



TASKFORCOME: TRANSNATIONAL ACTION TO ADVANCE SKILLS AND  
COMPETENCES FOR COMMUNITY ENGAGEMENT AND SOCIAL MIGRANTS  
ENTREPRENEURSHIP INITIATIVES IN THE CENTRAL EUROPE

# NATIONAL LABOUR MARKET REPORT

---

POLAND - REPORT

AUTHOR: JAN BRZOZOWSKI, CRACOW  
UNIVERSITY OF ECONOMICS

Final Version  
August 2019

---





# INDEX

EXECUTIVE SUMMARY

GENERAL TRENDS ON POLISH AND MALOPOLSKA LABOUR MARKETS

OCCUPATIONAL TRENDS AND DEMAND FOR SKILLS

IMMIGRANTS ON POLISH AND MALOPOLSKA LABOUR MARKETS

ENTREPRENEURSHIP AND PUBLIC SUPPORT FOR ENTREPRENEURS

REFERENCES



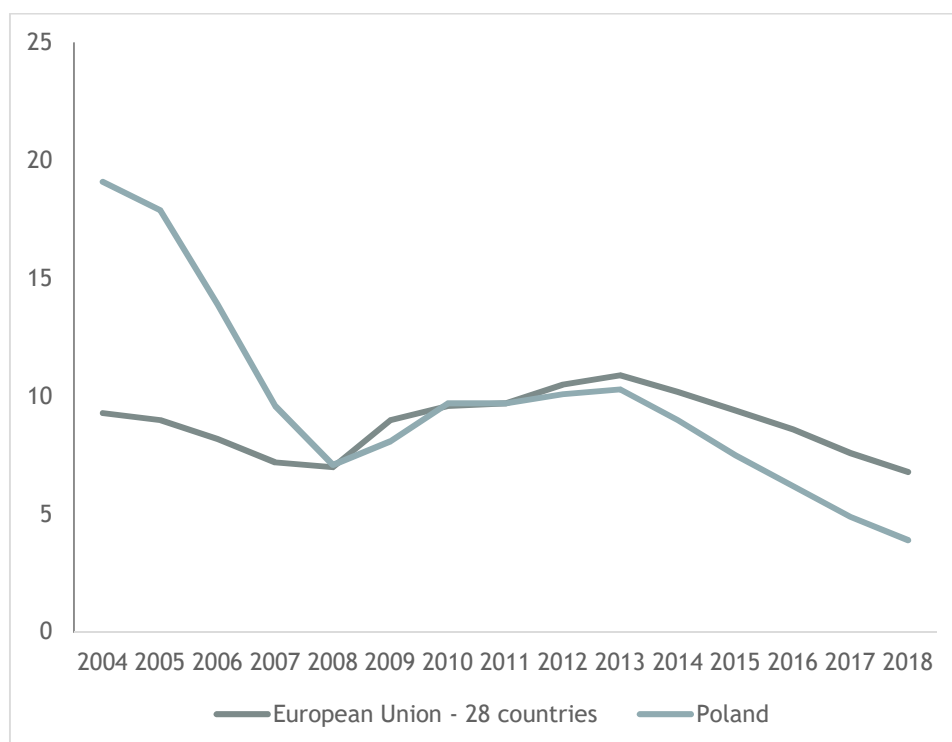
## 1. EXECUTIVE SUMMARY

Polish labour market has undergone significant changes in recent years. With continuous and dynamic economic growth in the last decade, the unemployment rates have dropped to historic low levels. The labour market has thus moved from “a market of employer” to a “market of employee”, in which there are visible shortages in most of the crucial sectors of the economy. These shortages are aggravated by demographic trends: Poland has lost ca. 1.3 migrants in the post-accession period (2004 onwards) and its becoming gradually affected by the ageing population problem. Thus, the political and economic crisis in Ukraine which has driven a large wave of immigrants to Poland has so far very positive effects on the economic levels. Ukrainian immigrants and other third country nationals to a great extent fill the most urgent vacancies on the Polish labour market, especially in the construction and transportation sectors. Albeit the entrepreneurial activities of migrants are still modest due to relatively short length of stay in Poland, the foreign business creation is already visible - between 2014 and 2018 there were 33.4 thousand new public limited companies founded with partial or total foreign ownership share. Additionally, according to ZUS registers, in September 2018 there were 17906 foreign-born individuals who were insured based on their entrepreneurial activity.

## 2. GENERAL TRENDS ON POLISH LABOUR MARKET

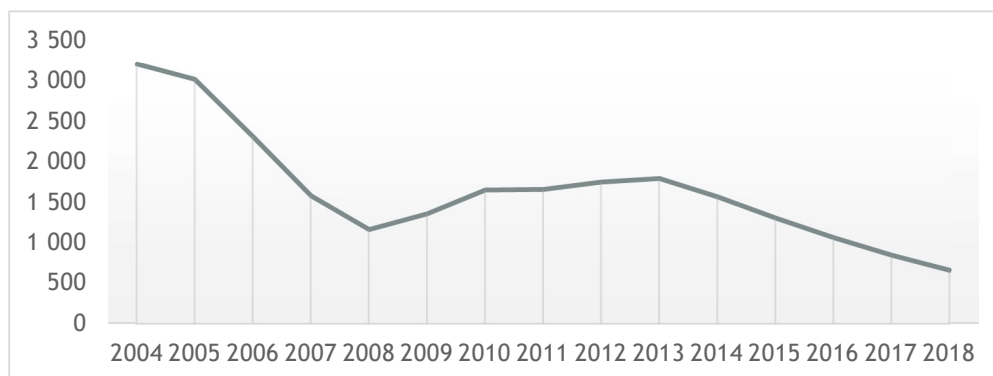
When Poland entered the EU, the situation on the labour market was characterized by structural imbalance inherited from the period of economic transformation on 1990s, in particular: oversupply of labour (Brzozowski & Kaczmarczyk, 2014). As the consequence, in 2004 the unemployment rate in Poland (19.1 per cent, cf. Figure 1) more than doubled the mean unemployment rate for the EU (9.3 per cent for current 28 member states, including the UK). The number of unemployed persons in 2004 was 3.2 million (Figure 2).

Figure 1. Unemployment rate in Poland (per cent)



Source: Eurostat (2019).

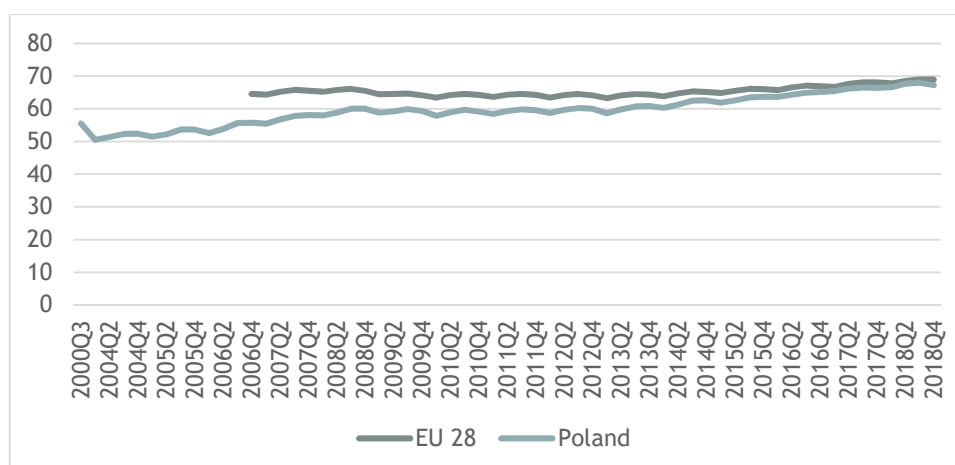
Figure 2. Unemployed persons in Poland (in 1000s)



Source: Eurostat (2019).

