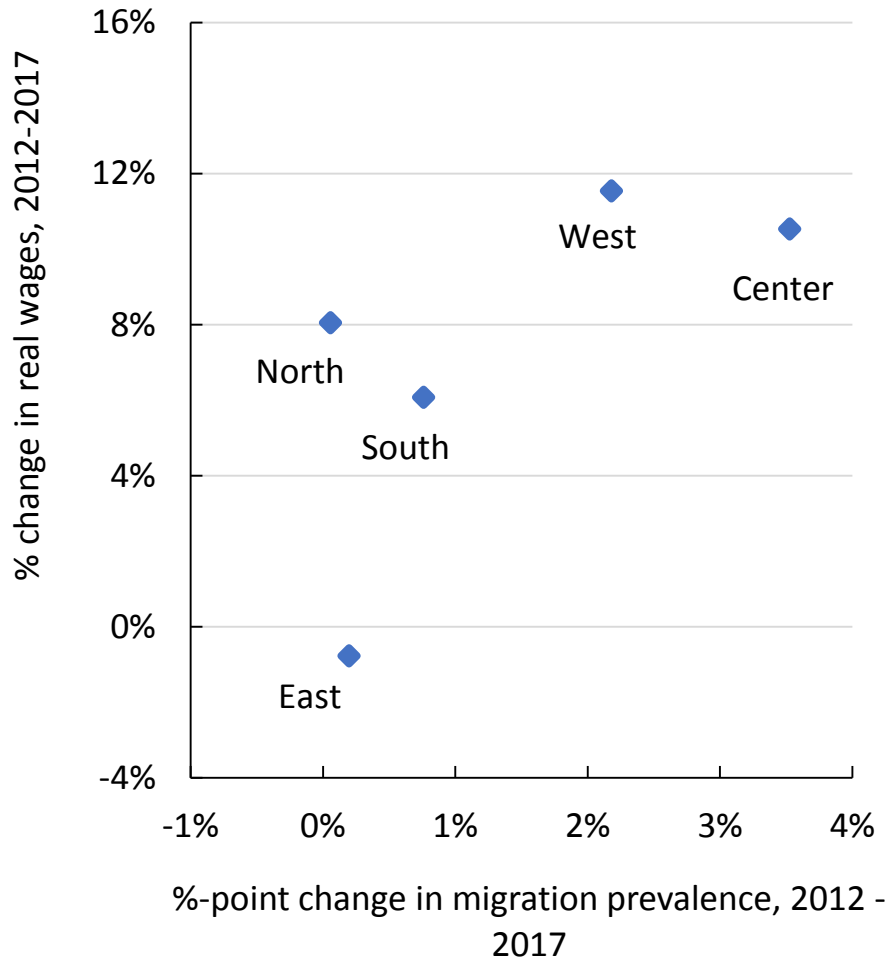
Nominal and real effective exchange rates, 2010-2018



- When the fixed exchange rate regime was abandoned in 2013, there was a large nominal and real depreciation until 2015. Since then, the real exchange rate as appreciated gradually, but remains far below its 2013 level.
- The slow real appreciation as part of the recovery from the severe crisis of 2014/2015 does not suggest a problematic decline in industrial competitiveness.

Source: International Monetary Fund, World Bank

Migration and real wage changes by economic region, 2012-2017



- Real wages have grown fastest in the two regions with the largest increase in migration prevalence.
- This observation is compatible with the hypothesis that emigration has led to higher wages.
- The modest increase in real wages, following a severe crisis, does not suggest a dangerous loss of industrial competitiveness.

Source: Ukrstat LFS 2012 & LFS 2017, National Bank of Ukraine

3. Insights and policy implications

- Working abroad sustains the **livelihoods** of at least 2 million Ukrainian migrants and their dependents. Many migrants are members of a household in Ukraine.
- Migrant remittances amount to 8 percent of GDP and provide a stable source of **foreign exchange earnings** for the Ukrainian economy.
- **Wages** have grown somewhat faster in those economic regions where migration prevalence has also grown the most. Yet, real wage growth since 2015 represents mostly a recovery from the 2014 economic crisis.
- When **measured in foreign currency, Ukrainian wages** are still far below their 2013 peak. It is unlikely, therefore, that the international competitiveness of Ukrainian industry has been affected much.

