Thematic Assessment of Local Enterprises and Labour Markets in Eastern Ukraine

Ukraine

REPORT

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About REACH

REACH is a joint initiative of two international non-governmental organizations - ACTED and IMPACT Initiatives - and the UN Operational Satellite Applications Programme (UNOSAT). REACH's mission is to strengthen evidence-based decision making by aid actors through efficient data collection, management and analysis before, during and after an emergency. By doing so, REACH contributes to ensuring that communities affected by emergencies receive the support they need. All REACH activities are conducted in support to and within the framework of inter-agency aid coordination mechanisms. For more information please visit our website: www.reach-initiative.org. You can contact us directly at: geneva@reach-initiative.org and follow us on Twitter @REACH_info.

SUMMARY

As the conflict in eastern Ukraine approaches its third anniversary, almost **10,000 people have been killed[1], 23,000 injured, and 1.7 million displaced as a consequence of fighting**. In addition, 20,000 homes have been damaged, and the country's economy is struggling to cope with the disruption of conflict. Although the Ukrainian government and the armed groups operating in the east have agreed several ceasefires, the Organisation for Security and Cooperation in Europe (OSCE) reports **numerous ceasefire violations[2] on a daily basis**: shelling and small arms fire reportedly continue along the contact line separating the Government Controlled Area (GCA) from the Non-Government Controlled Area (NGCA). **Conflict has significantly affected the regional economy in the east**. Large areas of Ukraine's industrial heartland are now in the NGCAs; even in the GCA, supply chains, industrial infrastructure and trading networks have been disrupted by the conflict. Evidence shows that since the beginning of the conflict in 2014, **production has fallen, investment has plummeted and workforces have shrunk** across the country's five eastern oblasts[3].

Several United Nations (UN), non-governmental organisations (NGOs) and humanitarian donor agencies expressed interest in an assessment on the local economy and labour market in eastern Ukraine that could be used to inform medium-term recovery programming in support of sustainable livelihoods. With funding from European Civil Protection and Humanitarian Affairs Operations (ECHO) and the Office for US Foreign Disaster Assistance (OFDA), REACH conducted **a mixed-methods assessment collecting both qualitative and quantitative data from a range of sources** between December 2016 and March 2017. The assessment covered the five oblasts of Ukraine most seriously impacted by the conflict: **Donetsk, Luhansk, Dnipropetrovsk, Kharkiv, and Zaporizhia.** This assessment aims to understand **the impact of conflict on the economic situation in eastern Ukraine and its consequences for household wellbeing.**

Key findings from the assessment included:

a. Businesses are suffering from disrupted trade relationships and a lack of demand for products. Since the conflict began, **70% of assessed businesses have reported decreasing revenues**, and **workforces have shrunk in 24% of surveyed enterprises.**

b. Conflict has had a negative impact on employment security as almost **one-fifth of active households lost employment since the conflict began**. Additionally, **57% of households surveyed had difficulties meeting their essential needs**. The impact of conflict on individuals' employment varied between the oblasts, with Luhansk and Donetsk most impacted at the individual level.

c. Businesses assessed identified a **skills gap that makes recruitment difficult**. There is a lack of skills development because vocational training centres are not operating at pre-conflict levels, and access to university education is difficult for some students.

d. **Access to credit for businesses in the eastern oblasts is low**, with few banks willing to loan and interest rates consequently high. In addition, there is little foreign investment in the area. Facilities and production technologies are outdated and require significant investment to remain competitive.

Potential priorities for programming that emerged from the assessment included:

a. **Supporting skills-based training developed to address skills gaps identified by businesses** for un- or under-employed people in eastern Ukraine, **particularly older people (over 50s)**.

[1] OHCHR, 'Report on the human rights situation in Ukraine: August – November 2016' (Ukraine, 2016) http://www.ohchr.org/Documents/Countries/UA/UAReport16th_EN.pdf
[2] OSCE, 'Special Monitoring Mission to Ukraine: Status Report, 19 April 2017' (Ukraine, 2017) http://www.osce.org/special-monitoring-mission-to-ukraine/312386?download=true
[3] An oblast is an administrative division of Ukraine. The term is analogous to 'state' or 'province'.

b. **Improving access to credit for businesses and individuals**, particularly small and micro-enterprises, and individuals wishing to start businesses.

c. Assisting businesses with legal and regulatory issues to **accessing European and emerging markets** to diversify their markets following the loss of trade with Russia and the Commonwealth of Independent States.

Contents

List of Acronyms

CWG	Cash Working Group
ECHO	European Civil Protection and Humanitarian Aid Operations
GCA	Government-Controlled Area
GDP	Gross Domestic Product
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
FSL	Food Security and Livelihoods
IDP	Internally Displaced Person
ILO	International Labour Organisation
NGCA	Non-Government Controlled Area
NRC	Norwegian Refugee Council
OCHA	Office for Coordination of Humanitarian Affairs
OFDA	Office of US Foreign Disaster Assistance
PIN	People in Need
PPP	Purchasing Power Parity
SDR	Secondary Data Review
SSS	State Statistics Services
SME	Small / Medium Sized Enterprise
UN	United Nations
UNDP	United Nations Development Programme

Geographical Classifications and Key Definitions

Donbas	A region in eastern Ukraine based around the Donets River Basin and encompassing Donetsk and Luhansk Oblasts.
Income	Money that an individual or business receives in exchange for providing a good or service or through investing capital.
Livelihood	A livelihood is a means of making a living. It encompasses people's capabilities, assets, income and activities required to secure the necessities of life. A livelihood is sustainable when it enables people to cope with and recover from shocks and stresses (such as natural disasters and economic or social upheavals) and enhance their well-being and that of future generations without undermining the natural environment or resource base.[4]
Oblast	An oblast is an administrative division. It is the first level of administrative division, analogous to "state" or "province".
Raion	A raion is an administrative division. It is the second level of sub-regional administrative division, analogous to "district" or "commune".
Working age population	Members of the population who are between the ages of 18 and 59.

[4] International Federation of Red Cross and Red Crescent Societies, IFRC Guidelines for Livelihoods Programming (Geneva, 2010).

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1. INTRODUCTION

This section outlines the justification of the assessment, followed by the research context and the overall structure of the report.

In March 2015, the Ukrainian Government with support from the United Nations, World Bank and European Union published a Recovery and Peacebuilding Assessment[5] which analyzed the conflict impact and needs in the five eastern oblasts of Ukraine: Donetsk, Luhansk, Kharkiv, Dnipro and Zaporizhia. This assessment provided an overall picture of recovery needs for the conflict-affected areas of Ukraine using data available at the end of 2014. However, after three years of crisis, an updated analysis of the local economies and labour markets of the eastern regions of Ukraine was identified as a priority, following consultations with a more than a dozen partners in order to inform short to medium terms livelihood activities. In a context like Ukraine, it is important for humanitarian actors to get reliable field-level evidence on the needs of the labour force and local employees to inform livelihood programs.

In terms of additional research available[6], recent initiatives had a strong focus on humanitarian needs, especially in the oblasts of Donetsk and Luhansk. Looking at broader socio-economic needs in the east, the World Bank launched in the fourth quarter of 2016 a comprehensive assessment on key challenges facing local communities, IDPs and veterans. This assessment provided significant information on the humanitarian and economic difficulties of the eastern regions of Ukraine in terms of housing, employment and infrastructure. Overall, this research highlighted the significant loss of economic security at the household level in these regions. However due to the research objectives of assessing the overall socio-economic impact of the conflict, sampling strategies did not allow comparison between the different oblasts. Using pre-conflict population figures of more than 14 million people, the five eastern oblasts are larger in terms of population than 60% of the world's countries. The importance of understanding differences between these areas becomes critical to inform programming given the size of the region.

While significant state statistics data looking at economic outputs, migration and main industries is available, understanding the impact of the conflict on businesses and their employees was more challenging. For example, one key angle of this assessment was to identify if the economic situation deteriorated as communities move closer to the contact line[7], as well as, if that was the case, what were the elements that made the five eastern oblasts more vulnerable, and thus requiring special assistance from humanitarian and development actors. It is clear that local communities and displaced persons affected by the conflict are in need of humanitarian assistance. However, livelihoods interventions need to look at broader economic catchement areas to understand how the contact line has created significant hardship for economomies and communities who are unable to trade and move freely. While it is clear that these restrictions have negative consequences on the local economies of sustaining cities and villages in the east, empirical evidence disgaggregated at the oblast level was limited.

With funding from European Civil Protection and Humanitarian Affairs Operations (ECHO) and the Office for US Foreign Disaster Assistance (OFDA), REACH conducted a mixed-methods assessment collecting both qualitative and quantitative data from a range of sources between December 2016 and March 2017. The assessment covered the five oblasts of Ukraine most seriously impacted by the conflict: Donetsk, Luhansk, Dnipropetrovsk, Kharkiv and Zaporizhia. This assessment used a combination of secondary data review, face-to-face interviews with households and businesses, and Key Informant interviews (KIIs) as well as focus group discussions (FGDs) to provide a situation analysis on the overall business environment and the labour market after two and half years of conflict in Eastern Ukraine.

This assessment aims to inform livelihoods interventions supporting local enterprises and the working age population in eastern Ukraine by providing a comprehensive picture of their needs, as well as the barriers to

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[5] World Bank, Ukraine: Recovery and Peace-Building Assessment, Analysis of Crisis Impacts and Needs in Eastern Ukraine (March 2015).
[6] In total, REACH reviewed more than 40 documents as part of the Secondary Data Review (SDR) process.
[7] Line originally defined by the Minsk agreement separating the GCA and NGCA.

rebuilding the region's economy created by the conflict. The primary stakeholders and audience for this report are organisations with ongoing or planned livelihood programmes who require information on the issues facing enterprises and the labour force to identify interventions addressing the needs of local communities, as well as the small and medium enterprises (SMEs) and labour force participants who wish to understand the economic dynamics of the area in which they live and work.

This report provides a detailed description of the methodology and the assessment process, and then outlines the key assessment findings, organised into sections based around the original research questions.

2. Methodology

2.1 Overview

The assessment adopted a mixed-methodology approach to collect qualitative and quantitative data: household surveys of the working-age population, local enterprise surveys, Key Informant interviews (KIIs) with labour centres and universities, and Focus Group Discussions (FGDs) with representatives of the working-age population. REACH felt this methodology would develop the broadest possible picture of eastern Ukraine's economic situation, contextualising primary statistical data through qualitative information and triangulating findings through an extensive secondary data review.

Before primary data collection began, REACH conducted a secondary data review to identify information gaps and contextualise the data collected throughout the assessment. Primary data collection was conducted in December 2016 using a mixed-methods approach. For primary data collection at the individual and business survey level, the confidence interval and margin of error for statistical significance was 90% and 7%

Firstly, REACH teams conducted a business survey, holding interviews with 719 representatives of local enterprises representing the major sectors of the economy in the five oblasts covered: Donetsk, Luhansk, Dnipropetrovsk, Kharkiv and Zaporizhia. A household survey of the working-age population was also conducted, comprised of interviews with 719 active and inactive members of the labour force. A representative of a university and a labour centre in each of the five oblasts were identified and KIIs held with each representative, giving a total of 10 KIIs conducted as part of the assessment. Finally REACH teams held five FGDs with a total of 30 participants who represented the working-age population to explore some of the issues raised in individual face-to-face interviews. Further data was obtained through the State Statistics Service of Ukraine (SSS) to triangulate the findings of the REACH survey and to add context at a broader level wherever necessary.

Map 1. Map of survey geographical scope

2.2 Research Questions

The assessment was built around an analysis of different facets of economic activity in eastern Ukraine from the perspectives of labour market participants, business owners and representatives of institutions such as universities and labour centres. REACH developed seven key research questions, shown below:

1. How have local economic activity and supply chains been affected by the conflict?
2. How have the main sectors and activities changed since the conflict began?
3. Has access to financing for businesses, entrepreneurs and individuals changed since the beginning of the conflict?
4. How can institutions support the restoration of the local economy?
5. How has the demand for labour changed due to the decrease in economic output?
6. How has the working age population been affected by the economic disruption caused by the conflict?
7. How has the conflict affected skills development?

To explore each of these research questions, REACH developed a set of indicators to be measured through data collected during the assessment. The indicators and the method of collection for each indicator are shown in the table below.

Table 1. Research questions, indicators and data collection methods

Research Questions	Indicators	Data Collection Methods
How have local economic activity and supply chains been affected by the conflict?	% change in output since conflict began	State Statistics Service of Ukraine data review
	% change in firm revenues since conflict began	Business survey
	% of interviewed firms reporting supply chains disrupted by the conflict	Business survey
How have the main sectors and activities changed since the conflict began?	% of interviewed firms forced to diversify activities since conflict began	Business survey
	% change in production by sector	State Statistics Service of Ukraine data review
	% of firms reporting a change in competitiveness of the environment	Business survey
How has the demand for labour changed due to the decrease in economic output?	% change of number of staff in firms	Business survey
	% of interviewed firms who find it difficult to recruit the relevant skill-set	Business survey
Has access to financing for businesses and entrepreneurs changed since the beginning of the conflict?	% of interviewed firms who find it difficult to access credit	Business survey
How has the working age population been affected by the economic disruption caused by the conflict?	% of interviewed who lost their job due to the economic situation	Household survey
	% of interviewed who changed occupation in relation to the conflict	Household survey
	% of interviewed who migrated for economic reasons	Household survey
	% of interviewed who declare their salary does not cover household needs	Household survey
	% use of strategies to cope with reduced household income	Household survey
How has the conflict-affected skills development?	% of universities or training centres with reduced operational capacity	Key Informant interviews
	% change in enrolment levels	Key Informant interviews
	% change in completion levels% of interviewed firms sending staff to training centres	Business survey

How can institutions support the restoration of the local economy?	% of unemployed registered in labour centres	Household survey
	% of working age population who find labour centres effective in finding employment	Household survey
	% of interviewed firms reporting they employ staff sent from labour centres	Business survey
	% of unemployed interested in vocational training	Household survey
	% of unemployed who would be willing to open a business	Household survey

2.4 Timeline

The assessment planning, data collection, analysis and report drafting were conducted between November 2016 and March 2017.