Still, in the following 15 years after the EU accession, Poland has experienced a period of dynamic economic growth which resulted in substantial employment growth. The employment rates in Poland, initially much below the EU28 mean, had gradually converged to the European levels (Figure 3).

Figure 3. Employment rate in Poland (per cent)



Source: Eurostat (2019).

Moreover, the accession to the EU has opened a new possibility of mobility to Polish citizens, who took the advantage of the opened labour markets in Europe<sup>1</sup>. As the consequence, the stock of Polish citizens residing temporary abroad in EU27 countries has increased from 750 thousand in 2004 to 2.1 million in 2017. Thus, the net outflow of ca. 1.4 million migrants in 2004-2017 period has additionally aggravated the situation on the Polish labour market, as most of those who moved to EU27 countries were relatively young and in productive age (GUS, 2018).

This process has additionally worsened Polish demographic prospects: in 2003 the number of population aged 19-24 was 3.945 million, while in 2015 it was only 2.835 million - a reduction by 1.1 million in just 13 years (GUS, 2015). This trend will aggravate in the upcoming years, as the predictions show a reduction of 20-24 population by additional 0.5 million till 2020 (as compared to 2014 (GUS, 2016)). The long-term implications could be very serious, as due to ageing population problem the working-age population might decline by 40 per cent by 2060 (OECD, 2018). In such a case, immigration could

---

<sup>1</sup> The full access to EU labour market was granted in a gradual way: first only the UK, Ireland and Sweden have fully opened their national labour market to Polish citizens (from 1<sup>st</sup> May 2004), while for instance Germany has lifted the restrictions only in 1<sup>st</sup> of May 2011.

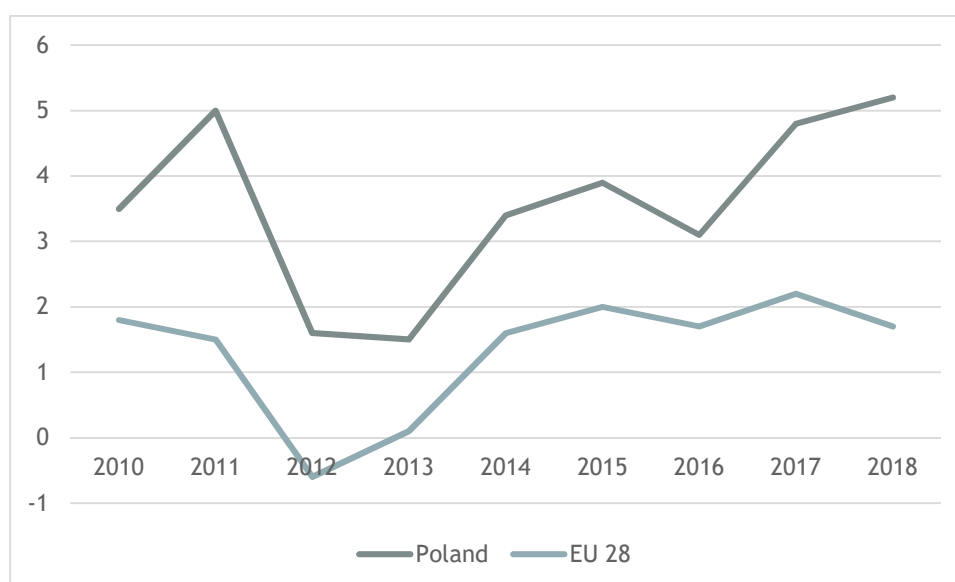
constitute one of the ways to overcome the problem of increasing labour shortages in the Polish economy.

### 3. OCCUPATIONAL TRENDS AND DEMAND FOR SKILLS

In the previous section we have already described a profound transformation of Polish labour market. The traditional (for the last 25 years of economic transformation) oversupply of employees and the stronger position of employers towards employees has been substituted by a shift toward a “market of the employee” - many employers report increasing problems when trying to fill job vacancies (Nagel, 2016; Praca.pl, 2016). Moreover, these changes are accompanied by the transformation from a migrant-sending to a migrant receiving country (see further sections of this report for more detailed analysis of migration trends).

Poland has experienced a very dynamic expansion of its GDP in the recent decade, much above the EU28 average (see Figure 4). But where these changes are more visible when it turns to sectoral employment?

Figure 4. GDP per capita annual change (per cent)



Source (OECD, 2019)

The table 1 shows that the employment creation would mostly occur in the ICT, Administrative activities (Nace sector N) and in transportation services.

Table 1. Sectors expected to have the strongest employment in Poland (2015-2025, per cent change)

No.	NACE Rev. 2		Change in %
1	J	Information& communication activities	25.97 %
2	N	Administrative & support activities	23.55 %
3	H	Transport & storage	23.30 %
4	F	Construction	14.61 %
5	L+M	Real estate, professional & related activities	11.06 %

Source: Cedefop (2018).



In terms of the projections for job opening, employment is expected to rise mostly in skilled (business & administration, healthcare) and semi-skilled professions (construction and agriculture).

Table 2. Projection of job openings by occupation for 2015-2025

No.	ISCO-08		Additional number of people needed
1	33	Business & administration associated professionals	473,457
2	71	Building & related trades workers	376,548
3	61	Skilled agricultural workers	343,858
4	24	Business & administration professionals	292,475
5	22	Health care professionals	223,166

Source: Cedefop (2018).

## 4. IMMIGRANTS ON POLISH AND MALOPOLSKA LABOUR MARKETS

### 4.1 Definitions and legal framework

According to the Statistics Poland (GUS), immigrants are defined as individuals coming from a foreign country with an aim to settle permanently or for a temporary stay. Immigrants belong to a wider category of foreigners, i.e. persons who do not have Polish citizenship (GUS 2019). In this sense, in the official statistics an immigrant is registered until the moment of naturalization and acquisition of Polish citizenship. So far the numbers of naturalizations were marginal: in 2002-2011 24.5 thousand persons received Polish citizenship, but in recent years with more intensive inflow of immigrants to Poland these numbers are rapidly increasing: in 2018 5.2 thousand persons have acquired Polish citizenship (Kacprzak, 2019).

This means that gradually the definitions and numbers in Polish official statistics and the common understanding of immigrant term in academic literature (where by immigrants we define foreign-born persons, or persons having at least one foreign-born parent) would diverge. Moreover, due to the facilitated cross-border movement of Ukrainians (non-visa regime for holders of biometric passports) and simplified procedure of employment which

includes the declaration on entrusting work to a foreigner (this procedure enables Polish employers to employ citizens of Armenia, Belarus, Georgia, Moldova, Russia and Ukraine for a period of maximum 6 months) the real numbers of immigrants in Poland are hard to estimate. For instance, official statistics on immigrants with valid documents (officially registered with temporary or permanent stay) is ca. 400 thousand in 2019 (UdSC, 2019). The statistics of Polish Social Insurance Institution (ZUS) show 609 thousand immigrants registered in the system of social insurance in March 2019. Finally, the registers of Ministry of Family, Work and Social Policy (MRPiPS, 2018) indicate 323 thousand work permits issued to foreigners in 2018 and 1.58 million declarations on entrusting work to a foreigner issued (MRPiPS, 2019)<sup>2</sup>. Consequently, the current (as for 2019) migrant population is estimated between 1 and 1.5 million persons, most of them coming from Ukraine.