Policy implications

- EU countries now host up to 3 in 4 Ukrainian migrants and are the source of 2/3 of migrant remittances.
- Policies to harness migration and remittances for the development of Ukraine can be developed in cooperation with EU and member states:
 - Support migrants through access to consular services, employment services, portability of social insurance, etc.
 - Work to reduce the cost of sending remittances from the EU to Ukraine through formal channels (see World Bank/ G7 initiative).
 - Orient education systems in Ukraine towards Ukrainian as well as EU labour markets; work towards skill (vocational training) partnerships with EU and member states
 - Support migrant transnationalism, initiate Diaspora policies to involve permanent migrants in economic and social development in Ukraine (Jaroszewicz & Kaźmierkiewicz, 2014)

References

- Barajas, A. et al. (2016) What's Different about Monetary Policy Transmission in Remittance-Dependent Countries? IMF Working Paper 16/44. Available at: <https://www.imf.org/external/pubs/ft/wp/2016/wp1644.pdf>
- Jaroszewicz, M. and Kaźmierkiewicz, P. (2014) 'Does Ukraine Have a Policy on Emigration? Transcending the State-Centered Approach', Central and Eastern European Migration Review, 3(1), pp. 11–26. Available at: http://ceemr.uw.edu.pl/sites/default/files/CEEMR_Vol_3_No_1_Jaroszewicz_Kazmierczak_Does_Ukraine_Have_a_Policy_on_Emigration.pdf
- Ratha, D. and Mohapatra, S. (2007) Increasing the Macroeconomic Impact of Remittances on Development. Available at: http://dilipratha.com/index_files/G8Berlin.pdf.

Matthias Luecke

luecke@berlin-economics.com

David Saha

saha@berline-economics.com

German Advisory Group Ukraine

c/o BE Berlin Economics GmbH

Schillerstraße 59, 10627 Berlin

Tel: +49 30 / 20 61 34 64 0

www.beratergruppe-ukraine.de

Twitter: [@BerlinEconomics](https://twitter.com/BerlinEconomics)

Facebook: [@BE.Berlin.Economics](https://www.facebook.com/BE.Berlin.Economics)

Annex tables and backup slides

Ukrainian migrants by country of destination:

Detailed notes on data sources

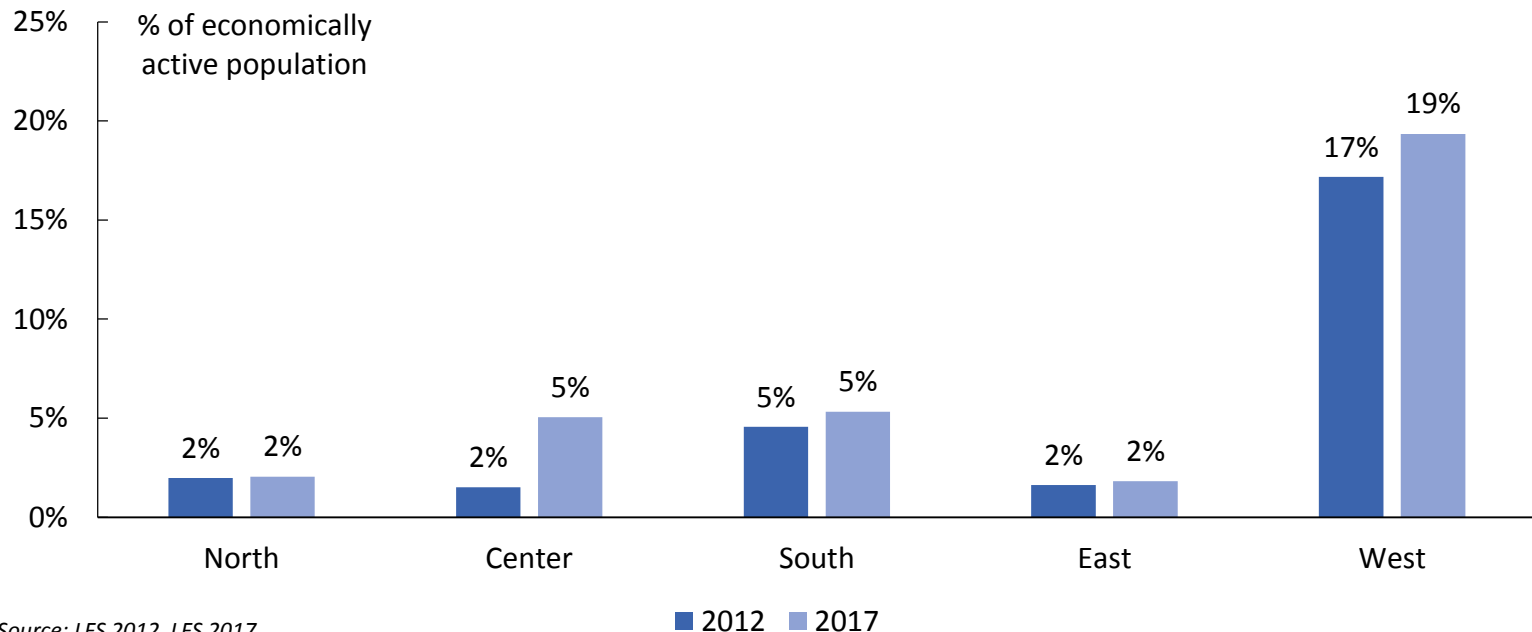
- World Bank (available for 2010, 2013, 2017)
 - Definition: International migrant stock is the number of people born in a country other than that in which they live. It also includes refugees
 - Link: <https://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data>
- Labor Force Survey special modules (available for 2007, 2012, 2017)
 - Definition: Migrant workers are persons, who either worked abroad or searched for a job abroad during the reference period of 2.5 years
 - Source: State statistic service of Ukraine
- Eurostat/ partner country data
 - Definition: Migrants are defined as people holding a valid residence permit on the reporting date 31st Dec each year
 - Link: <https://ec.europa.eu/eurostat/databrowser/view/tps00171/default/table?lang=en>