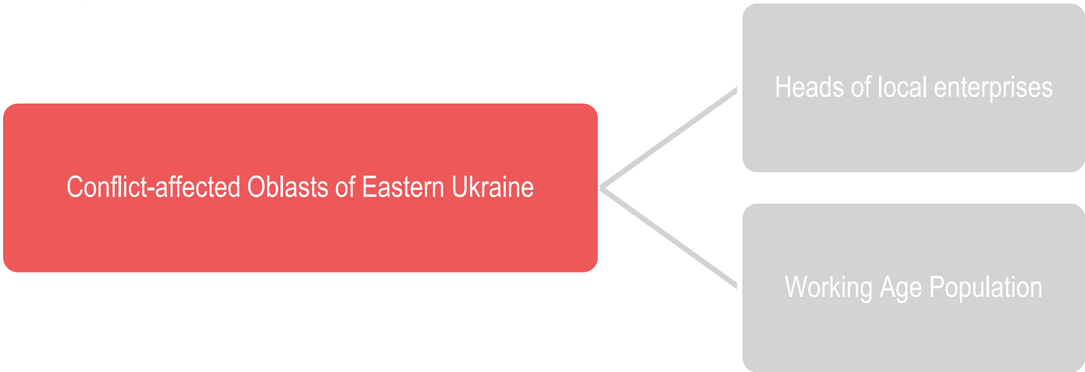
November 2016	• Consultations with NGOs and UN Agencies • Terms of Reference, tools designed and shared for feedback
December 2016	• Sampling consultations, planning and resource mobilization • Quantitative data collection conducted in second half of December
January 2017	• Data processing and data cleaning • Preliminary data analysis
Feb - March 2017	• Sharing of preliminary findings • Drafting of report • Presentation of findings

2.5 Population of Interest

The population of interest for this study are:

- Local heads of enterprises
- Local employees and job seekers
- Labour centres in each oblast
- Universities, vocational training centres, banks and trade unions

Figure 1. Target Population



Luhansk, Donetsk, Kharkiv, Dnipropetrovsk, and Zaporizhia Oblasts were selected for this research because they are the areas closest to the contact line and likely to be affected by the conflict. This choice has been cross-referenced against the operational priorities of government and aid agencies currently active in Ukraine.

2.6 Mixed-Methodology Data Collection

Secondary Data Review

REACH gathered material for the Secondary Data Review (SDR) from more than 36 sources including the UN, World Bank, and the State Statistics Service of Ukraine, amongst others. REACH also used SDR materials provided by ACAPS and materials obtained through consultations with partner agencies in Kyiv, Sloviansk and Severodonetsk.

Household Assessment

REACH designed the household assessment in consultation with agencies working in eastern Ukraine in order to collect data that would be useful for programmatic purposes. The objective of this assessment was to explore the set of research questions relating to the impact of conflict on individuals. It included direct questions on employment and salaries, more general questions related to the impact of conflict overall, and specific questions on vulnerabilities in terms of ability to meet essential needs.

Business Assessment

REACH developed a business survey conducted with 719 enterprises, incorporating the information needs of agencies working in the eastern area and exploring specific themes identified as relevant by the SDR. REACH conducted this separately to the household assessment in order to obtain perspectives on differing needs from both employers and employees.

Focus Group Discussions

Five FGDs were held to explore some of the more common issues raised in household assessment with groups representing community members. An FGD was conducted in each of the five oblasts assessed. In selecting participants, REACH considered gender and specific vulnerabilities to ensure all voices were heard. A snowball technique was used, with REACH first contacting household heads in each oblast who were interviewed during the household assessment and asking them to recommend further FGD participants. Each FGD had between four and seven participants.

Table 2. List of FGDs by oblast

Oblast	Number of Participants
Dnipropetrovsk	4
Donetsk	6
Kharkiv	7
Luhansk	7
Zaporizhia	6

	Total	**30**

Key Informant Interviews

REACH conducted 10 KIIs to gather institutional information, which was used both to give insight into the impact of conflict on universities and labour centres, and to triangulate data collected through FGDs, business surveys, and household surveys. Each oblast has one labour centre; REACH contacted the five centres and selected a senior member of staff as a KI. One university in each oblast was selected at random, and the dean or most senior member of staff available was chosen as a KI. This gave a total of 10 KI interviews: five with labour centre representatives and five with representatives of universities.

Table 3. List of key informant interviews

Oblast	Sector	Number
Dnipro	University	1
	Labour Centre	1
Donetsk	University	1
	Labour Centre	1
Kharkiv	University	1
	Labour Centre	1
Luhansk	University	1
	Labour Centre	1
Zaporizhia	University	1
	Labour Centre	1
	Total	**10**

Data was collected by 15 enumerators who had been trained and recruited for the Inter-Agency Vulnerability Assessment (IAVA) earlier in 2016, supported by additional enumerators recruited through partner agencies. In total, 48 enumerators participated in the survey. All enumerators received further training on the aims and methodology of this thematic assessment.

2.7 Sampling Strategy

Business Sector

REACH collected data from 719 local enterprises in total, divided into big, medium, small and micro enterprises in accordance with the Ukrainian government's size definitions, which are determined by gross income and number of employees[8].

Table 4: Number of businesses surveyed, by size

Size	Number of Enterprises	% of Enterprises Surveyed
Big	16	2.2%
Medium	93	12.9%
Small	189	26.3%
Micro	421	58.6%
Total	**719**	**100%**

[8] The Ukrainian government uses the following business size definitions:
- Micro-enterprise: less than 10 employees, gross annual income less than €2 million
- Small enterprise: less than 50 employees, gross annual income less than €10 million
- Medium-sized enterprise: less than 250 employees, gross annual income less than €50 million
- Large enterprise: More than 250 employees, gross annual income more than €50 million

Sampling was done at the oblast level, aiming to achieve a 90% confidence level with a 7% margin of error. The oblast-level sample size was weighted and allocated to each raion based on the number of enterprises per raion in proportion to the total number of enterprises in the oblast. REACH also disaggregated the sample by size of enterprise at the oblast level, as information on enterprise size at raion level was not available, and developed custom weightings for business size.

REACH used a combination of random and purposive sampling to select businesses for survey. Businesses were selected purposively from the settlements which had been randomly selected for individual household assessment (see 'Household Survey'). In the raions where there were no settlements randomly selected for individual assessments, teams selected businesses purposively at the administrative centre of the raion.

Weighting

Weighting was done at the oblast level using mixed proportional weights referring to the total number of enterprises by size within each oblast and the number of enterprises by size. This is used to enable aggregation of several sampling stratum for overall observations. The weighting scheme is shown below:

$$\omega_o = \frac{N_e/N}{n_e/n}$$

N_e – the number of enterprises by type per oblast

N – the total number of enterprises of the assessed region

n_e – the sample of the enterprises by type per oblast

n – total sample size

Table 5: Final weights for enterprises

Oblast	Big Facilities	Medium Facilities	Small Facilities	Micro/Private Facilities
Dnipropetrovsk	0.0257818	0.10150032	0.98701849	2.201899572
Donetsk	0.0131253	0.04588914	0.31002446	0.930844178
Zaporizhia	0.0079689	0.04855802	0.52522656	1.323259799
Luhansk	0.0028126	0.01427374	0.08360974	0.308112507
Kharkiv	0.0045704	0.07720477	0.93076201	2.48077949

Household Survey

REACH collected data from the working age population through an individual household survey. REACH used population records from datasets provided by the SSS, disaggregated at the city and city-type village level as of 31 December 2015. REACH supplemented the SSS data with information from Ukraine's most recent census, conducted in 2001, on villages and micro-villages. Population figures for Luhansk and Donetsk Oblasts were calculated based only on the government-controlled areas (GCA), excluding settlements from the non-government controlled area (NGCA) to the east of the contact line.

Taking the stratified random approach, REACH selected 200 settlements for the population frame using Sampling Design Tool for ArcGIS software. As an initial step, REACH mapped the settlements in the five oblasts, excluding the settlements located in the NGCA as described above. REACH then assigned each settlement a specific number of points determined by its population. The points were assigned random locations in each settlement and mapped. Finally, REACH used the Sampling Design Tool to randomly select points from the map in accordance with the number of samples required per oblast and obtained the administrative records for each of the selected points.

Weighting

Weighting was done at the oblast level using simple proportional weights that refer to the total population of each oblast. The weighting scheme is shown below:

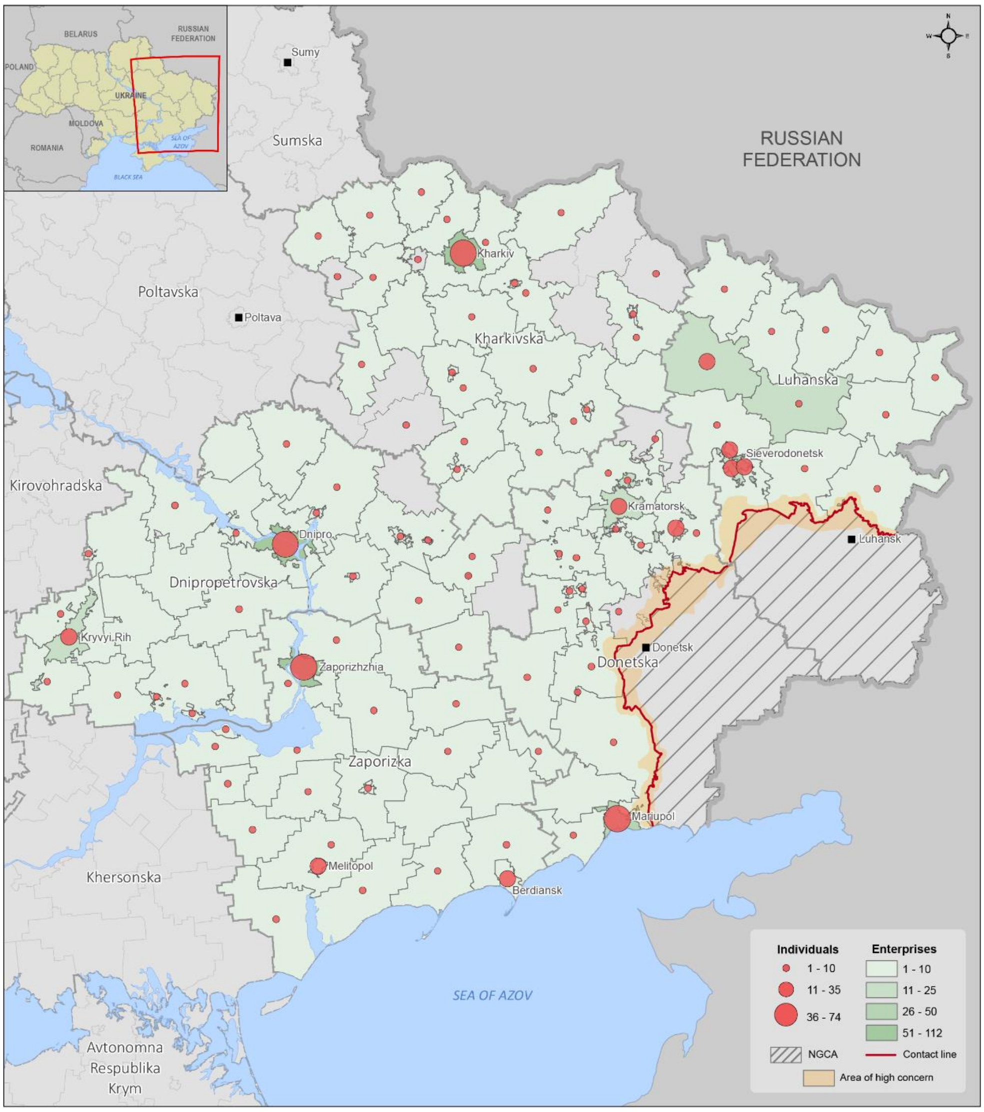
$$\omega_o = \frac{N_p/N}{n_p/n}$$

N_p – the population of the oblast
N – total population of the assessed region
n_p – the sample of the oblast
n – total sample size

Table 6: Final weights for working age population

Oblast Name	Weight
Dnipropetrovsk	1.615357146
Donetsk	0.953341232
Kharkiv	1.301909825
Luhansk	0.311017355
Zaporizhia	0.854713743

Map 2: Location of working-age population and enterprises surveyed



Limitations

The main limitations of this assessment are:

- For the enterprise survey, REACH used the Government of Ukraine's register for businesses which records registered businesses as opposed to active businesses. The assessment also drew from information on the number of businesses per raion provided by the State Statistics Service (SSS) of Ukraine. This dataset contained sufficient location information and did not include inactive businesses, but had not been updated since 31 December 2015.
- The sample for the working age population had to exclude settlements of less than 1,000 persons as per the SSS data because including these settlements meant visiting a very high number of settlements which was not possible given the resources available.
- Due to intense fighting during winter 2016, REACH did not conduct assessments in the settlements located within the UNOCHA zone of high concern[9] to avoid unnecessary exposure of staff and enumerators to violence.
- REACH was unable to obtain sufficient data from the household survey to determine whether labour centres are useful for the population of the eastern oblasts. Only 8% of individuals reported being

[9] The UNOCHA zone of high concern represents GCA-controlled territory less than 5km from the contact line between the NGCA and the GCA.

unemployed and of these respondents, none were registered in labour centres; only 3% of the total sample was registered in labour centres. Consequently, the results on whether labour centres are useful are not statistically significant. KII data from the five labour centres indicated their employment finding services are in demand, and FGD participants stated that centres were useful, but this could not be triangulated using REACH's quantitative data.

- In the household survey process, reaching working-age individuals who were employed and working during weekdays was difficult. REACH surveyed these individuals on weekends and evenings to mitigate this problem, but some partner agencies were unable to work during the weekends or in the evenings, leading to difficulties in finding sufficient enumerators and drivers.
- Data collection took place during the winter months, when temperatures in eastern Ukraine are low and harsh weather conditions present challenges to travel to isolated locations with poor road access. REACH developed a movement policy followed by all staff to minimise the risk to staff, and adapted the workplan dictating staff movements, whenever necessary to avoid impassable roads or dangerously long journeys after dark.

These limitations were discussed with the main partners involved in the assessment and the partners agreed that the methodology adopted for this research was the most appropriate given the various restrictions in terms of data collection in eastern Ukraine in the winter season.

2.8 Consultations

Consultations began in November 2016 with People in Need and the Danish Refugee Council, and expanded to include representatives from the International Organisation of Migration (IOM), Mercy Corps, Norwegian Refugee Council (NRC), the Cash Working Group, the Food Security and Livelihoods cluster (FSL), World Food Programme (WFP), and Caritas. In conjunction with these stakeholders, REACH defined the geographical scope of the assessment, the research questions and the types of analysis to be undertaken.

2.9 Contributions

Following the consultations mentioned above, REACH drafted the research design and shared the outline with the stakeholders for comments and feedback. After all stakeholders had been offered the chance to comment, REACH finalised the research design, making some adaptations to the sampling strategy agreed with partners that had sufficient statistical expertise to provide inputs in terms of sampling strategy. Several NGOs and UN agencies provided human and logistical contributions to this thematic assessment conducted in eastern Ukraine. WFP, FSL, DRC, PIN, IOM, and NRC provided guidance on the assessment plan at the research design stage. Caritas and PIN contributed human resources and logistical support in the form of vehicles, drivers and enumerators. Finally, R2P contributed office space in the field for staff.