Additionally, in Polish system there is an instrument called Pole's Card, which certifies the belonging to a Polish Nation, but does not equal with polish citizenship. It can be issued to a member of Polish Diaspora (originally to

---

<sup>2</sup> These declarations do not have to materialize in reality, i.e. not every declaration equals a migrant who really comes to work in Poland. According to estimates, the numbers of migrants employed within the simplified procedure (entrusting work to a foreigner) is between 60 to 70 per cent of the number of declarations issued. In this sense, the total number of migrants working under this regime should be estimated between 950 thousand and 1.1 million.

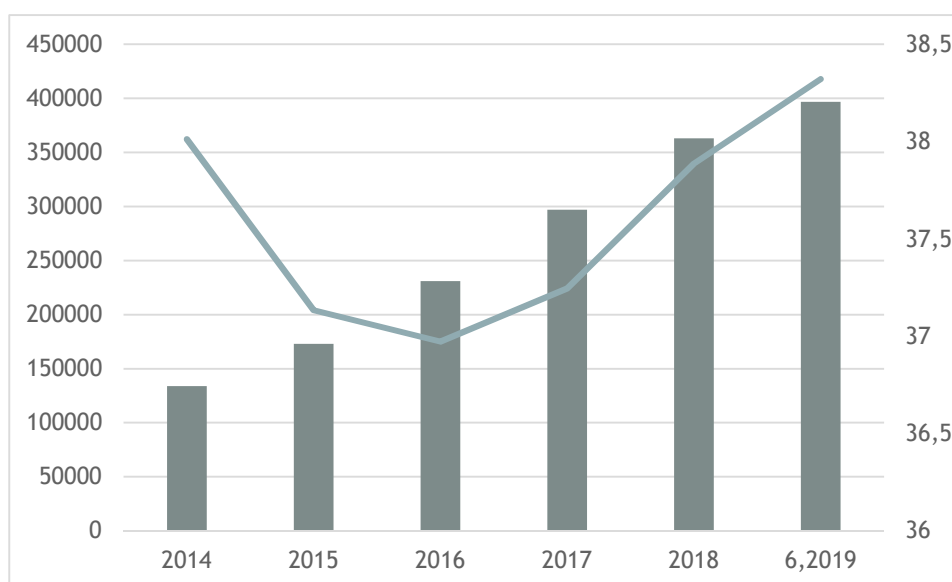
citizens of former USSR countries, now, from June 2019 - to all members of Polish Diaspora across the world) which can prove Polish ethnic origin and engagement in Polish cultural matters (for instance active role in Polish Diaspora organizations and some knowledge of Polish language). The document provides a set of privileges to a migrant, including free access to labour market (no employment permits are needed) and a full right to open a business activity (equally to the Polish citizens). Albeit having a Polish ethnic origin, Pole's Card holders are usually experiencing very similar problems in socio-economic situation as other immigrants with non-Polish ethnic origin. Therefore, in the Polish context we adopt a definition of a migrant who is: a) foreign-born (i.e. born outside the current country of residence) b) at least one of his/her parent is foreign-born c) at least one of his/her grandparent is foreign-born.

#### 4.2 Migrants on Polish labour market

Until 2015, Poland was mostly an emigration country, and the importance of immigration for national economy was marginal. The official statistics of UdSC (Office for Foreigners) indicate that in 2014 there were ca. 134 thousand foreigners with valid documents (temporary residence, permanent

etc.), which accounted for less than 0.5 % of a total population. Still, starting from 2015 these numbers have significantly increased, reaching 400 thousand in 2019. For the last 5 years the gender structure of foreigners in the country was relatively stable, with clear predominance of males (ca. 62-63 per cent).

Figure 5. Officially registered immigrants (valid documents) and females as % of all migrants



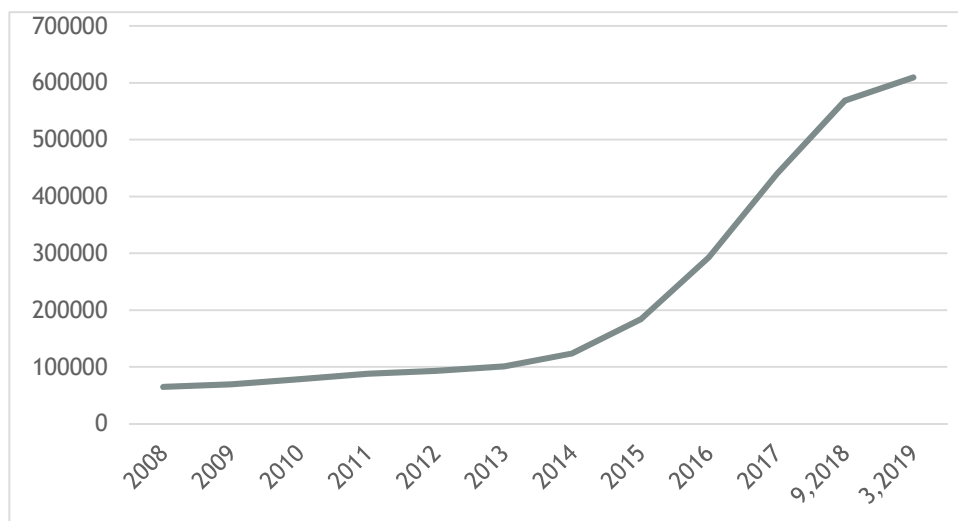
Source: UdSC (2019).

Still, the official statistics on residence do not capture the totality of migrant population in Poland, and the participation of this group in Polish labour market in particular. This is because there are alternative, more flexible modes of entry into national labour market than the residence permit, including the declaration on entrusting work to a foreigner (i.e. simplified

procedure - the description of this work regime is explained later in this report).

Therefore, the more accurate statistics on the migrant participation in Polish labour market is provided by ZUS (Polish Social Insurance Institution). This data includes only the legally registered individuals in Polish system of social insurance, therefore the migrants who work illegally are obviously not covered.

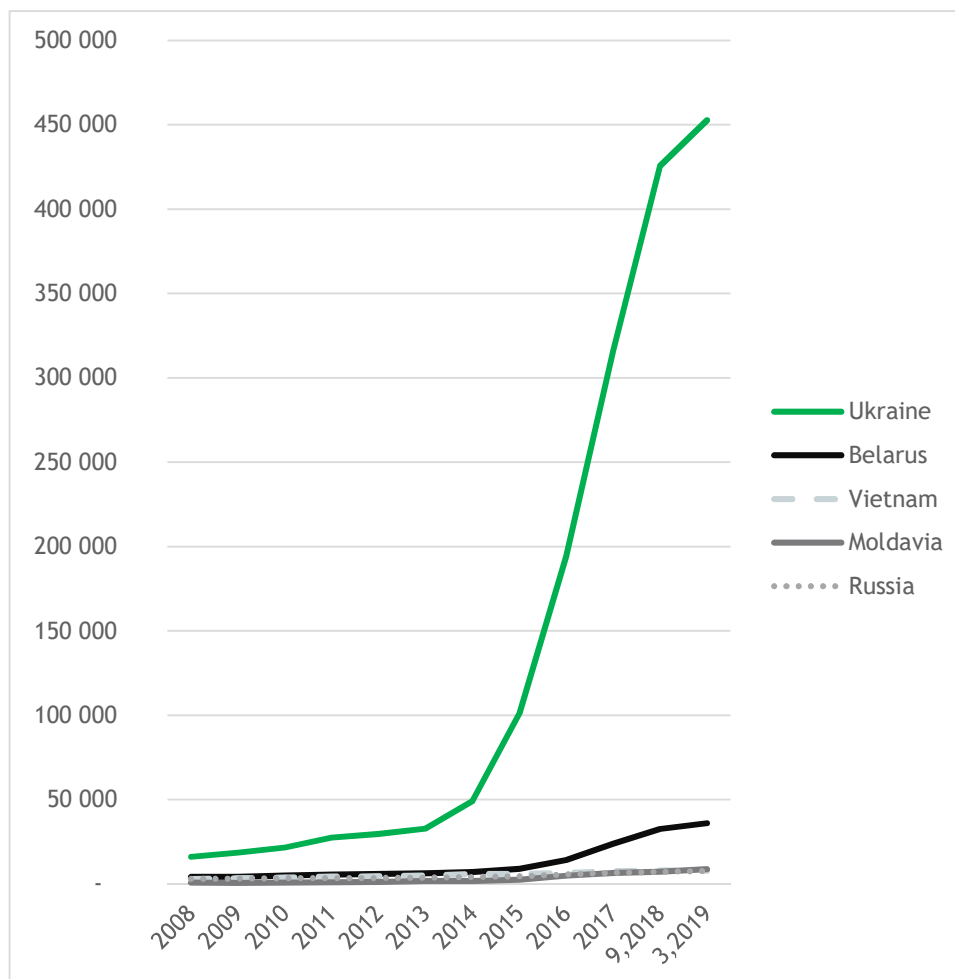
Figure 6. Immigrants (social insurance registration)



Source: ZUS (2019a,b).