Remittances and the financial system

- Remittances are a **relatively stable foreign exchange inflow** and may increase the recipient country's creditworthiness (Ratha & Mohapatra, 2007)
- (Regular) remittances are transferred through commercial banks that receive foreign exchange while withdrawals may be predominantly in local currency. This **may help commercial banks to access international capital markets** (Ratha & Mohapatra, 2007)
- Some research (e.g. Bajasas et al., 2016) suggests that **commercial banks** in high-remittances countries **may hold relatively more liquid assets**, which may **weaken the transmission of monetary policy**. It has been suggested that high-remittances countries have been more likely, as a result, to adopt fixed or managed exchange rates.

Migrants by economic region of origin

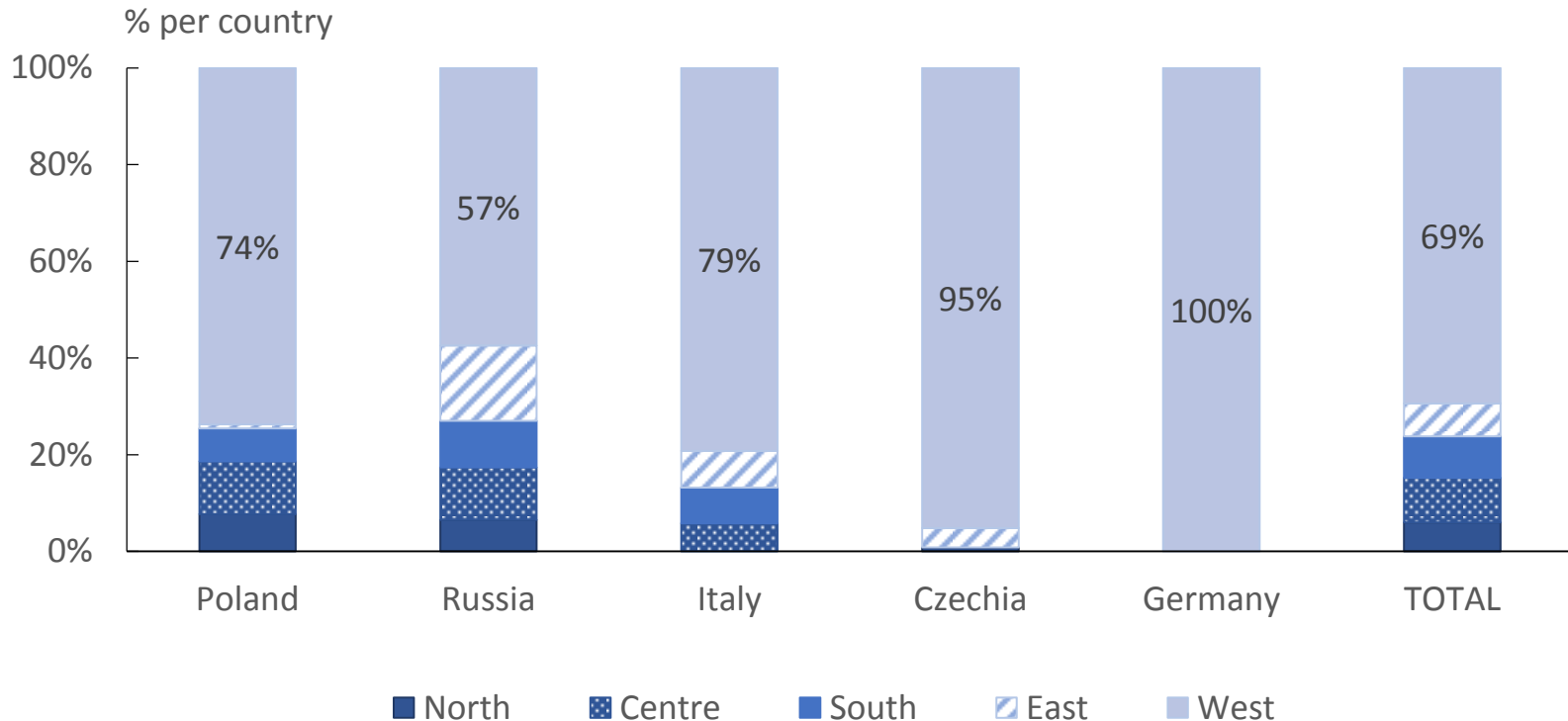
Migration prevalence by economic region
(percent of working-age population)



Emigration prevalence (migrants/ working age population) is highest in Western Ukraine, where the employment rate, gross output and wages are also the lowest.

Regional origin and destination countries in 2017

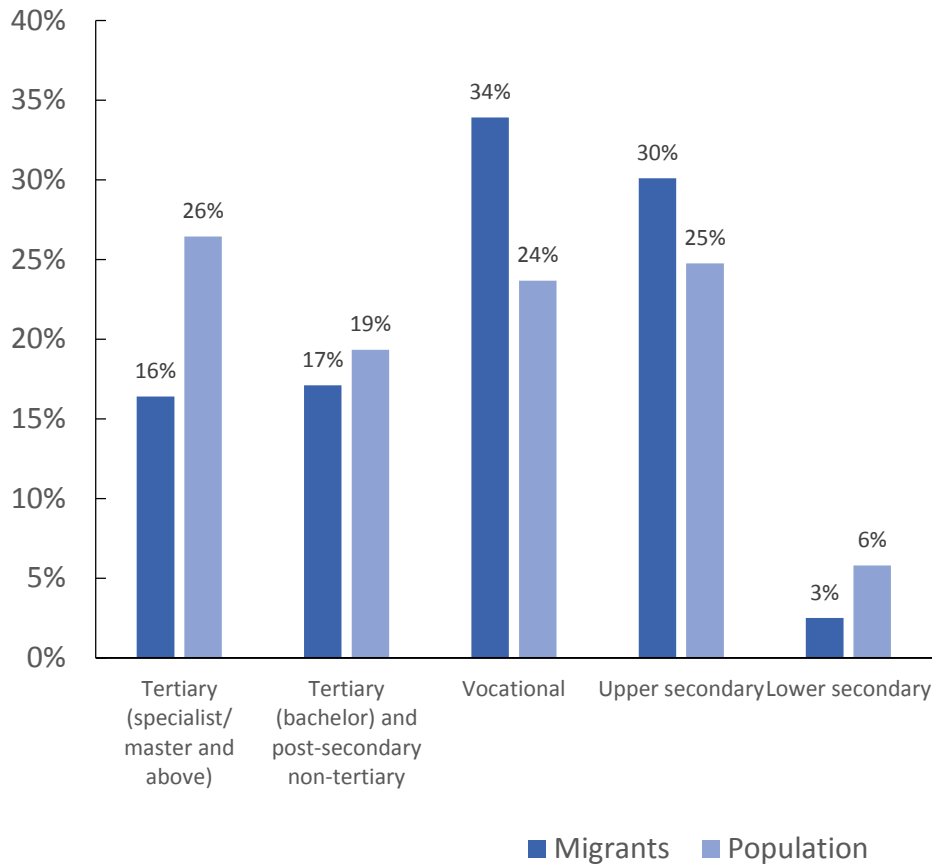
Who goes where? Origin regions and destination countries 2017



Source: Ukrstat, LFS 2017

Brain drain from Ukraine?