3. Context Analysis

This section of the report presents the findings of the Secondary Data Review (SDR) and analysis of primary data from the State Statistical Service (SSS) to give an overall picture of Ukraine's economic and demographic situation at the time of the assessment in 2016, focusing on the eastern oblasts. It is organised into three sub-sections, exploring:

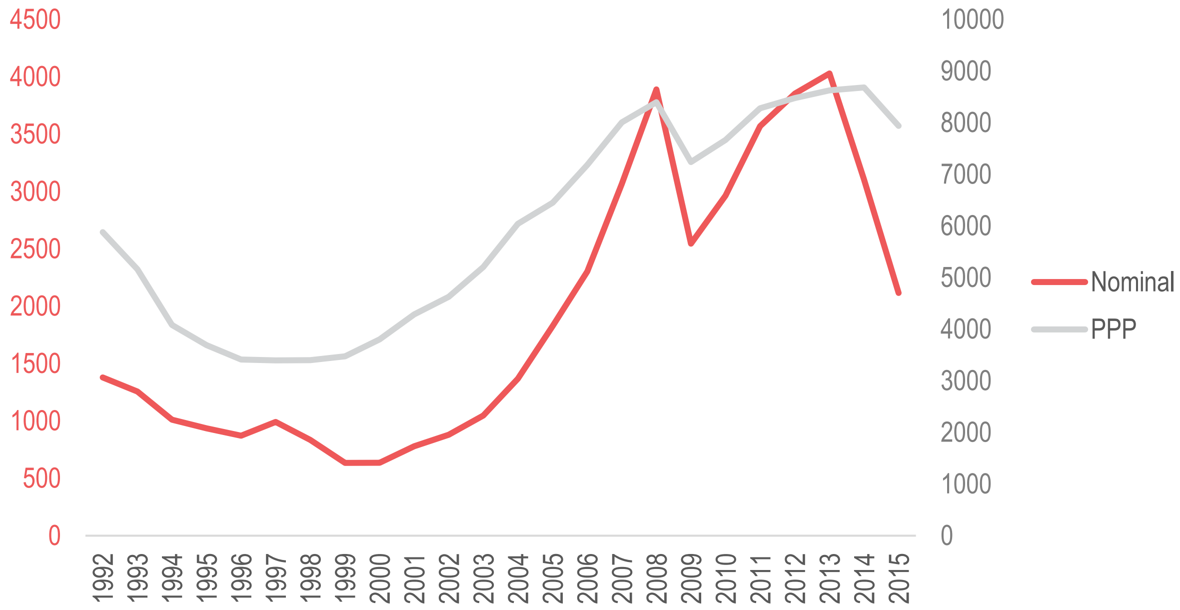
1. The general economic situation in Ukraine
2. Employment and labour in Ukraine
3. Population dynamics in Ukraine

3.1 Economic Context

The SDR found the economic context was weak before the outbreak of conflict in 2014, and that conflict has magnified some pre-existing negative trends and brought new negative economic factors into play. The SDR showed that Ukraine's economic situation at the time of the assessment in 2016 was poor: plummeting Gross Domestic Product (GDP), difficulties in attracting Foreign Direct Investment (FDI), falling industrial production and loss of export markets for Ukrainian products characterised the economic environment. **However, there were signs of recovery in 2016, indicated by small decreases in unemployment and slight increases in FDI.**

Since 2014, Ukraine's Gross Domestic Product (GDP) per capita has dropped by half in terms of absolute USD[10]. For the preceding two years, the economy was stagnant, with GDP growth averaging 0% in 2012-2013[11]. However, stagnation became sudden collapse with the onset of the crisis. Whilst nominal GDP dropped due to the devaluation of the Ukrainian Hryvnia since the crisis started in early 2014, GDP in terms of Purchasing Power Parity (PPP) remained closer to pre-crisis levels, showing a lower 8.5% drop. Therefore, the impact of conflict on household ability to purchase essential goods has been less significant than the collapse in nominal GDP suggests.

Figure 2: GDP per capita for Ukraine since 1992, nominal and PPP (US $)

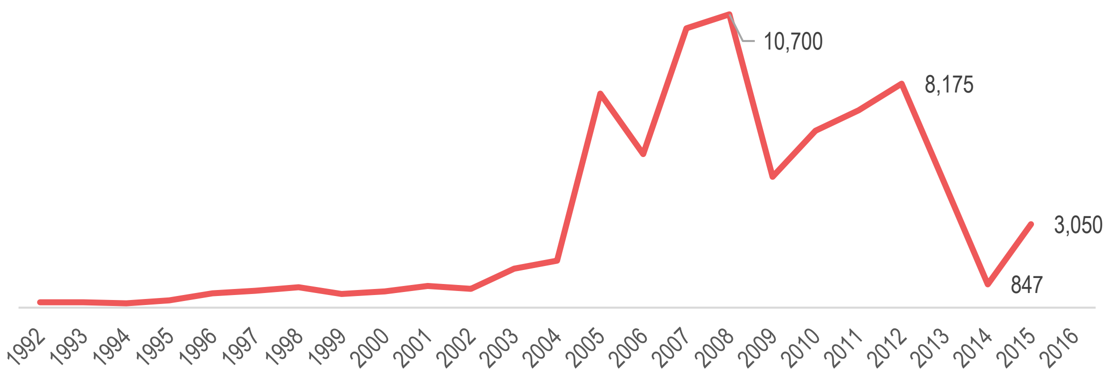


Source: World Bank, World Bank Open Data, 2017

FDI has been falling since before the conflict, with falls in 2008-2009 related to the global economic crisis, before a period of recovery and further drops in 2012 related to a slump in demand for Ukrainian exports and the deteriorating political situation. However, the crisis in Crimea and the outbreak of conflict in eastern Ukraine had a serious impact on investor confidence, reflected in the decrease in FDI between 2012 and 2014. As the situation stabilized in 2015, FDI increased to show a slight recovery and a positive upward trend in investor confidence, although levels of FDI had not yet reached half of 2013 levels in 2016. The Ukrainian government is attempting to improve the investment environment for international investor through increasing transparency in state-owned enterprises, simplifying the tax code, and removing unnecessary investment regulations. However, particularly in the east of the country, the United States Department of Business Investment Climate Statement for 2016 highlighted uncertainty over the eastern region and a lack of judicial reform as ongoing obstacles to FDI[12].

[10] State Statistics Service of Ukraine, 2016.
[11] World Bank, Ukraine: Recovery and Peace-Building Assessment, Analysis of Crisis Impacts and Needs in Eastern Ukraine (March 2016).
[12] US Department of State 'Investment Climate Statement: Ukraine' (Washington, 2016).

Figure 3: Foreign Direct Investment to Ukraine, net inflows (US $ million)



Source: World Bank, World Bank Open Data, 2017

The overall economy at the time of assessment in 2016 is also suffering from loss of export markets due to poor trade relations with the Russian Federation and the Commonwealth of Independent States (CIS) as a result of retaliatory trade measures since the conflict started. Russia and the CIS were previously Ukraine's largest trade partners: in 2014, according to the World Bank, exports to Russia fell by 39.5% compared to 2013. In 2016, Russia suspended duty free access for Ukrainian goods and banned the importation of Ukrainian food and agricultural products, placing additional restrictions on transport of Ukrainian goods through Russian territory. Trade with the European Union (EU) increased from 27% of exports in 2013 to 32% in 2015, but the growth in trade with the EU has not yet compensated for Ukraine's loss of access to Russian markets and the rise in cost of exporting to Kazakhstan and other Central Asian states due to new prohibitions on transporting Ukrainian goods through Russian territory which mean goods must take a more circuitous and more expensive route to Central Asia.

Additionally, the drop in exports seems also driven by a drop in production of goods. According to SSS data, production fell by 10.1% from the 2013 levels in 2014, and by a further 13% in 2015, before rising by 2.4% from the 2015 levels in 2016. The World Bank attributes the majority of production decreases to a drop in heavy industry production, which has **been disproportionately felt by the eastern region because this area represents the industrial heartland of Ukraine.** The World Bank estimated in 2016 that the Donbas region hosts around 900 large industrial plants, which includes 140 collieries, 40 metallurgical plants, and seven thermal power stations. The area is economically critical to Ukraine: all Ukrainian coal production takes place in the Donbas, and the region accounts for some 15.7% of GDP.[13] Many of the large industrial plants previously responsible for production in the Donbas are located in the NGCA, with the NGCA as a whole responsible for some 6% of Ukraine's pre-conflict GDP.

3.2 Employment and Labour

According to the International Labour Organisation (ILO), **unemployment has risen across the country since 2014[14] due to the general economic decline, and this has been particularly acute in the eastern region of the country.** The ILO reported an unemployment rate of 9.5% amongst the working-age population in 2015, whilst the unemployment rate in Donetsk Oblast was 14.4% and 15.3% in Luhansk.[15] However, KIs from labour centres in the five eastern oblasts gave a slightly more positive view of the employment situation: they stated that unemployment peaked in 2015, when the highest numbers of unemployed people were registered at centres across

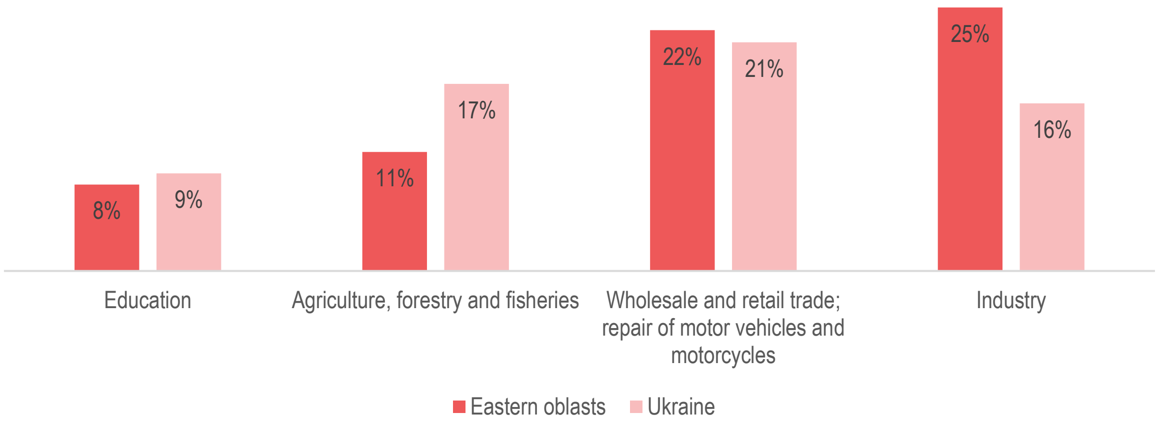
[13] World Bank, Ukraine: Recovery and Peace-Building Assessment, Analysis of Crisis Impacts and Needs in Eastern Ukraine (Ukraine, 2016).
[14] International Labour Organisation, Employment Needs Assessment and Employability of Displaced Persons in Ukraine (Ukaine 2016).
[15] International Labour Organisation, Employment Needs Assessment and Employability of Displaced Persons in Ukraine (Ukraine 2016).

the eastern oblasts, but that some limited recovery had occurred in 2016 and unemployment figures had fallen since 2015.

Across Ukraine, the sectors employing most of the labour force are wholesale and retail trade, which employs 21% of the workforce, and agriculture, which employs a further 17% of the workforce. Ukrainians employed in industry represent the third largest group of employees (16% of the workforce). As shown in the table below, **industry dominates the economy in the east,** employing 25% of the population of Dnipropetrovsk, Luhansk, Zaporizhia, Kharkiv, and Donetsk Oblasts. Wholesale and retail trade employ 22% of the eastern Ukrainian workforce, and agriculture is in third position (employing 11% of the eastern workforce).

Declines in agricultural and industrial production have had a negative influence on a large proportion of the workforce in Ukraine. However, this impact has been particularly deep in the eastern region, as the industrial sector is the most significant employer in the east and the agricultural sector is also a key employer. This confirms the ILO's finding that the workforce in the eastern region is more affected by rising unemployment.

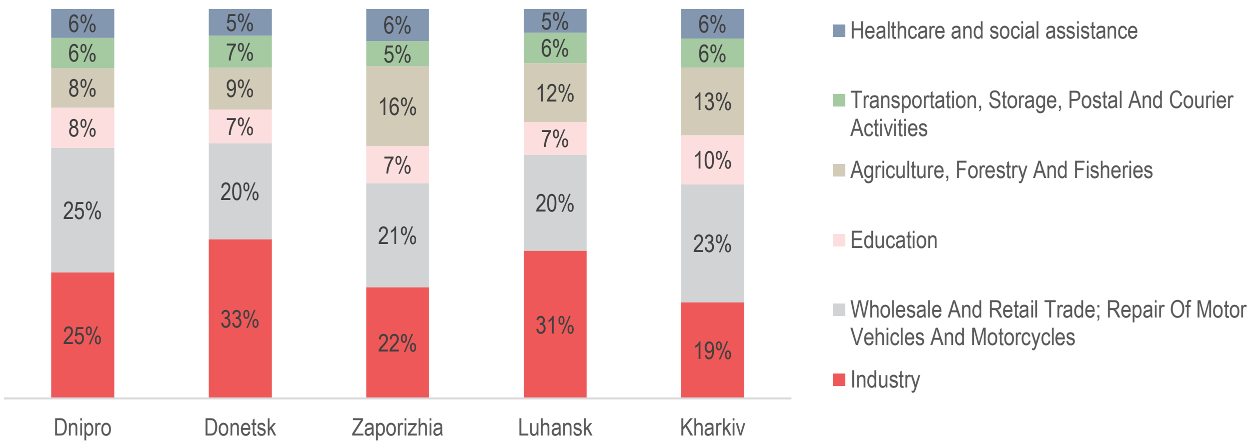
Figure 4: Top four employment sectors in Ukraine and in the eastern oblasts, 2016



Source: State Statistics Service of Ukraine, Sector of Employment, 2017

Within the eastern region itself, there are differences in the relative importance of the industry and agriculture sectors. The workforces in Luhansk and Donetsk are much more reliant on industry than those in Kharkiv and Zaporizhia; in Zaporizhia, over 15% of the labour force is employed in the agricultural sector (Figure 3). Industrial dominance in Luhansk and Donetsk suggests the ILO finding of higher unemployment rates in these two oblasts reflects the economic impact of the crisis on heavy industry, and that this sector has been particularly negatively affected by conflict.