The statistics provided by ZUS indicate a dramatic increment in the migrant population active on Polish labour market: these numbers have increased fivefold from 124 thousand in 2014 to 609 thousand in March 2019.

Figure 7. Immigrants (social insurance registration) by country of citizenship



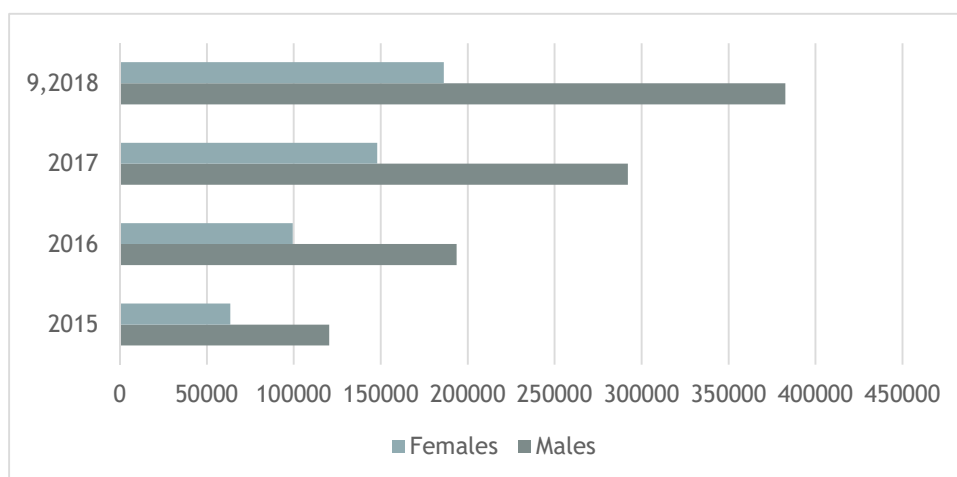
Source: ZUS (2019a,b).

The structure of migrant population by nationality clearly indicates, that this massive inflow of foreigners is caused by Ukrainians (and to some extent Byelorussians) who were driven to Poland by instable political and economic situation of the country following Euromaidan Revolution (2014) and Russian military interventions in Crimea and Donbas. As for March 2019, there were 452 thousand Ukrainian citizens registered in ZUS social security system (74

per cent of migrant population), followed by 36 thousand Byelorussians, 9 thousand Moldovans, and ca. 8 thousand Vietnamese and Russians (please note: we include only top 5 nationalities, while the share of other ethnic groups is rather marginal).

In terms of the gender structure of the migrant population on labour market, it is almost identical with the structure of foreign population with residence permits: there is a clear predominance of males, ranging from 65 to 67 per cent in 2015-2018 period.

Figure 7. Immigrants (social insurance registration) by gender



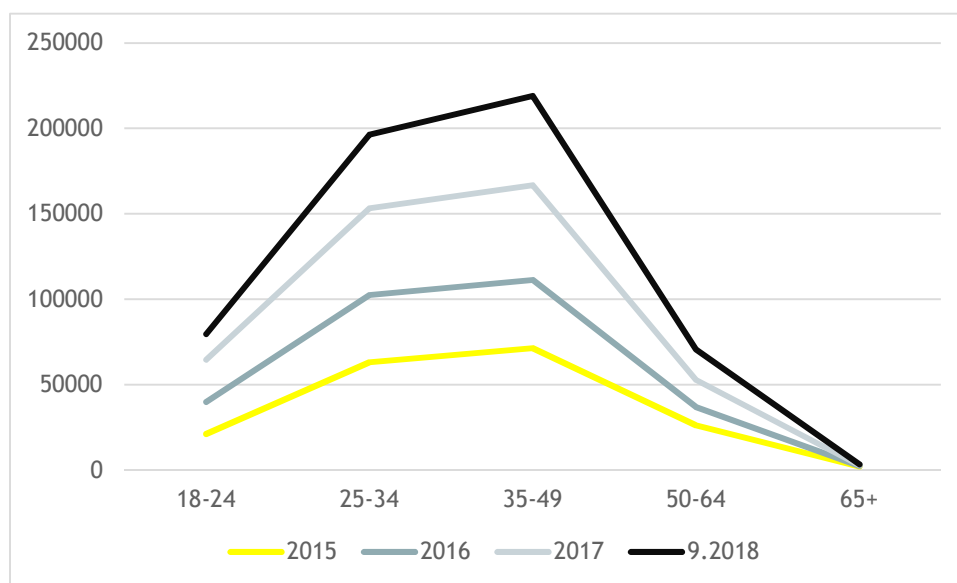
Source: ZUS (2019a,b).

The age composition of migrants in Poland is relatively young with predominance of 25-34 and 35-49 age groups. Thus, the age structure of this



population has an inverted U-shape, which is very relevant for the future entrepreneurial activity of migrants in Poland, as the relevant studies indicate that there is an inverted U-shaped relationship between age and the likelihood of being an entrepreneur (Lévesque & Minniti, 2011).

Figure 8. Immigrants (social insurance registration) by age groups

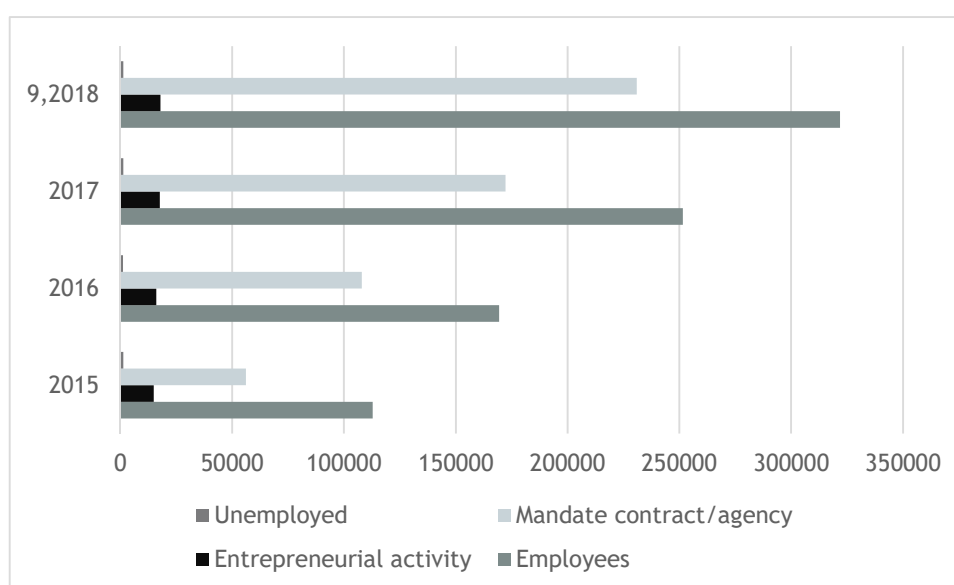


Source: ZUS (2019a,b).