Education levels of emigrants vs. whole population

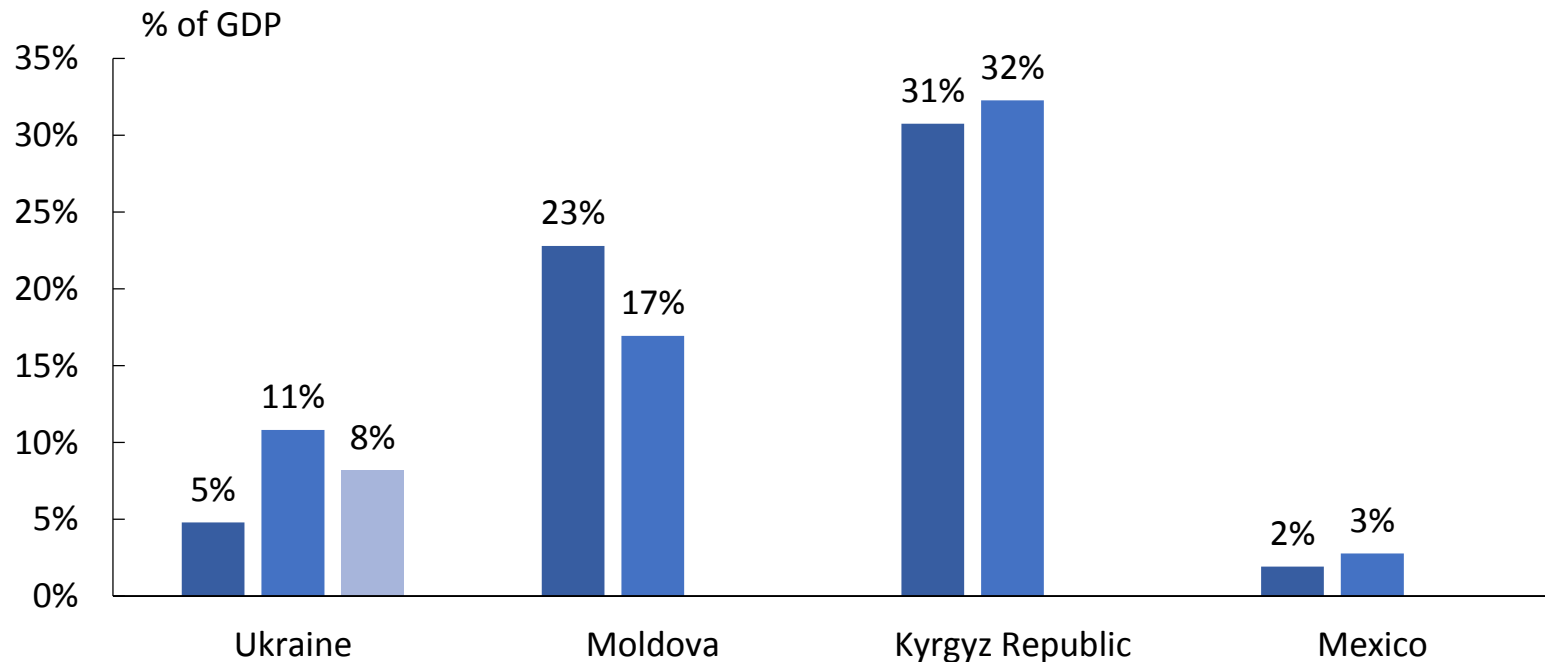


- Relative to the working-age population, migrants are less likely to be tertiary-educated, but more likely to have a vocational education.

Source: Ukrstat, LFS 2017 & "Economic Activity of Population 2017"

Remittances: an international comparison

Personal remittances: an international comparison (percent of GDP)



Source: Worldbank

■ 2012 ■ 2017 ■ NBU data