Figure 5: Proportion of workforce employed by the most dominant sectors in the eastern oblasts, 2016

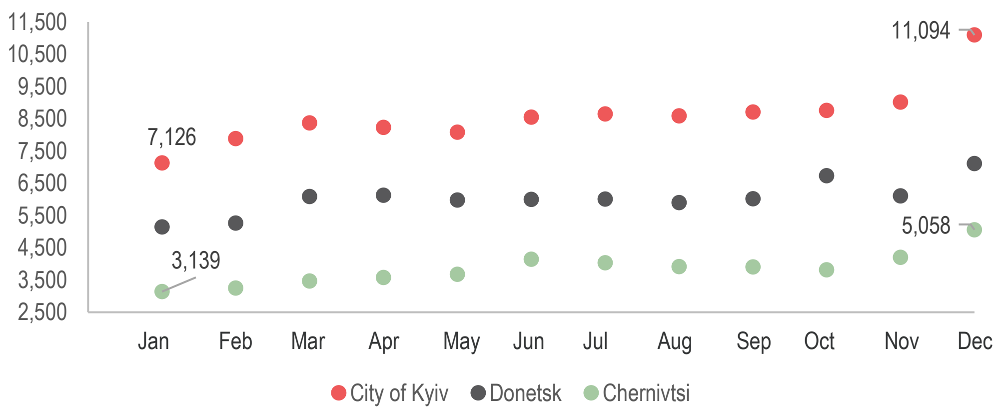


Source: State Statistics Service of Ukraine, Sector of Employment, 2017

KI data from labour centres highlights disparities between rural and urban areas in terms of income and employment. KIs stated that **rural areas of the eastern oblasts suffer more from unemployment and unstable wage payments than urban areas due to seasonality** which disproportionately affects agricultural workers in addition to lower wages.

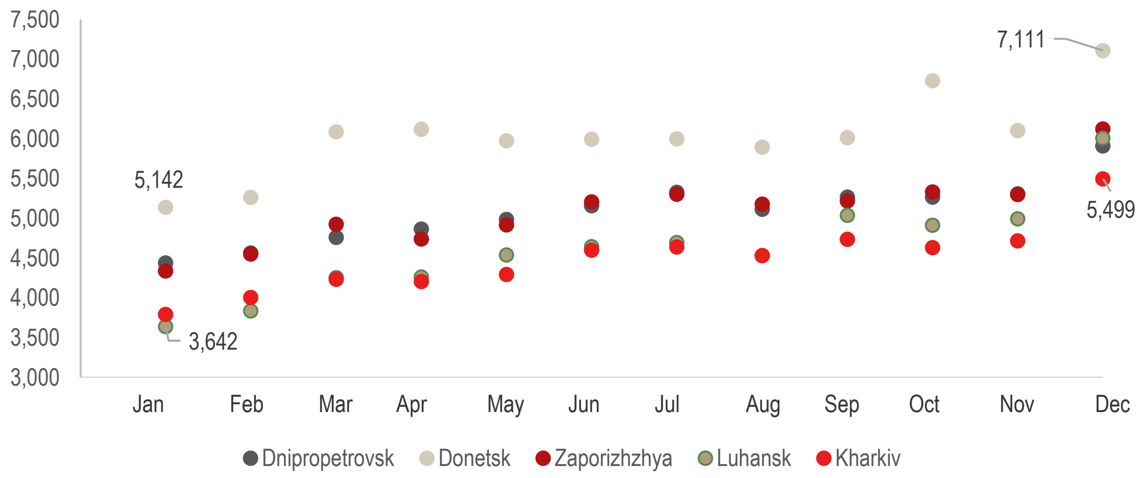
Incomes vary widely across Ukraine with the highest wages in Kyiv city (11,094 UAH / month in December 2016) and lower wages seen in the western oblasts of the country, such as Chernivtsi Oblast (5,058 UAH / month in December 2016). On average, **wages are higher in the eastern region, as shown in Figure 6. This may be because more members of the labour force in this area are employed in the industrial sector, which pays higher average wages than other sectors.** Of the five eastern oblasts, Donetsk consistently showed higher wages in 2016 than the others, with wages 40% higher than in Kharkiv in January 2016 and 30% higher than in Kharkiv in December. The lowest average wages appear in Kharkiv, although seasonal variation in wages is highest in Luhansk. In general, monthly variation between wages was very high in 2016, as shown on the graph below (Figure 6). Whilst partially driven by general seasonal variations such as harvest seasons, the government-provided statistics were not sufficiently clear on methodology to draw any specific conclusions as to why the data show such high variations.

Figure 6: Average wages in Kyiv, Donetsk and Chernivtsi, by month, 2016



Source: State Statistics Service of Ukraine, Average Wages, 2016

Figure 7: Average wages in the eastern oblasts, by month, 2016

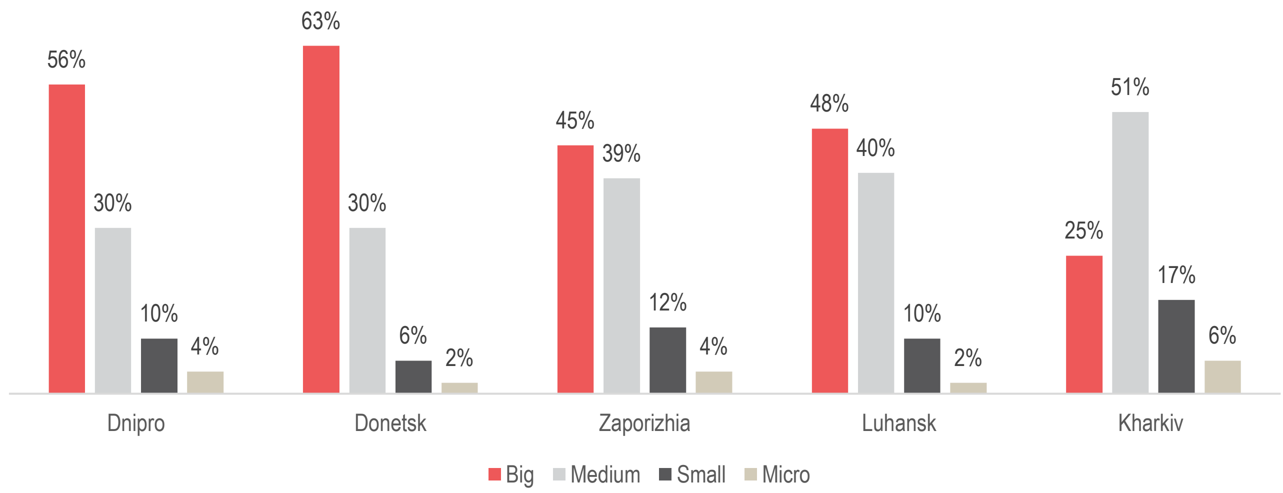


Source: State Statistics Service of Ukraine, Average Wages, 2016

Across Ukraine, the largest group of employees (36%) works in medium-sized enterprises, whilst a further 27% are employed in large enterprises. Salary distribution analysis shows that although only 27% of the workforce are employed by large enterprises, these enterprises pay 39% of reported salaries. A further 40% of reported salaries are paid by medium-sized enterprises. This data suggests salaries of employees working in large enterprises tend to be higher than salaries of employees of medium and small enterprises.

Wage distribution patterns show that **larger enterprises dominate the economy in the east of Ukraine,** where half of reported salaries are paid by large companies. Large enterprises are particularly predominant in Donetsk, where they pay 63% of salaries, and in Dnipropetrovsk, where they pay 56% of salaries. These oblasts host a higher concentration of large enterprises such as state-run coal mines and metallurgical production facilities. In contrast to Kharkiv, where only 25% of reported wages are delivered by large enterprises, wage earners in Dnipropetrovsk and Donetsk are more vulnerable to the negative effects of conflict on heavy industry as the industrial sector is dominated by large enterprises. Conversely, in Kharkiv and Luhansk, negative trends affecting medium size and small businesses are more likely to have a negative effect on wage earners because medium and small enterprises are more common in these oblasts

Figure 8: Share of wages paid by size of employer, eastern oblasts, 2016

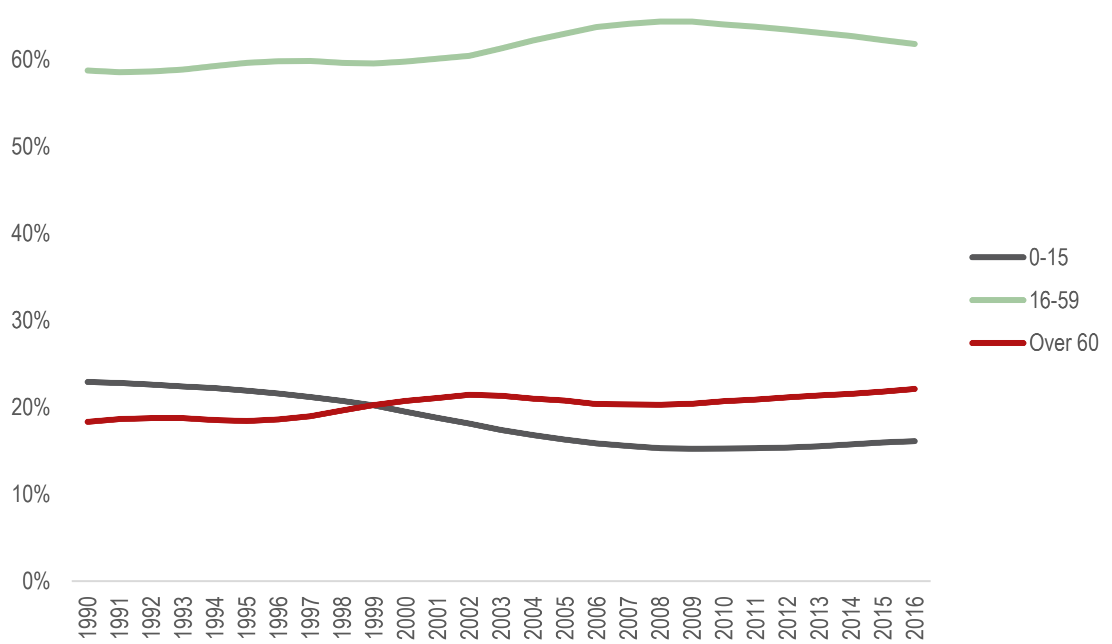


Source: State Statistics Service of Ukraine, Average Wages, 2016

3.3 Population Dynamics

Overall, Ukraine's population is aging. As Figure 9 shows, **the proportion of the population below the age of 15 is decreasing, while the share of the population over the age of 60 is growing** and became larger than the proportion of under-15s in 2000. An aging population may increase pressure on formal support systems such as pensions, and informal support systems such as family members acting as unpaid careworkers for the elderly; shortages of younger workers may also create difficulties for labour-intense industries such as the food processing sector and force industries to adapt production technology so that production is less physically demanding for employees. This may have implications for labour supply and the regional economy in eastern Ukraine, which relies on large-scale industrial production using outdated capital stock that will be expensive to adapt and that struggles to attract investors.

Figure 9: Population age dynamics, Ukraine

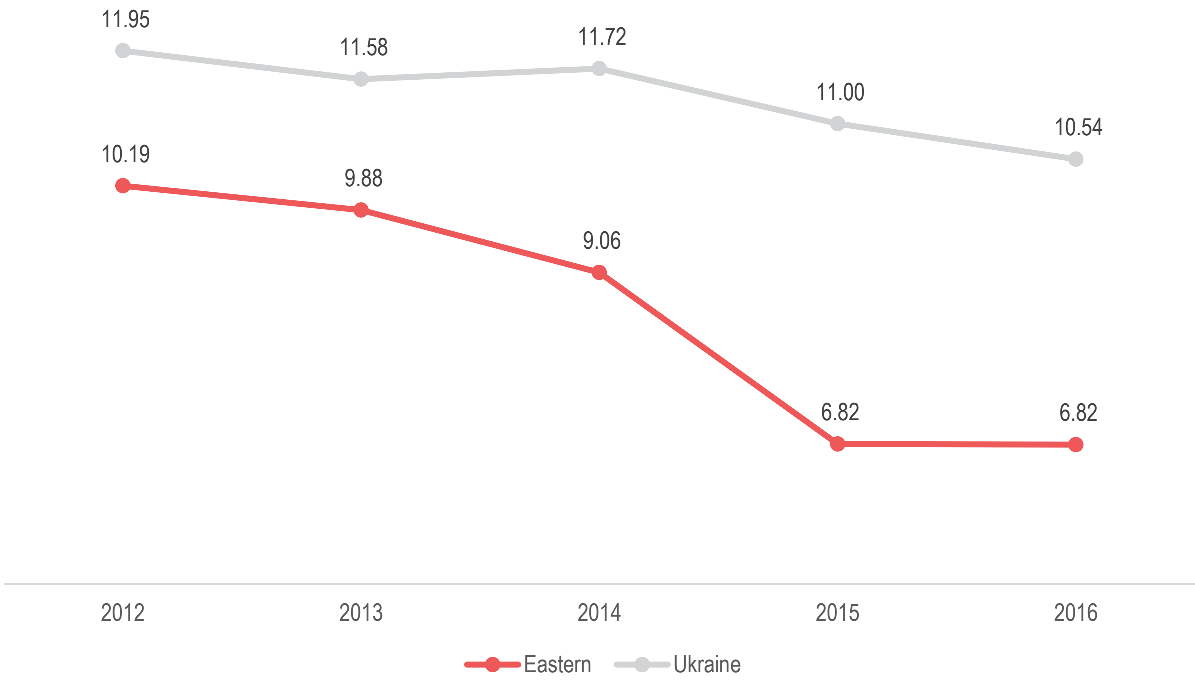


Source: State Statistics Service of Ukraine, Population, 2016

Changes in age dynamics cannot be attributed to increasing life expectancy, which has remained relatively constant in Ukraine since the 1960s, showing an increase of only two years in contrast to an increase of 12 years in Germany. **Birth-rates have fallen significantly since 2012 across Ukraine and in the eastern region**, but the problem is particularly acute in the eastern oblasts, where according to state-provided statistics the birth-rate in 2016 was 6.82 in comparison to 10.54 across Ukraine as a whole (Figure 10).

The statistics show that birth-rates were lower in the east but were declining at roughly the same pace as elsewhere in Ukraine until 2014, when there was a steeper drop in birth-rates in the east. This could be attributed to conflict which affects fertility patterns in a number of ways: births may decrease due to uncertainty, psychological stress, and poor health, or increase due to the 'insurance effect'. Economic and physical insecurity in eastern Ukraine may be driving the drop in birth-rates; given the high levels of migration from some of the five oblasts surveyed, departures of younger members of the population may also be contributing to the low birth-rate observed. However, unlike the statistics for previous years, the statistics provided by the Ukrainian SSS for 2015 and 2016 do not include all births taking place in the NGCAs, which are not counted in the government statistics unless the baby is registered in the GCAs. This contributes to the steep drop in recorded birth-rates shown in Figure 10 below.