Most of migrants who work in Poland have an employment contract (321 thousand in September 2018), but a considerable group is choosing a more flexible form of contract: mandate contract and agency work (subcontracting through intermediary job agencies - 230 thousand persons in 2018). In this second category, we find most of the foreign workers hired within the

declaration on entrusting work to a foreigner (i.e. simplified procedure), which enables Polish employers to employ citizens of Armenia, Belarus, Georgia, Moldova, Russia and Ukraine for a period of maximum 6 months.

Figure 9. Immigrants (social insurance registration) by employment status



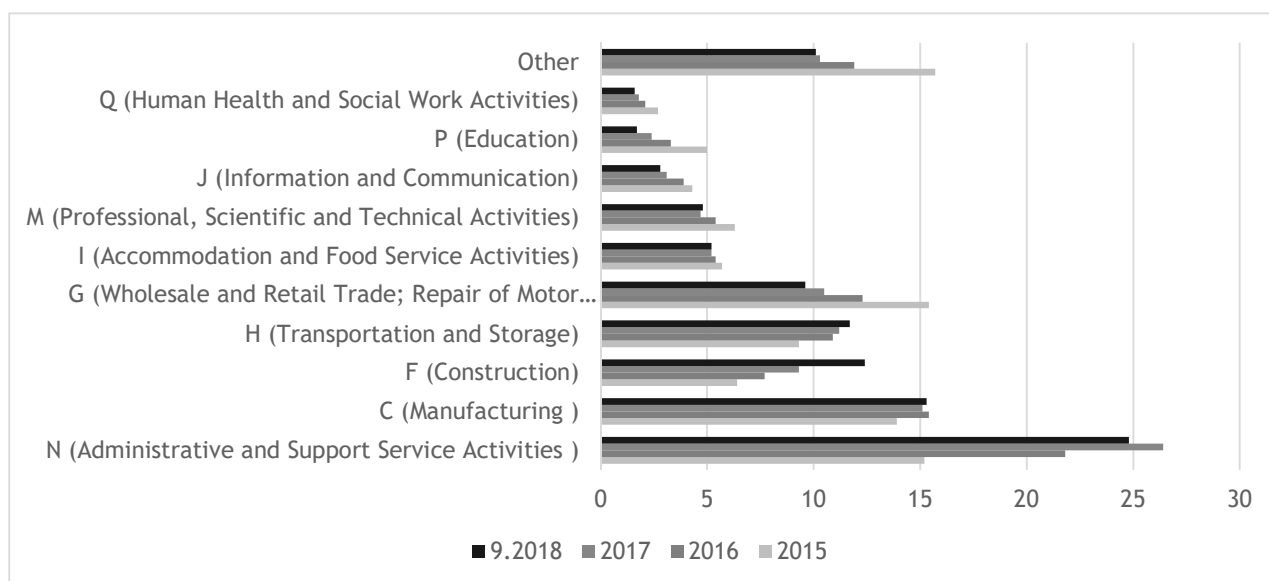
Source: ZUS (2019a,b).

Finally, there is ca. 18 thousand foreigners who have declared entrepreneurial activity and 1345 registered unemployed individuals. However, please note that the aforementioned categories can be combined: the same person can have an employment contract and conduct entrepreneurial activity at the same time.

### 4.3 Migrants by the sector of economic activity

In terms of the sectoral occupation, most of the migrants are employed within sector N (Administrative and Support Service Activities, see Figure 10). This is mostly because most of temporary employment agencies are registered in this sector. It includes usually unskilled and semi-skilled occupation in wholesale and detailed trade, cleaning services etc.

Figure 10. Immigrants (social insurance registration) by sector of activity (%)



Source: ZUS (2019a)

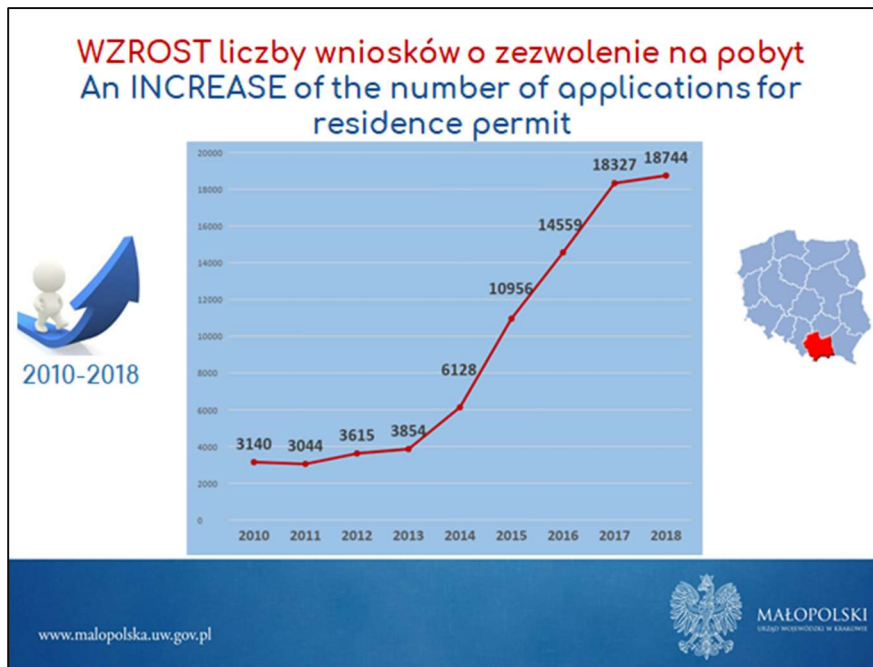
Migrants are also visible in Manufacturing sector and in the Construction and Transportation & Storage: moreover, in recent years the share of the employment in the last 2 sectors has significantly increased. Yet, relating to the demand for skills and employment creation by sectors (Section 3 of this

report), we can say that currently migrants are mostly employed in unskilled and semi-skilled professions, therefore mostly filling the vacancies that are unattractive to domestic workers. A worrying aspect is a marginal employment share of migrants in Human Health and Social Work Activities (1.6 per cent in September 2018): this could be both caused by the low wages and harsh working conditions (especially in the Public Healthcare system), but also due to a very difficult process of qualifications' recognition. For instance, doctors coming from third countries (outside the UE) have to undergo the nostrification process of their diplomas, pass a special public exam and undergo apprenticeship training before getting a formal consent for working as a medical doctor in Poland.