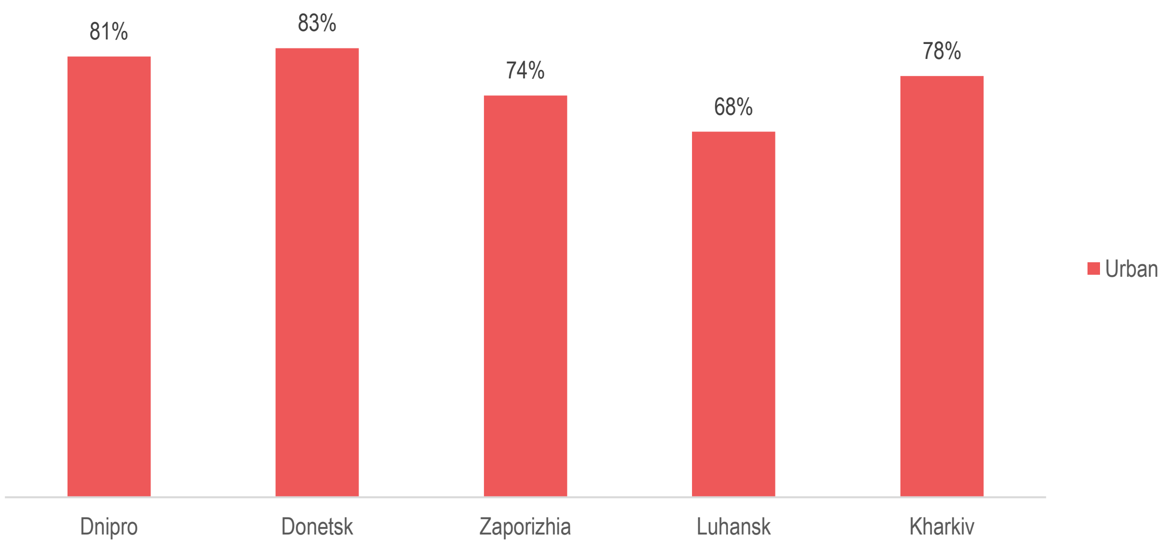
Figure 10: Birth-rates in Ukraine, 2012-16



Source: State Statistics Service of Ukraine, Population, 2016

Ukraine's population is mainly concentrated in urban areas, where 69% of Ukrainians are living. **The population of the eastern oblasts is more urban than the rest of the country** with 78% of eastern Ukrainians living in urban areas. Donetsk, Dnipropetrovsk and Kharkiv Oblasts host larger urban centres than Zaporizhia and Luhansk, and consequently the population in these oblasts is more urban.

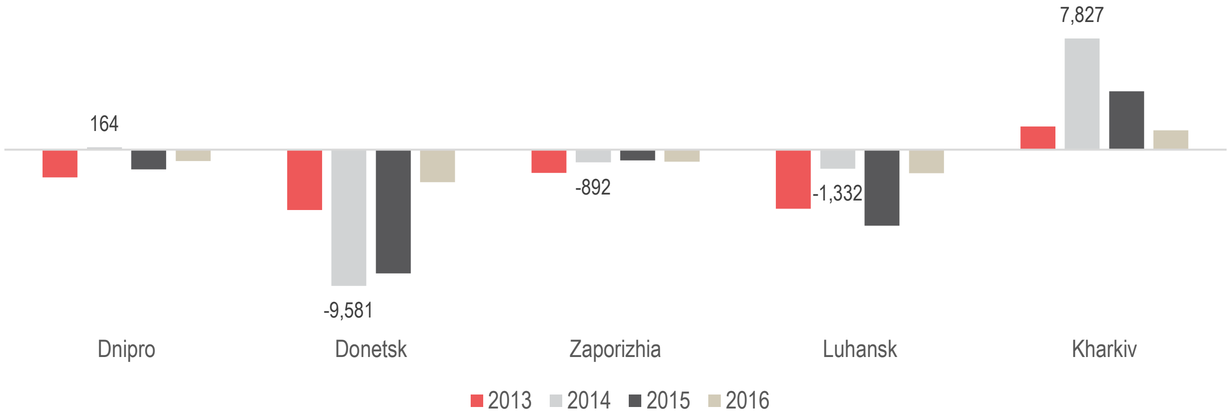
Figure 11: Urban dwellers as a percentage of the total population, eastern oblasts



Source: State Scientific and Production Enterprise "Kartographia", Population Data, 2015

Oblast statistics for the eastern region show **out-migration has been most significant in Donetsk and Luhansk** since 2013. According to OSCE reports[16], these migration flows are probably linked to the proclamation of the Donetsk People's Republic and Luhansk People's Republic in 2014, as well as the intensification of conflict in eastern Ukraine in mid-2014. However, out-migration from Donetsk and Luhansk Oblasts was also high in 2013, so the conflict appears to have exacerbated an existing trend rather than created a new pattern of movement. The spike in immigration to Kharkiv in 2014 may be related to movement from Donetsk.

Figure 12: Net migration flows, eastern oblasts

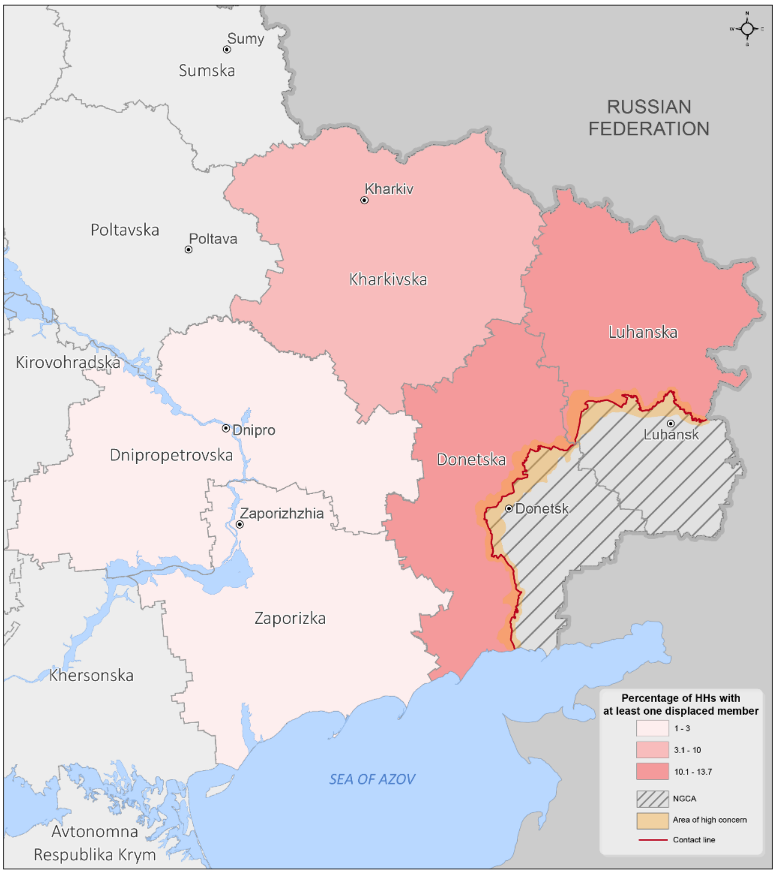


Source: State Statistics Services, Net Migration 2013-2016

The REACH assessment found **households in Donetsk and Luhansk Oblasts were more likely to have experienced displacement** than households in the other eastern oblasts, as shown on the map below. This is consistent with data from the MoSP which shows similar distribution of IDPs in the east.

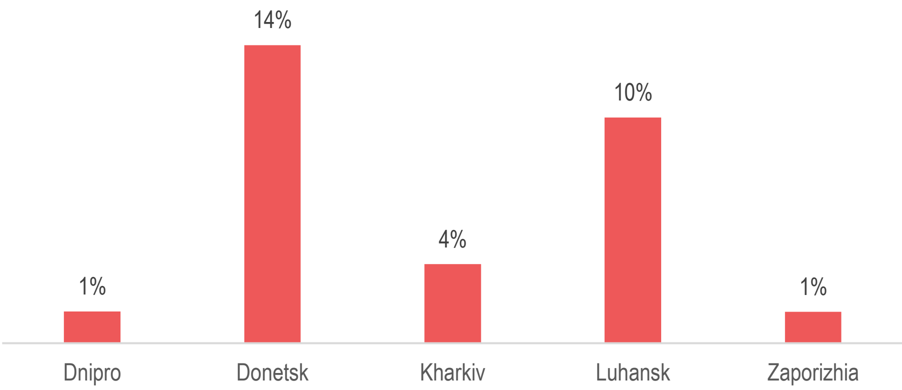
[16] OSCE, Conflict Related Displacement in Ukraine: Thematic Report (July 2016).

Map 4: Proportion of households with at least one displaced member



Across the eastern region, 6% of households reported that at least one of their members had been displaced by conflict more than three months before the assessment took place. In Donetsk, over twice as many households (just under 14%) reported at least one displaced member; in Luhansk, 10% of households reported at least one displaced member, but in Dnipropetrovsk and Zaporizhia only 1% of households were reportedly affected by displacement (Figure 13).

Figure 13: Proportion of households reporting at least one displaced member, eastern oblasts



4. FINDINGS

This section of the report presents the main findings of the REACH assessment. REACH collected data between December 2016 and March 2017 in eastern Ukraine through household surveys of the working-age population, business surveys, KIIs with labour centres and universities, and FGDs with representatives of the working-age population. Additionally, the findings include data collected by the State Statistical Service of Ukraine. The assessment's findings are organised by research questions, with the seven original research questions divided into two sections focusing on the impact of the conflict on the economic context, and on the impact of the conflict on labour and employment.

4.1 Impact of the conflict on the economic context

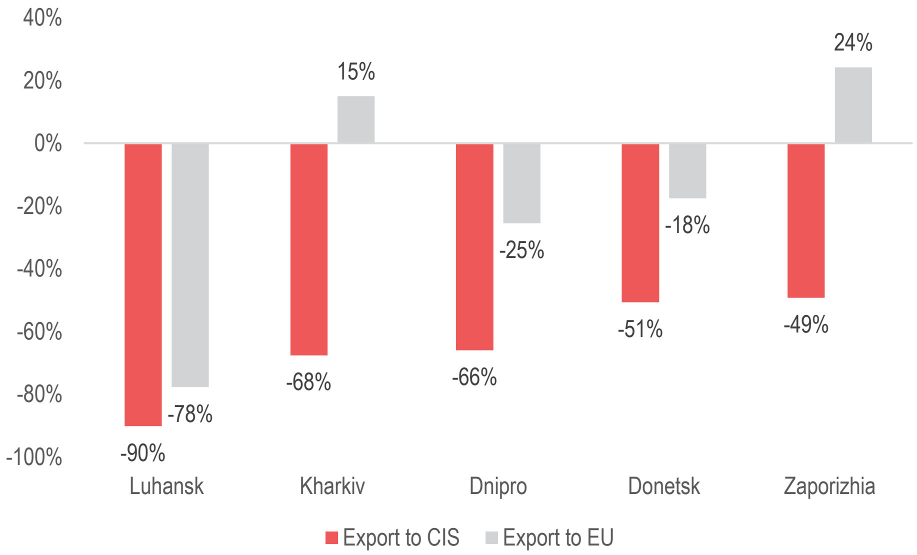
In this section, the report develops a picture of local economic activity and how it has been impacted by conflict in eastern Ukraine, examining export changes and changes in profits as well as changes in production. It also analyses changes in business activities and the business environment, including access to credit and financing, before moving on to an analysis of labour centres' place in the local economy and possible avenues for support to economic restoration.

4.1.1 How have local economic activity and supply chains been affected by the economic blockade on the NGCAs and the conflict?

Understanding the effects of conflict on the local economy, rather than on a Ukrainian-wide basis, was a key aim of this assessment. The SDR and the findings of the REACH assessment showed that conflict has impacted the economic context in eastern Ukraine significantly. They both found that the regional economy has been struggling since the outbreak of conflict in 2014, with some limited recovery taking place in 2016. The analysis confirmed the regional economy in the eastern oblasts has been more deeply impacted by the conflict than other regions of Ukraine, with almost 77% of businesses surveyed in the eastern oblasts reporting that the conflict had impacted their activities.

Between 2014 and 2015, **exports dropped in value by US $13 billion**. This was mainly due to a drop in exports to Russia and the Commonwealth of Independent States (CIS), as shown by analysis of data provided by the SSS for the five eastern oblasts. The data shows steep declines in exports to the CIS and Russia were taking place even before Russia imposed new regulations in 2016, as illustrated by Figure 14 below. Falls in exports to the EU were less significant than falls in exports to the CIS, occurring on a comparable level only in Luhansk.

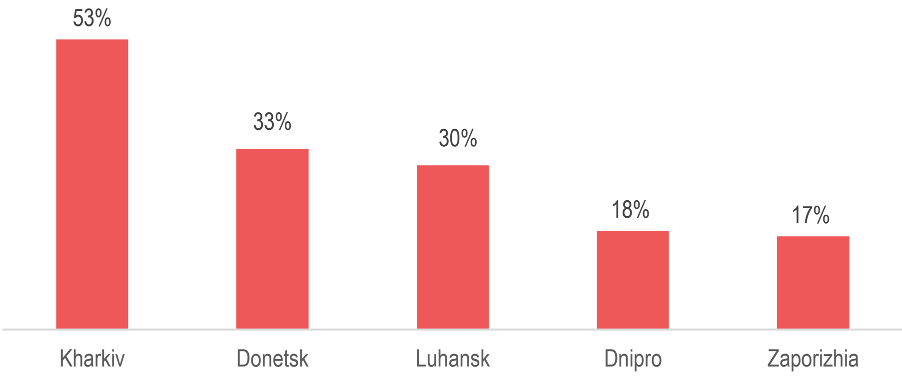
Figure 14: Exports to the CIS and EU, 1992-2015



Data from the German Advisory Group[17] (2014) confirms this finding, showing a drop in exports to Russia in 2014, particularly in exports of agriculture-food products, machinery and metals. Enterprises in the eastern region are highly likely to have been affected by this because heavy industry dominates Dnipropetrovsk, Donetsk and Kharkiv, while Luhansk's economy also relies heavily on agriculture.

REACH found **33% of enterprises reported they were affected by external policy changes relating to international trade**. Policy changes affected the largest number of businesses in Kharkiv (53%) and the smallest number in Zaporizhia (17%) and Dnipropetrovsk (18%).

Figure 15. Proportion of businesses reporting impact from external policy changes due to conflict, eastern oblasts



In addition, **66% of enterprises reported a decrease in revenue levels since the beginning of the conflict**. Revenues were least likely to have fallen in Dnipropetrovsk, correlating with the lower impact of external policy change on that oblast, but were most likely to fall in Zaporizhia; 13% of businesses in both oblasts also reported an above-average increase in revenues, indicating that Dnipropetrovsk's businesses were suffering least and that conflict is having a more variable effect on businesses in Zaporizhia.

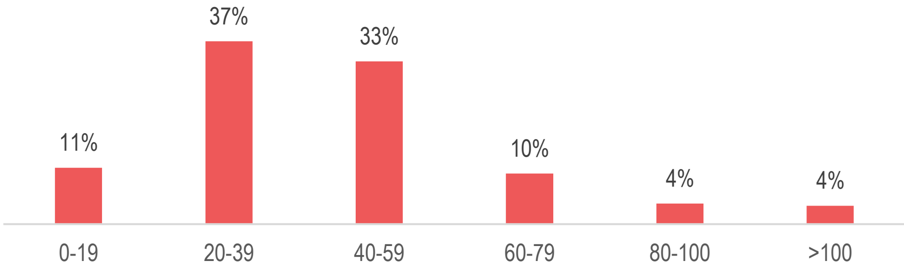
Table 7: Changes to business revenues since the beginning of the conflict, eastern oblasts

	Dnipro	Donetsk	Kharkiv	Luhansk	Zaporizhia
Decreased	55%	64%	66%	66%	77%
Increased	13%	8%	6%	12%	13%
No change	32%	28%	27%	21%	9%

Correspondingly, **over 70% of enterprises reported a decrease in profit levels**, with almost 90% of these reporting a drop of 20% or more, and 50% reporting profit had fallen by over 40% (Figure 16). Of the businesses which had lost profits, the magnitude of loss was greatest in Donetsk, where 56% had lost more than 40% of profits, and Zaporizhia, where 48% had lost more than 40% of profits.

Figure 16: Percentage of profit loss reported

[17] German Advisory Group, 'Strong reduction in exports in 2014 despite severe depreciation', March 2015.



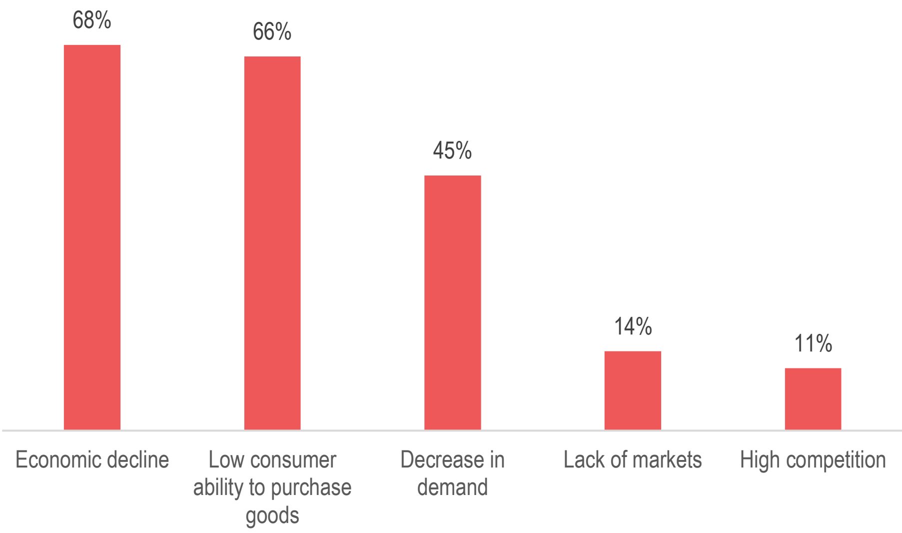
Businesses in all the eastern oblasts attributed losses in revenue and profit to a decrease in demand since the start of the conflict (Table 8). Businesses located away from the direct physical effects of conflict in Dnipropetrovsk and Kharkiv cited a lack of demand as the primary reason for loss in revenue, reflecting the SDR finding that poor trade relations and low levels of FDI have affected the economy beyond those areas directly impacted by the physical disruption of the contact line In Donetsk and Luhansk, damage to infrastructure reportedly had a more serious effect on revenue, probably because fighting has been most intense in these oblasts. Disrupted supply chains also impacted revenue, particularly in Luhansk and Donetsk due to Ukrainian government restrictions on the supply of goods as well as blockades of roads and railways by armed groups in the NGCAs.

Table 8: Primary reasons reported by businesses for decline in revenue, eastern oblasts

	Decrease in Demand	Disruption of Supply Chains	Damaged Infrastructure
Dnipro	90%	4%	7%
Donetsk	74%	13%	26%
Kharkiv	94%	13%	15%
Luhansk	84%	39%	38%
Zaporizhia	76%	10%	6%

The most common barriers to economic recovery for enterprises in the east are shown in the graph below (Figure 17). **A large majority of businesses cited economic decline amongst the main issues they face**, which is linked to the other most-cited problems: low consumer ability to purchase goods and a general decrease in demand for their products. Lack of markets came a distant fourth to these issues. Other issues included high competition (11% of businesses) and infrastructure damage (10% of businesses).

Figure 17: Main reported barriers to business recovery, eastern oblasts

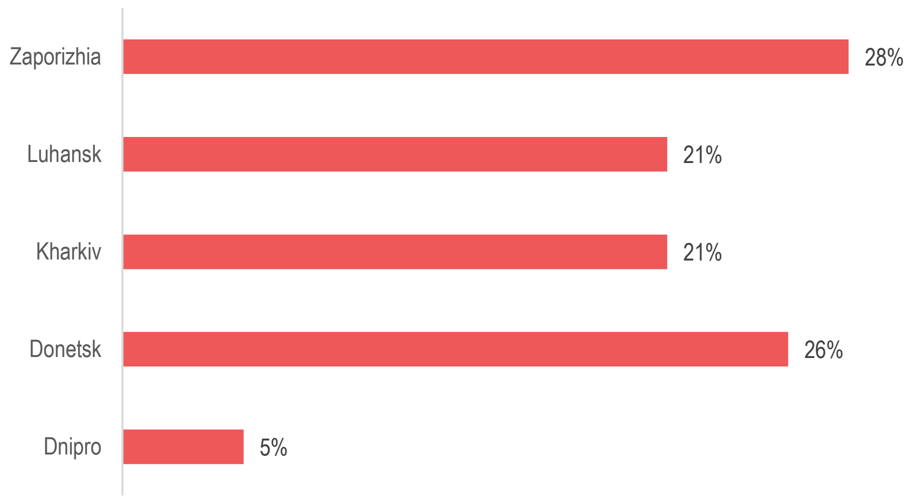


4.1.2 How have the main sectors or activities changed since the conflict began?

Analysis of the data showed that some changes in enterprise size, adaptation of activities, and changes in supply and demand had occurred since the conflict began. However, changes in enterprise size and the type of activities enterprises engaged in were relatively small in comparison to the changes seen in supply and demand for products, while competitiveness remained at roughly similar levels to the pre-conflict period.

REACH found **limited evidence of enterprise shrinkage through this assessment**, as only 13% of employers in the eastern oblasts stated their businesses had changed in size. Businesses most likely to change in size were located in Zaporizhia and Donetsk.

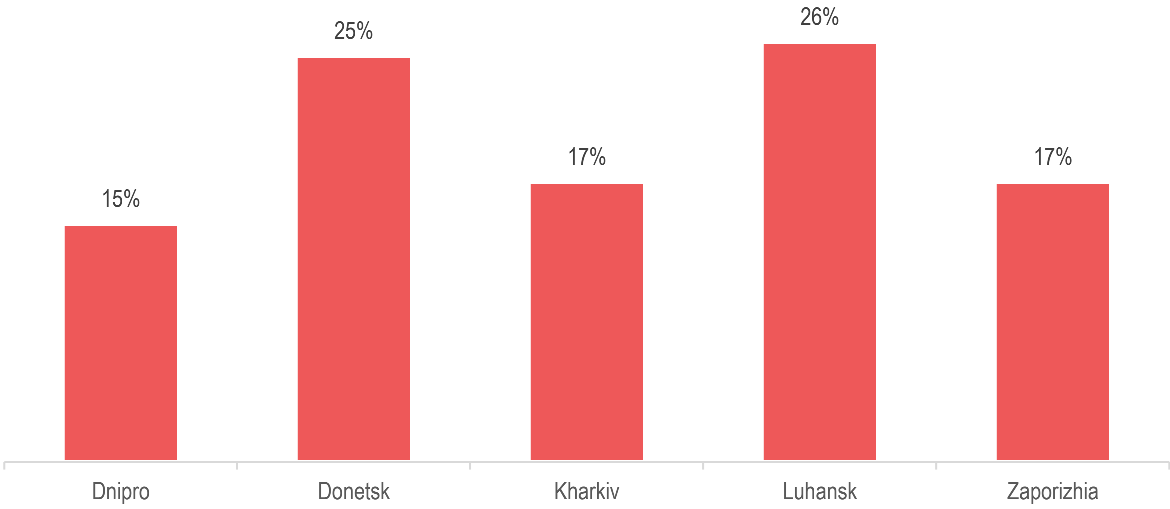
Figure 18: Businesses reporting changes in size since the conflict began, eastern oblasts



The assessment also found that 6% of enterprises had shrunk sufficiently to be reclassified under the Ukrainian SSS definitions of small, medium, and large businesses, which are determined by gross annual income and number of employees.

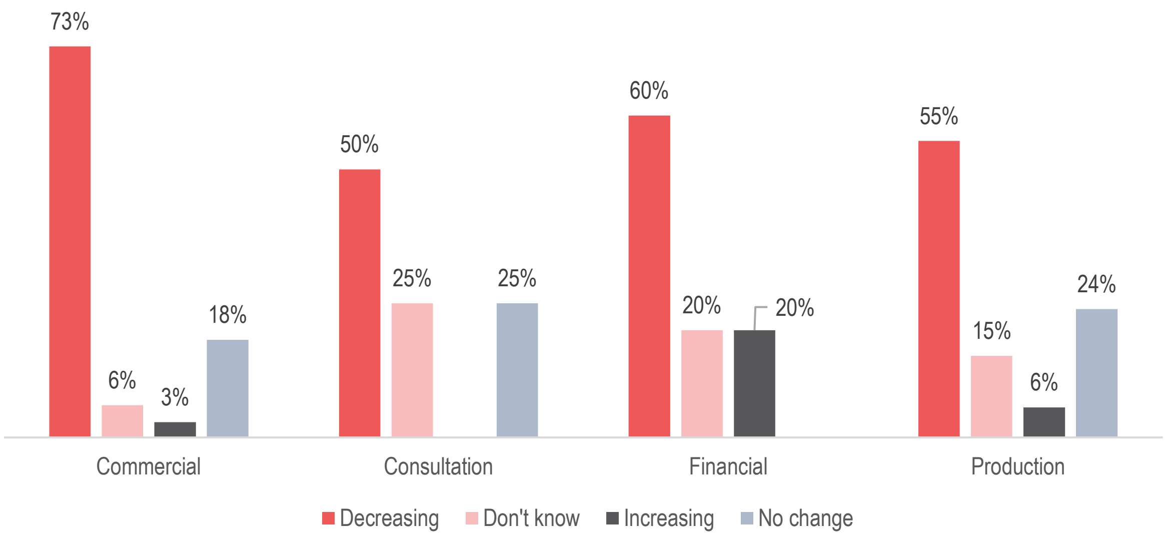
A relatively small number of businesses (16%) had diversified their activities to mitigate the impact of the conflict. Businesses in Donetsk and Zaporizhia accounted for 25% and 26% of these businesses respectively, shown in Figure 19. However, it was unclear whether businesses that adapted were simply early adopters of a useful coping strategy, or whether these businesses were hardest hit by conflict and had therefore been forced to adapt.

Figure 19: Businesses reporting diversifying activities by oblast



Supply and demand changes were most acute in the commercial sector, where 73% of businesses felt both supply and demand were decreasing. This sector includes businesses engaged in different types of trade, such as intermediary trade businesses and direct trade businesses. A majority (65%) of businesses felt that supply and demand for their products were both decreasing, but this varied across different sectors (Figure 20). Supply and demand changes were most acute in the commercial sector, where 73% of businesses felt supply and demand were decreasing. Changes were consistently reported by businesses across the different size categories.

Figure 20: Supply and demand changes reported by sector[18]

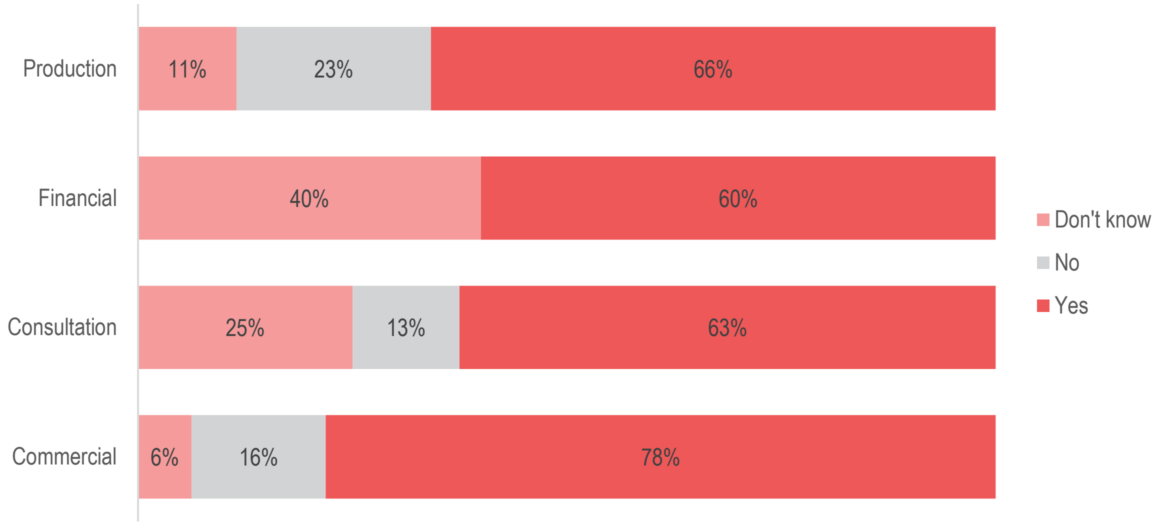


More than 72% of businesses reported production in their sector was influenced by conflict, with 96% of these businesses saying the influence had been negative. This figure supports the finding that supply and demand

[18] The commercial sector refers to the purchase and sale of goods, and commodity exchange. Financial sector covers banking insurance, audit, leasing and stock exchange. Consultation includes enterprises who provide consultation service such as marketing, HR, management, and information technologies. Production are activities relating to the direct production of goods and service such as agriculture, steel and heavy machinery.
Hoi I. V., Smelianska T. P. Entrepreneurship – (Ukraine, 2013)

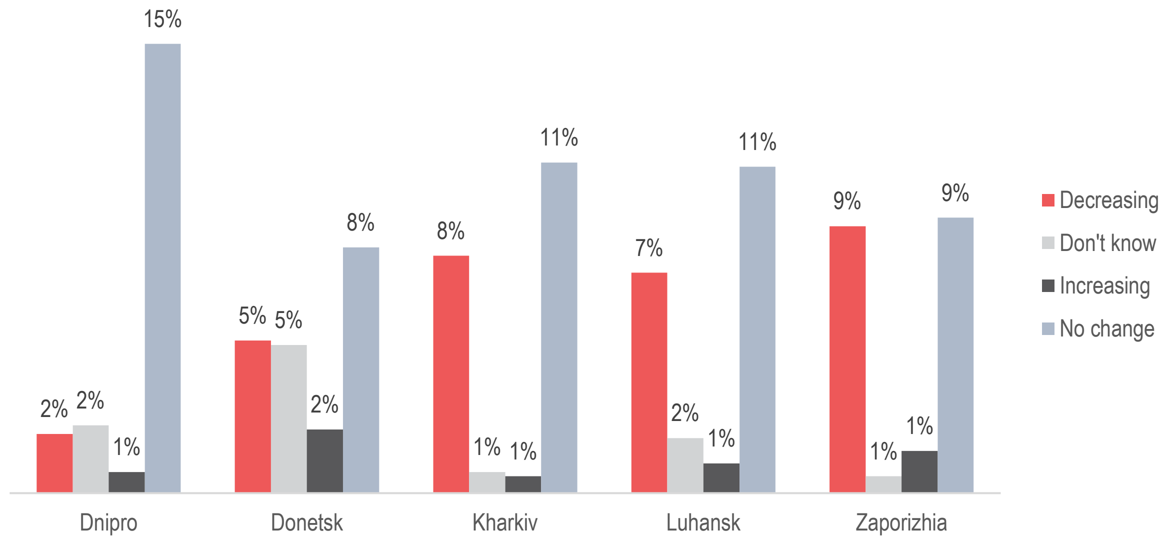
for products were decreasing. When disaggregated by type of business, businesses in the commercial and production sectors were most likely to report influence on production, as shown in Figure 21.