#### 4.4 Migrants in the Malopolska region

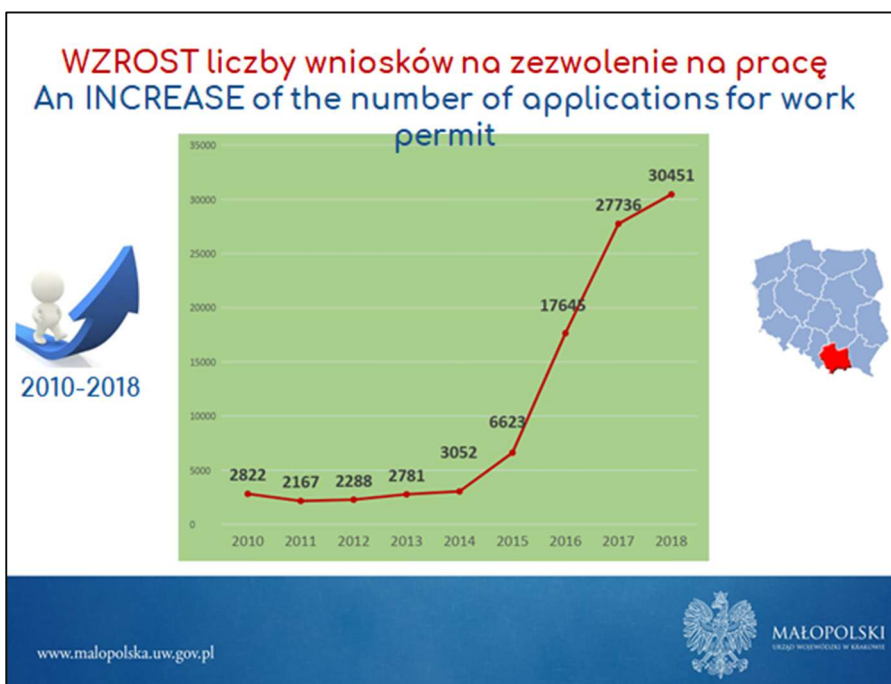
The number of migrant population in Malopolska is rising from 2014, which is both visible in the registers on the applications for the residence permit (6.1 thousand in 2014 to 18.7 thousand in 2018, see Figure 11) and in the statistics on the applications for the work permit (see Figure 12).

Figure 11. Number of applications for residence permit in Malopolska



Source: MUW (2019).

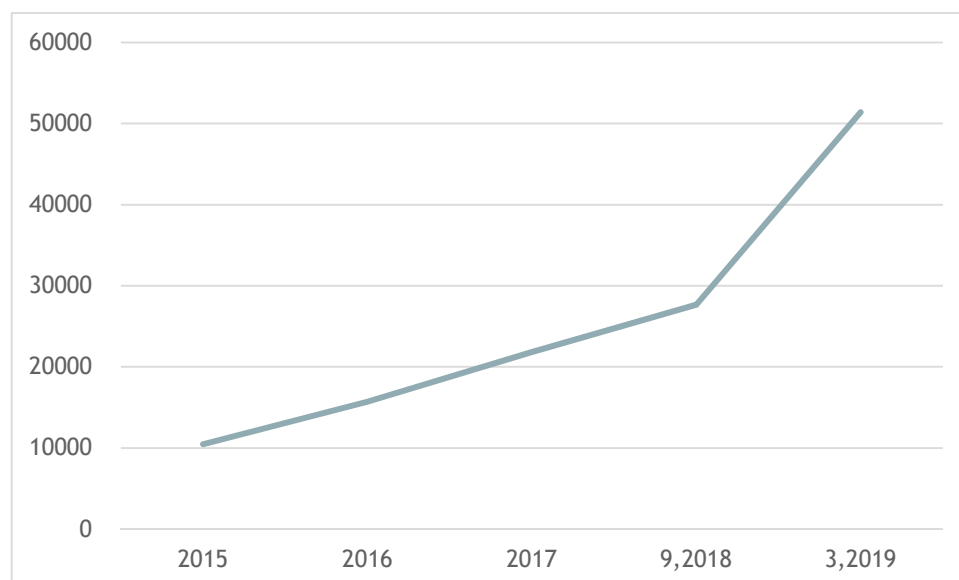
Figure 12. Number of applications for work permit in Malopolska



Source: MUW (2019)

In the case of officially registered migrants in Polish social security system, Malopolska has experienced a dramatic increase in the last six months. While in 2015 there were only 10.5 thousand migrants registered in ZUS, this number has increased to 27.7 thousand in September 2018 and then jumped to 51.4 thousand in March 2019. Still, this rapid increment should not be associated with the followed increase in migrant population: rather the migrants who have been working informally before 2019, now have turned to legal employment.

Figure 13. Immigrants in Malopolska (social insurance registration)

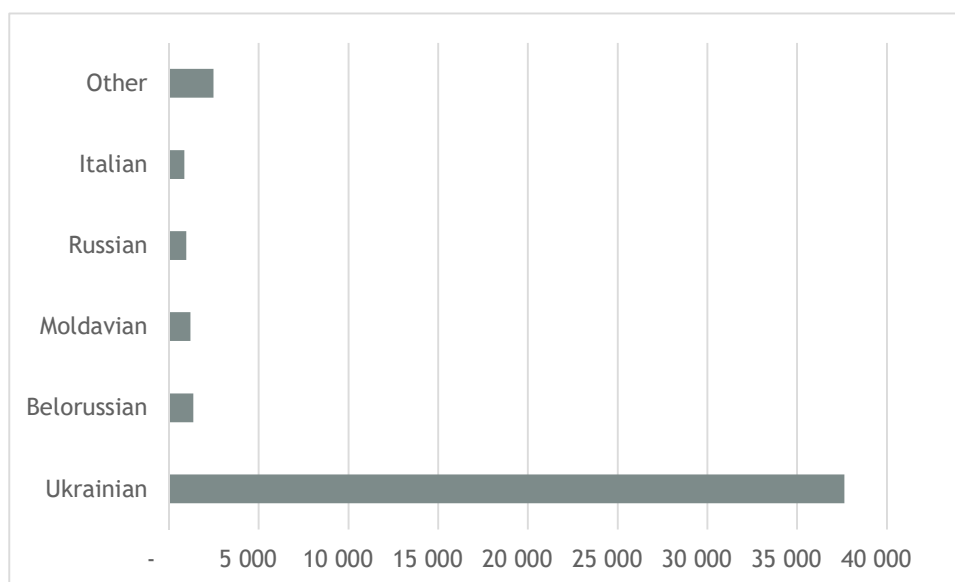


Source: ZUS (2019,a,b).

The structure of migrants registered in ZUS according to the foreign country citizenship resembles the national one: there is a clear predominance of

Ukrainians (37.6 thousand in March 2019, which accounts for 73 per cent of migrant population in the region), followed by the ex-USRR countries such as Belarus, Russia and Moldova. The only exception in this case is Italy, which could be explained by the rapid expansion of the B2B industry in Malopolska's capital - Kraków (many Italians are employed in business-to-business industry) and the engagement of Italian construction firms in the infrastructure projects in the region (Balice Airport, road DK47 from Rabka to Zakopane).

Figure 14. Main migrant groups in Malopolska by citizenship (March 2019)



Source: ZUS (2019b).

Yet, the real magnitude of migrant population in Malopolska is much bigger, but difficult to estimate as many of foreigners - especially Ukrainians - come

for a short-term (i.e. few months) stay, during which day work informally. According to Ukrainian Consulate in Kraków, in the capital of Malopolska alone the number of Ukrainian population is between 60 to 70 thousand (Kursa, 2018).