Figure 21: Businesses reporting influence on production by sector



Surveyed entreprises indicated that competitiveness for businesses remains at overall similar levels to before the conflict in the eastern oblasts. Thirty-one per cent of businesses reported competitiveness was decreasing, 54% said it had not changed and only 5% said it was increasing, while 10% said they did not know. Big businesses appeared most resilient to economic difficulties, as competitiveness decreased least for big businesses (25% of big businesses) while between 28% and 32% of medium, micro and small businesses reported decreasing competitiveness.

Figure 22: Changes in competitiveness by oblast



At the oblast level, **competitiveness was decreasing most in Kharkiv and Zaporizhia and least in Dnipropetrovsk.** This was interesting given that enterprises in Kharkiv and Zaporizhia were also most likely to report decreasing wages. While only a very small proportion of businesses said monopolies had developed because of decreasing competitiveness, the data suggests a risk that monopolies may develop in these oblasts in the future, driving down wages whilst increasing prices for consumers.

4.1.3 Has access to financing for businesses and entrepreneurs changed since the beginning of the conflict?

REACH found that access to credit has declined in the five eastern oblasts: **businesses are less able to access credit than before the conflict.** Thirty nine per cent of businesses reported access to credit had changed and that they were experiencing difficulties in accessing credit, with the main difficulties shown in the table below.

Table 9: Reported main difficulties in accessing credit in the eastern oblasts

	Dnipro	Donetsk	Kharkivsk	Luhansk	Zaporizk	Total
Higher Percentage Rate	41%	21%	26%	35%	20%	29%
Weak Credit System	30%	8%	8%	43%	5%	16%
Absence of Security Deposit	13%	8%	15%	5%	10%	12%
Other	0%	2%	0%	1%	2%	1%

High rates of interest were problematic for 29% of all businesses. In general high rates were considered the most frequently cited difficulty in accessing credit expect in Luhansk were an overall weak credit system (insufficient lenders, inability to borrow) was more regularly cited by respondents with interestingly limited responses related to absensce of security deposits. This indicates that rather than actual capital being a barrier, lack of channels enabling borrowing and investing seemed to limit access to credit. High rates of interest may be driven by two factors: the generally poor economic situation and the higher levels of risk lenders must now assume to invest in the eastern regions of Ukraine due to the conflict.

According to the World Bank, access to credit for Ukrainian firms has been difficult since 2008, suggesting the **conflict has exacerbated an existing negative trend**. The World Bank's 2013 Enterprise Survey found that access to finance was a key constraint for enterprises, that the proportion of private enterprises with a bank loan or line of credit had been falling since 2008, and that medium-sized businesses were least able to obtain credit[19]. Post-conflict reconstruction and development programming will then need to address this issue to enable sustainable business growth in the future.

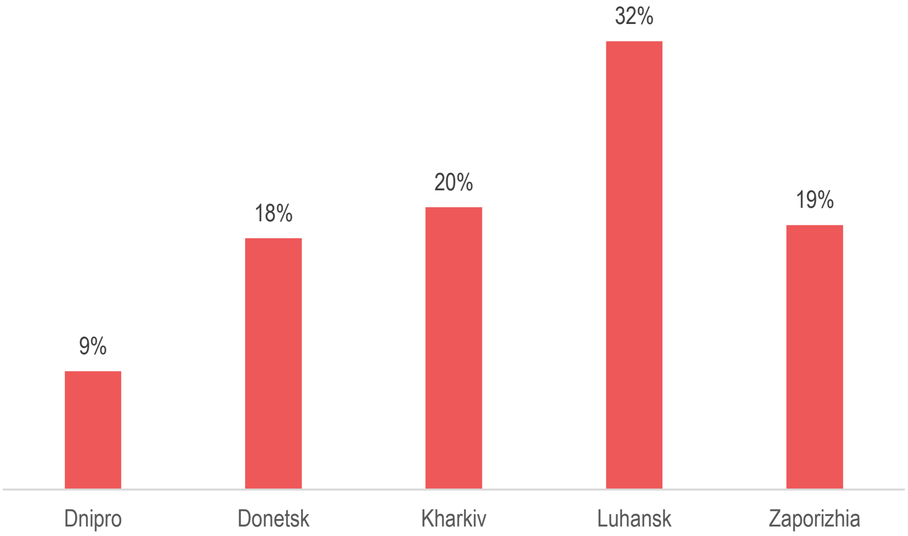
4.1.4 How can institutions support the restoration of the local economy?

This thematic assessment also sought to establish how institutions such as labour centres, vocational training centres and universities could support the local economy in eastern Ukraine in recovering. Given the issues identified in the economic context above, REACH analysed the possibilities for supporting individuals in accessing sustainable employment through establishing their own businesses. This section also seeks to understand the place of labour centres in the local economic context and considers their role in supporting economic restoration.

Labour centres appeared useful from the perspective of firms, with one in five firms surveyed in the business survey employing staff referred by labour centres. KIs from labour centres said that connecting job seekers and businesses with vacancies was their most in-demand service, although the labour centre in Zaporizhia also reported that obtaining documentation for unemployed people to access benefits was an area of demand.

[19] World Bank / International Finance Corporation, Ukraine: Country Profile 2013 (Ukraine 2014).

Figure 23: Firms employing staff from labour centres, by oblast



Again, use of labour centres varied by oblast: firms in Luhansk were most likely to employ staff from labour centres, whilst this was least common in Dnipropetrovsk.

FGD participants reported labour centres were useful. Centres pay unemployment benefits on behalf of the state, and participants said these payments were essential during periods of unemployment. Job finding services received mixed reviews: in general, **participants said labour centres are good at finding positions, but the jobs available are often low-paid and temporary**. Some participants said jobs advertised by the centres were difficult

> *"The centre is fine. The specialist at the centre, who understands my needs, offers jobs that really fit my experience, but unfortunately it's all temporary work. She asks what I am interested in, makes an offer of a few jobs, and I select from those jobs."*
>
> Male FGD participant, Kharkiv

to reach on public transport, and that centres sometimes advertise positions that have already been filled.

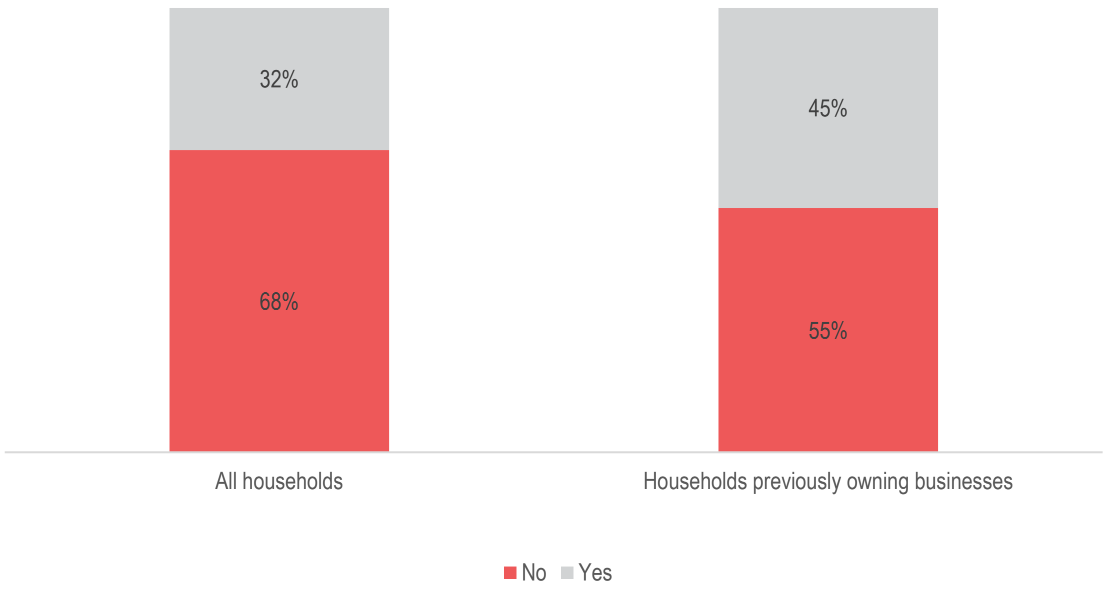
Overall, **almost 3% of respondents in the household survey considered labour centres useful**. However, REACH found none of the unemployed respondents to the household survey were registered at labour centres, and consequently they were not able to answer whether labour centres were useful.

> *"The centre registers you and then they send you to work in the most remote places. I live in X district and I was sent to Y district, I had to change buses several times to get to work on time. Or they send you to firms with really low wages… for example, the centre promises you'll get 3,000 UAH and when you get there the business offers you 2,000 UAH and says your pay will be delayed."*
>
> Female FGD participant, Kharkiv

Institutions such as vocational training centres and labour centres could support economic recovery through supporting respondents in opening their own businesses, so the assessment investigated whether this was a preferred option for respondents. **Almost 33% of respondents to the household survey were interested in opening their own business.** This proportion rose to 45% amongst respondents who had previously owned a business (Figure 24). In total, 12% of households owned a business, representing a decrease of three percentage points from the 15% of households who owned businesses before the conflict. Eighty five per cent of the businesses owned by these households were classed as micro businesses, while the remaining 15% were classed as small.

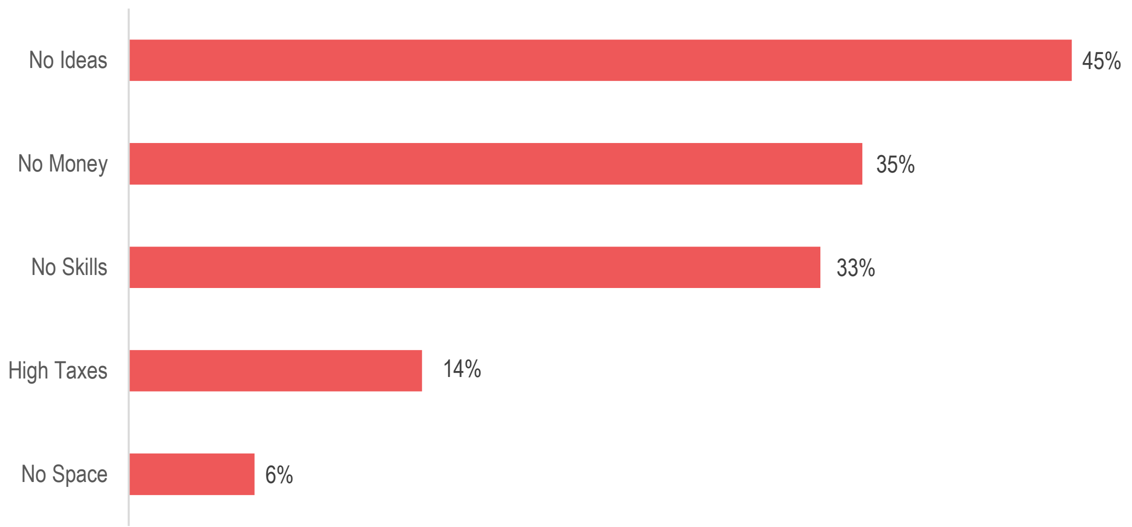
Future programming in this area could therefore focus on supporting micro businesses, potentially through providing small grants or loans to enable business expansion.

Figure 24. Proportion of respondents who reported being interested in opening a business



The most commonly-cited reason respondents did not want to start businesses was a lack of ideas, with 45% of respondents reporting this as an issue. Lack of ideas was closely followed by lack of skills and lack of money, mentioned by 33% and 35% of respondents respectively (Figure 25). The data suggests providing small grants to cover start-up costs and investing in skills-based training could encourage respondents to start their own businesses in the future.

Figure 25. Reported challenge to opening a business



Amongst the respondents who wanted to open businesses, the most cited area was related to the trading of goods and services,such as the opening or retail shops such as a clothing store or a food market (28%). The second most frequent response was the provision of services, such as hairdressing, plumbing and transportation (23%). Then came wholesale trading focusing on sale and purchase of goods and services to enterprises, such as communication, cleaning, IT or security services. This was followed by production of agricultural goods and provision of intermediary trade services such as real estate and financial enterprises (Figure 26). These responses indicate the dominance of tertiary sector activites in terms of potential income generating activities in the region.

Figure 26: Top five categories of production businesses respondents would like to open

Businesses identified inability to find employees with the relevant skills as one of the main issues in recruitment.They also indicated that skills development programmes provided by local institutions or development actors could support economic growth and recovery in the region. In addition, the REACH assessment identified a demand for training and skills development amongst the working-age population: **49% of unemployed respondents said they would be interested in vocational training**, of whom 95% said they would still be interested if training was unpaid.

4.2 Impact on Labour and Employment

This section of the report analyses the impact of conflict on labour and employment in eastern Ukraine. It incorporates data from the business survey, the household survey, and from KIIs and FGDs conducted as part of the assessment. To understand the impact on labour and employment, it analyses unemployment rates and job loss, changes in salary from a business and an employee perspective, and the effect of conflict on recruitment and skills development. Finally, it analyses the impact of conflict on household ability to meet needs and the strategies used to cope with economic problems at the household level.

4.2.1 How has the demand for labour changed due to the decrease in economic output?

To understand changes in labour demand, REACH analysed findings from the business survey relating to both the size of workforces and their composition in terms of gender. These findings were triangulated by the SDR results, which found that **rising unemployment was a key issue in the eastern region**, particularly in Donetsk and Luhansk. Informants in the ILO 2015 assessment stated that the major factor preventing businesses from recruiting was the general economic climate, which translated into a decline in production and no requirement to recruit additional workers to cope with growth. REACH results were broadly consistent with the findings of the SDR, but gave a more positive outlook: the assessment found that **workforces in about a quarter of businesses had shrunk, but that lack of skilled employees was reportedly a bigger issue for businesses in recruitment than a lack of vacancies.**

About 24% of businesses reported their workforce has changed in terms of size and gender composition since the conflict began. Staff change dynamics are shown in the table below, disaggregated by gender. Only 2% of businesses in Dnipropetrovsk said their workforces had changed, while Luhansk hosted the largest proportion (6%) of businesses whose workforces had changed. Across the eastern oblasts, most of the business reporting a change in workforce stated that they had decreased the number of both female and male staff. The data did not show any particular bias across the oblasts that might suggest businesses preferred to make female staff redundant, apart from in Luhansk, where female staff appear to be disproportionately vulnerable to shrinking workforces.