## 5. ENTREPRENEURSHIP AND PUBLIC SUPPORT FOR ENTREPRENEURS

According to OECD statistics, Poland is an entrepreneurial country, with self-employment rate at 20.3 per cent, i.e. much higher than the EU average (15.5 per cent, cf. OECD 2019). In this context, the self-employment rate of immigrants is very low (3.1 per cent) and much lower than the average rate for natives. This is a surprising finding, as in most of the cases in Northern America and Europe the self-employment rate of immigrants is higher than the one of the domestic population (Brzozowski, 2017). Yet, in the Polish context it is important to note that migration spell of most of foreigners staying in Poland is relatively short and most of them are relatively young, therefore - if the push and pull factors towards entrepreneurship among migrants follow the Western scenarios (Szarucki et al., 2017) - we should expect a rise of the entrepreneurial activities of migrants in the nearest future



## 5.1 Legal framework and definition of migrant entrepreneur

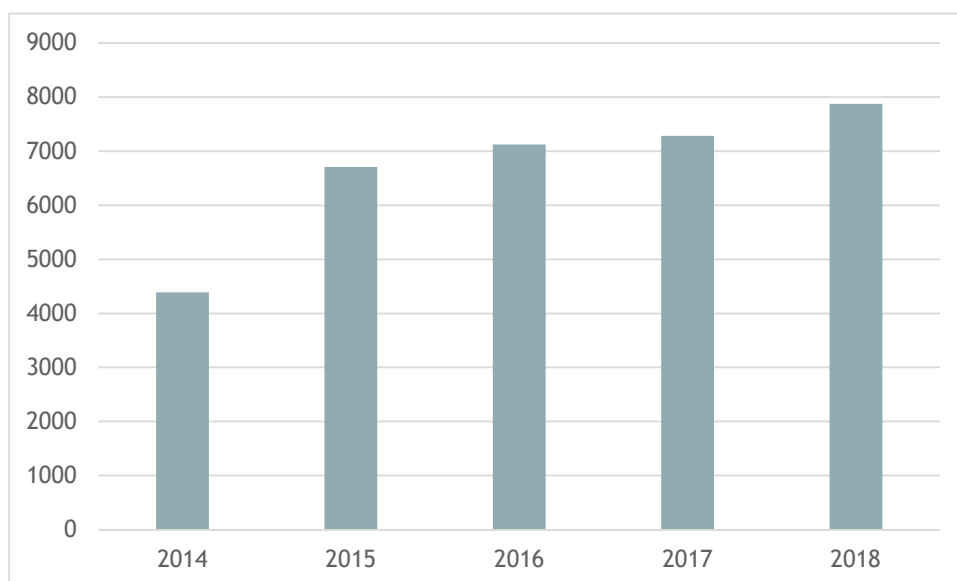
In the case of entrepreneurship, we adopt the following definition of an entrepreneur: " a person with managerial role (founder or co-owner of an enterprise), self-employed individual or person who intends to start a business". In the case of self-employed individuals, such business entity is restricted only to those foreigners in Poland who either have a Pole's Card, permanent residence status, or temporary residence permit for family member or temporary residence permit for student). Therefore, many migrants start businesses in Poland by creating limited liability companies, as the minimal capital needed to open such entity is just 5 thousand zloty (ca. 1250 €) or becoming partners in such a business.

## 5.2 Migrant entrepreneurs in Poland

According to ZUS registers, in September 2018 there were 17906 foreign-born individuals who were insured based on their entrepreneurial activity. This means that ca. 3.1 per cent of officially registered migrants in Polish social security system are entrepreneurs (ZUS, 2019b). However, entrepreneurs can choose other forms of entrepreneurial activity, including ownership and co-

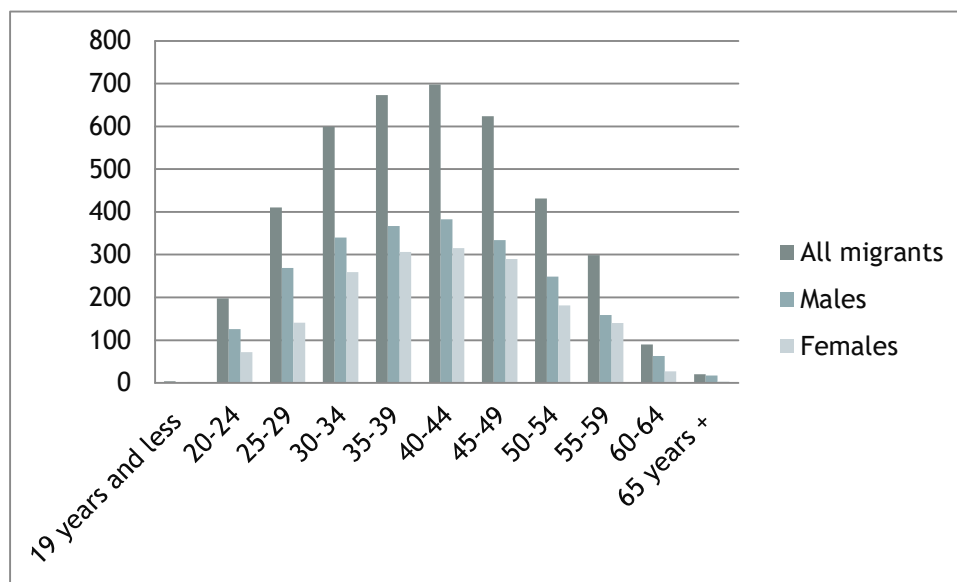
ownership of public liability companies. Between 2014 and 2018 there were 33.4 thousand new public limited companies founded with partial or total foreign ownership share (see Figure 15) - many of them are just migrant business, which take the advantage of the low capital threshold for creating such companies (5 thousand zloty - ca. 1250 €) .

Figure 15. New public limited companies with foreigner co-ownership (by year of foundation)



Source: COIG (2019).

Figure 16. Migrant entrepreneurs by age groups and gender



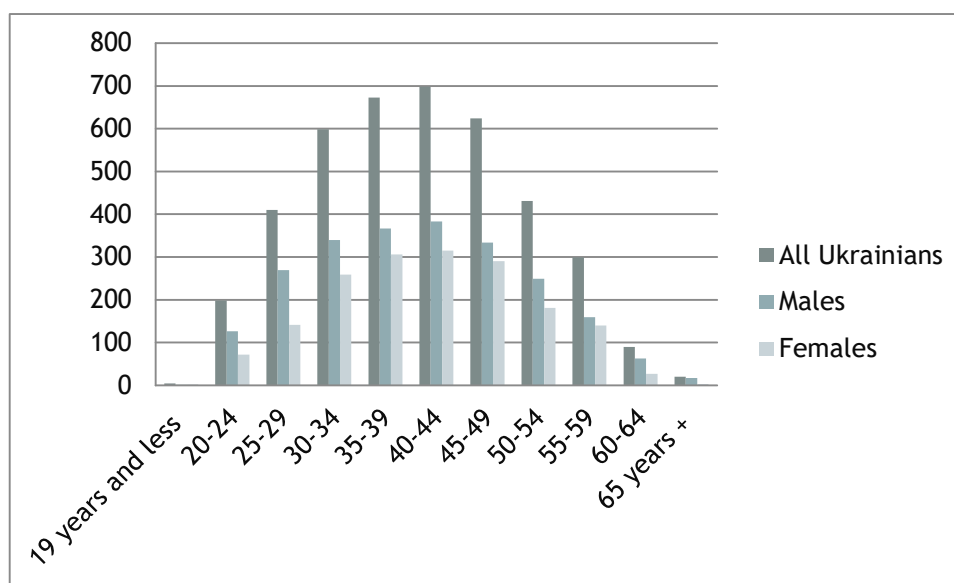
Source: ZUS (2019b).

In the case of self-employed entrepreneurs, there is a clear predominance of males (12899 individuals, 72 per cent) and their age structure resembles an inverted U-shape, which is in line with the trends and theories outlined in a previous section (see Figure 16).

When looking at the most visible group of migrants in Poland, we can see a surprising pattern: Ukrainians are much less entrepreneurial than other ethnic groups, with the self-employment rate at 1 per cent. The age structure of Ukrainian entrepreneurs in Poland resembles the structure of all migrant

entrepreneurs, but the gender ratio is more balanced as females constitute 43 per cent of entrepreneurs in this case.

Figure 17. Ukrainian entrepreneurs by age groups and gender



Source: ZUS (2019b).

### 5.3 Public support for entrepreneurship in Poland

Poland, due to the post-communist heritage has a specific entrepreneurial structure: out of 2 million firms in 2018, 96 per cent are micro-enterprises, mostly single-person businesses. This is because the history of entrepreneurial activity in the country was basically restarted in 1990s, and most of the firms have not reached a mature phase of development as their Western counterparts. Although their share in GDP creation is rather modest

(39 per cent in 2018), micro and small enterprises in Poland account for 31 per cent of total employment, maintaining 5 million jobs in 2018 (PARP 2018).

Polish system for entrepreneurial support is mostly managed through a national agency PARP - Polish Agency for Enterprise Development, which offers training, consultancy and financing programs mostly for SMEs. These programs are usually financed with national and EU funds. However, currently within PARP system there are no programs directed especially to migrant entrepreneurs. The migration policy in Poland is in the early stage of development and most of the programs targeted to immigrants are visible on regional and municipal levels (see our national report on public policies within Taskforcome project) and conducted with an active participation of the third sector and NGOs (see our national report on SE and CbSEs).

Still, the most recent GEM study on Poland conducted by PARP indicates that public support for entrepreneurship - according to the experts' assessment - is poorly developed, especially in the areas of public instruments such as incubators and entrepreneurial parks, but also in the area of entrepreneurial training, which is crucial to our Taskforcome project activities. Also the administrative and fiscal burdens were cited as the most important barriers

in the development of SMEs sector in Poland (GEM-PARP, 2017). Additionally, the planned increment in the social insurance contribution for self-employed persons (the minimal social contribution to ZUS for entrepreneur is expected to rise to 1400 zł, ca. 300 € per month in 2020) could be harmful to many small-scale entrepreneurs (Kijek, 2019), including many migrant businessmen.

## Literature:

Brzozowski, J. (2017). Immigrant Entrepreneurship and Economic Adaptation: A Critical Analysis. *Entrepreneurial Business and Economics Review*, 5(2), 159-176.

Brzozowski, J., & Kaczmarczyk, P. (2014). Konsekwencje migracji poakcesyjnych z Polski dla kompetencji zawodowych i kulturowych polskiego społeczeństwa. Ekspertyza Komitetu Badań nad Migracjami Polskiej Akademii Nauk: Warszawa.

Cedefop (2018). Mapping the landscape of online job vacancies Background report: Poland, CEDEFOP, available, <http://www.cedefop.europa.eu/en/events-and-projects/projects/big-data-analysis-online-vacancies/publications>

COIG (2019). Inwestorzy zagraniczni 2018, Centralny Ośrodek Informacji Gospodarczej, [https://www.coig.com.pl/inwestorzy-zagraniczni-2018\\_grudzien.php](https://www.coig.com.pl/inwestorzy-zagraniczni-2018_grudzien.php)

GEM-PARP (2017). Raport z badania Global Entrepreneurship Monitor - Polska. PARP: Polish Agency for Enterprise Development, Warsaw.

GUS (2015), Stan i struktura ludności według wieku w latach 1989 - 2015 [State and the structure of the population by age in 1989-2015] Główny Urząd Statystyczny/Central Statistical Office, Warsaw 2015  
<http://stat.gov.pl/obszary-tematyczne/ludnosc/ludnosc/struktura-ludnosci,16,1.html>

GUS (2016), Prognoza ludności rezydującej dla Polski na lata 2015 - 2050 [The forecast of resid-ing population in Poland for 2015-2050], Główny Urząd

Statystyczny/Central Statistical Office, Warsaw 2016,  
<http://stat.gov.pl/obszary-tematyczne/ludnosc/prognoza-ludnosci/prognoza-ludnosci-rezydujacej-dla-polski-na-lata-2015-2050,8,1.html>

GUS, (2018). Informacja o rozmiarach i kierunkach czasowej emigracji z Polski w latach 2004-2017 // Information on size and direction of temporary migration from Poland in years 2004-2017, GUS - Główny Urząd Statystyczny // Central Statistical Office, Warsaw.

GUS, (2019). Pojęcia stosowane w statystyce publicznej: imigranci  
<https://stat.gov.pl/metainformacje/slownik-pojec/pojecia-stosowane-w-statystyce-publicznej/1138,pojecie.html>

Kacprzak, I. (2019). Coraz trudniej dostać polskie obywatelstwo, "Rzeczpospolita", 15 February 2019,  
<https://www.rp.pl/Spoleczenstwo/302149884-Coraz-trudniej-dostac-polskie-obywatelstwo.html>

Kijek, Ł. (2019). Składki na ZUS mocno w górę. "Wielu małych przedsiębiorców pomyśli: Po cholere mi to!", 27 June 2019, Gazeta.pl,  
<http://next.gazeta.pl/next/7,151003,24941310,skladki-na-zus-mocno-w-gore-wielu-malych-przedsiębiorcow-pomysli.html>

Kursa, M. (2018)., Przybywa Ukraińców w Krakowie. Studiują, pracują, chcą się integrować. Gazeta Wyborcza, 7 April 2018.

Lévesque, M., & Minniti, M. (2011). Age matters: How demographics influence aggregate entrepreneurship. Strategic Entrepreneurship Journal, 5(3), 269-284.



MRPiPS, (2018). Informacja o zatrudnieniu cudzoziemców w Polsce // Information on employment of foreigners in Poland, Ministry of Family, Work and Social Policy, Warsaw: 2018.

MRPiPS, (2019). Liczba i struktura oświadczeń wpisanych do ewidencji przez powiatowe urzędy pracy w 2018 r. // Numbers and structure of declarations registered by local labour offices in 2018, Ministry of Family, Work and Social Policy, Warsaw: 2019, available at: <http://psz.praca.gov.pl/-/8180211-oswiadczenia-o-powierzeniu-wykonywania-pracy-cudzoziemcowi-wpisane-do-ewidencji-oswiadczen-obowiazujace-od-2018-r->

Nagel, K., (2016), Wybrane mierniki określające niedopasowanie kwalifikacji i umiejętności na przykładzie Polski [Selected indexes for measuring skills and qualifications mismatch: the case of Poland], Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, Nr 258/2016.

OECD, (2018). OECD Economic Surveys: Poland, OECD: Paris.

OECD, (2019). Self-employment rate, available at <https://data.oecd.org/emp/self-employment-rate.htm>

PARP (2018). Małe i średnie przedsiębiorstwa w Polsce 2018. PARP: Polish Agency for Enterprise Development, Warsaw.

Praca.pl, 2016, 8 Trendów rynku pracy w 2016 r. według praca.pl [8 main trends on the Labour market in 2016 according to praca.pl]; praca.pl 2016-01-12, [http://www.praca.pl/centrum-prasowe/komunikaty-prasowe/8-trendow-ryнку-pracy-w-2016-r-według-praca-pl\\_cp-1283.html](http://www.praca.pl/centrum-prasowe/komunikaty-prasowe/8-trendow-ryнку-pracy-w-2016-r-według-praca-pl_cp-1283.html)

Szarucki, M., Brzozowski, J., & Stankevičienė, J. (2016). Determinants of self-employment among Polish and Romanian immigrants in Germany. *Journal of Business Economics and Management*, 17(4), 598-612.

UdSC (2019). Statystyki migracji // Migration Statistics, available at: [migracje.gov.pl](http://migracje.gov.pl).

UdSC (2019). Statystyki migracji // Migration Statistics, available at: [migracje.gov.pl](http://migracje.gov.pl).

ZUS, (2019a). Cudzoziemcy w polskim systemie ubezpieczeń społecznych // Foreigners in a Polish System of Social Insurance, ZUS - Polish Social Insurance Institution, Statistics and Actuarial Forecasts Department, Warsaw 2019.

ZUS, (2019b). Number of insured persons who - in their notification for pension insurance reported nationality other than Polish by voivodeships. As of 31 March 2019, ZUS - Polish Social Insurance Institution, Statistics and Actuarial Forecasts Department, Warsaw 2019.