Table 10: Businesses reporting changes in number of staff since the beginning of the conflict eastern oblasts

	Dnipro	Donetsk	Kharkiv	Luhansk	Zaporizhia	Total
Don't know	0%	5%	3%	2%	0%	2%
Decreased female staff	0%	9%	3%	22%	7%	5%
Increased female staff	44%	5%	11%	4%	3%	13%
Increased female, decreased male staff	0%	0%	0%	2%	0%	0%
Decreased male staff	19%	27%	38%	33%	33%	32%
Decreased both	25%	48%	32%	24%	40%	35%
Increased male staff	6%	7%	3%	2%	13%	6%
Increased male, decreased female staff	6%	0%	8%	4%	3%	5%
Other	0%	0%	3%	4%	0%	1%

"To sum it up, the conflict has negatively affected us- the whole city is losing jobs. In Luhansk I worked in accounting, in trade, and in a wholesale warehouse. Now I'm not working, and my husband has gone to work abroad."

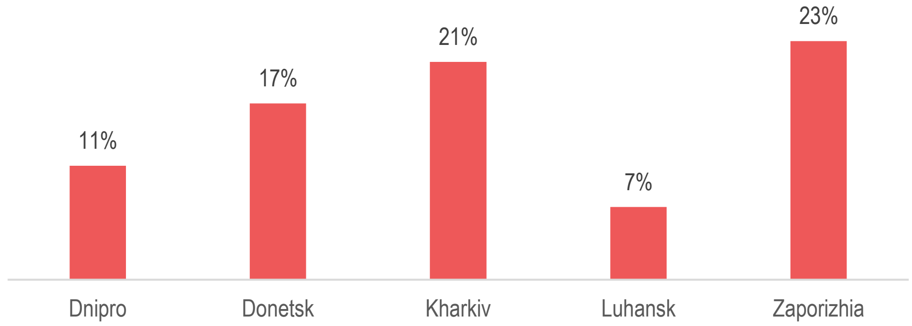
Female FGD participant, Severodonetsk

"I've lost my job. Yes, it's because of the war. At the factory there were cutbacks and I was dismissed."

Male FGD participant, Zaporizhia

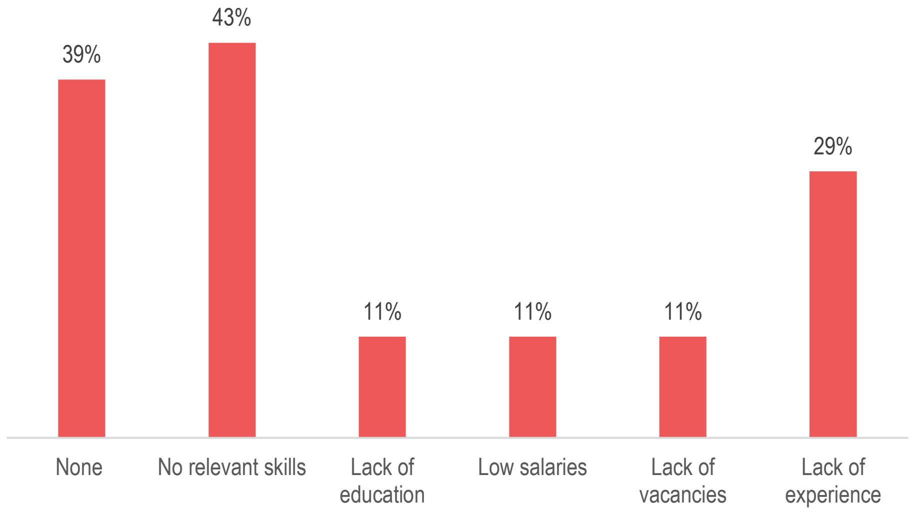
Whilst workforces have been shrinking, some salaries have also fallen since the beginning of the conflict, reported by 15% of enterprises interviewed. Although only 15% of enterprises reported that they were paying smaller salaries, a further 50% of enterprises indicated there had been no change in salaries; high inflation rates and price hikes, identified in the SDR as an issue, meant that wages were dropping in real terms even for businesses who had not reduced wages. Wage reduction was not uniform across the oblasts, as shown in the chart below illustrating the percentage of enterprises in each oblast who reported reducing wages since the conflict began.

Figure 27: Businesses reporting paying lower salaries since the beginning of the conflict



The assessment also analysed the impact of conflict on business ability to recruit skilled labour in eastern Ukraine. Through the business survey, REACH found the lack of specific relevant skills was the most common problem for businesses in recruiting employees. This was reported at a much higher rate than lack of vacancies, low salaries, or lack of education (Figure 28). Of the 57% of businesses who said there were some barriers to recruitment, 43% gave a lack of relevant skills as a key barrier. Lack of experience was also a key issue as reported by 29% of these businesses, who stated that in addition to specific technical skills and education they required employees who had previous experience of conducting the roles businesses needed to fill. Labour centres reinforced this impression, stating that finding employment can be difficult for younger people or those without training because businesses prefer to employ experienced individuals who require no training to perform their role.

Figure 28: Barriers to recruitment reported by businesses



Comparing the eastern oblasts, the assessment found **businesses in Zaporizhia seemed to be struggling most to attract and recruit employees**. Fifty three per cent of businesses in Zaporizhia stated they could not recruit due to lack of vacancies, with low salaries also being a common issue, both of which are probably linked to the generally poor economic climate. Underlining this issue, the labour centre in Zaporizhia said they received decreased numbers of vacancies to advertise through their employment-finding service in 2014 and 2015, but that the number of vacancies advertised in 2016 increased slightly. According to businesses, lack of skills or education were not as important in Zaporizhia, but were very problematic in Luhansk and Kharkiv. Donetsk businesses were least likely to report any problems in recruitment.

Table 11: Main reported barriers to recruitment by oblast

	Dnipro	Donetsk	Kharkiv	Luhansk	Zaporizhia

No barrier	20%	32%	14%	12%	23%
No relevant skills	21%	14%	22%	32%	11%
Lack of education	18%	20%	28%	26%	8%
Low salaries	15%	6%	23%	18%	37%
Lack of vacancies	4%	7%	27%	10%	52%
Lack of experience	27%	11%	25%	27%	10%

Sixty six per cent of enterprises, spread evenly across the eastern oblasts, reported that it was difficult to recruit employees with relevant skills. Businesses had less difficulty finding workers for elementary occupations such as freight handling and for sales or retail work, describing these skills as available. The skills most difficult to find vary widely across the eastern oblasts, as shown below (Table 12). Businesses in Donetsk reportedly struggle to find miners, while in Luhansk businesses have difficuly in recruiting heavy machine operators, reflecting the domination of mines and large-scale agriculture respectively in these oblasts.

Overall, **specific technical skills related to professional categories are most difficult to recruit for**, in addition to higher-level management positions across different sectors. Interestingly, 40% of entprises in Donetsk indicated that miners were difficult to recruit which might be due to the dominance of the mining industry in the region and the hardship related to these positions. This findings show quite significantly the disconnect between the labor force and needs of enterprises who require more qualified professionals such as accountants, mangers or nurses who are hardest to recruit based on the survey with some differences across regions. The assessment did not specifically ask whether this had changed due to the conflict. However, out-migration from the eastern region and displacement within the region may have created a skills drain leading to the difficulties businesses reported in

"No one wants to hire you if you have two young children. Or they want a young specialist to have continuous work experience in one role for 3 to 5 years. If you have that, you can be a good specialist even if you have children. But I have worked in lots of different places and I've taken maternity leave."

Female FGD participant, Zaporizhia

finding skilled workers, potentially exacerbated by the aging population and low birthrate. Additionally, with businesses losing profit and revenue due to the conflict, it may be more difficult for employers to invest time and resources in training for newly-recruited employees. FGD participants reinforced this, stating that few employers were willing to train employees. Reportedly, the problem is particularly acute for women because their careers are disrupted by maternity leave, which means employers may discount their applications because they lack continuous periods of employment.

Table 12: Positions for which it is difficult to find appropriate skillsets, eastern oblasts

	Dnipropetrovsk	Donetsk	Kharkivsk	Luhansk	Zaporizka	Grand Total
Professionals	28%	29%	40%	65%	43%	36%
Manager	17%	18%	12%	40%	35%	20%
Technical and Associate Profiles	10%	11%	6%	10%	27%	12%
Service Sale	8%	16%	11%	11%	13%	11%
Miner	8%	40%	5%	0%	4%	10%
Skilled Agriculture, Forest, and Fishery	11%	16%	3%	2%	2%	7%
Craft or Trade Related Workers	4%	2%	2%	13%	11%	5%

Plant or Machine Operators	6%	6%	0%	24%	4%	5%
Elementary Professions	7%	2%	2%	1%	4%	4%
Clerical and Support Workers	3%	0%	0%	5%	0%	1%
Plant Workers	0%	2%	0%	6%	1%	1%
Armed Forces	2%	0%	0%	0%	0%	1%

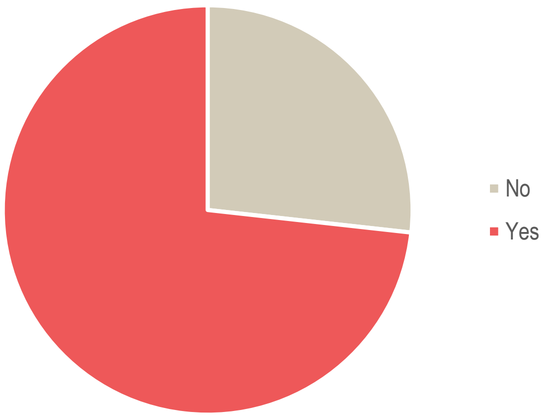
4.2.2 How has the conflict affected skills development?

Through the assessment, REACH also analysed whether conflict had contributed to creating a skills deficit and preventing the development of skills required by the local labour market in eastern Ukraine. This analysis relies on data collected through the business survey and through KIIs with informants from one university in each oblast and the labour centre of each oblast.

Overall, **enterprises reported a relatively low rate of sending staff to vocational training centres at universities, privately-run facilities and government-provided centres**. However, the proportion of enterprises using training centres had not changed significantly since the conflict began. Almost 20% of firms said they sent staff to training centres and most these staff were young (under 25): 66% of staff sent to training centres were between the ages of 18 and 35. With the population aging, skills development for older people (60+) to enable longer working lives will become more important, indicating a potential area for support.

REACH found vocational training centres had been affected by the conflict. While opinion amongst businesses surveyed was split evenly on whether training centres had been affected, with 49% reporting that they had and 51% that they had not, a much higher proportion of the 20% of businesses who reported using training centres said centres are not operating at pre-conflict levels (Figure 27) in terms of the range, level and quality of training services they provide.

Figure 29: Businesses who use training centres and reported centre operations were affected by conflict



KIIs data suggests that **conflict has affected some universities in terms of enrolment and completion**. Demand for enrolment had fallen for some universities, which led to a reduced number of students and reduced numbers of staff. Reduced numbers of students were reported by universities in Dnipropetrovsk and Luhansk, but not in Kharkiv. Reductions were partly because less students from Crimea were attending. However, Zaporizhia National University reported increased numbers of students from Crimea due to an advertising campaign as well as an accreditation programme to assist students qualified in Crimea and the NGCAs in validating their documents for recognition by the Ukrainian authorities.

A **lack of acceptable documentation for students in the NGCAs** prevented them from attending university in the GCAs. This was particularly acute for Donetsk, which was unsurprising given that Donetsk Oblast has been divided by the contact line and many of the students who would previously have attended Donbas State Pedagogical University (DSPU), located in Sloviansk, are now unable to do so.

KIs from Donetsk's DSPU identified falling student numbers as a pre-conflict trend caused by lower student numbers at the elementary level due to falling birth rates. Enrolment at DSPU in 2013 had shrunk to approximately 5,600 students, from a high of 8,000 students in the early 2000s.

4.2.3 How has the working age population been affected by the economic disruption caused by the conflict?

REACH also analysed the effect of conflict at the household level through the household survey conducted as part of the assessment. These findings were triangulated using SSS data.

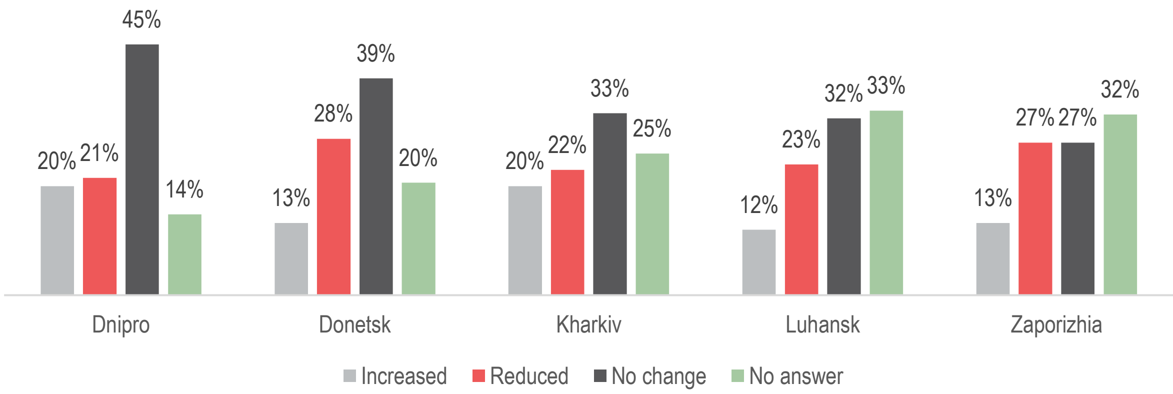
The assessment found that households were impacted through loss of employment and falling salaries and that this affected their ability to meet their essential needs, as shown below.

Almost one in five households surveyed reported that they had members who had lost jobs due to conflict. Loss of employment due to conflict appeared to be worst in the oblasts closest to the contact line: job loss was especially acute in Luhansk, where 33% of households reported a member losing their job, and Donetsk (27%).

Reinforcing the impression that Luhansk and Donetsk are worst affected, these oblasts also showed a higher proportion of people forced to change jobs as a result of conflict. Overall, 16% of respondents said someone in their household changed jobs because of the conflict. In Luhansk, the proportion was 23% and in Donetsk 22%.

In addition, **24% of respondents said conflict had resulted in decreases in their salaries.** Decreases in salary varied between oblasts; confirming the general picture, Donetsk and Zaporizhia respondents reported the most reductions and the fewest increases, whilst Dnipropetrovsk and Kharkiv residents reported the most increases (Figure 30).

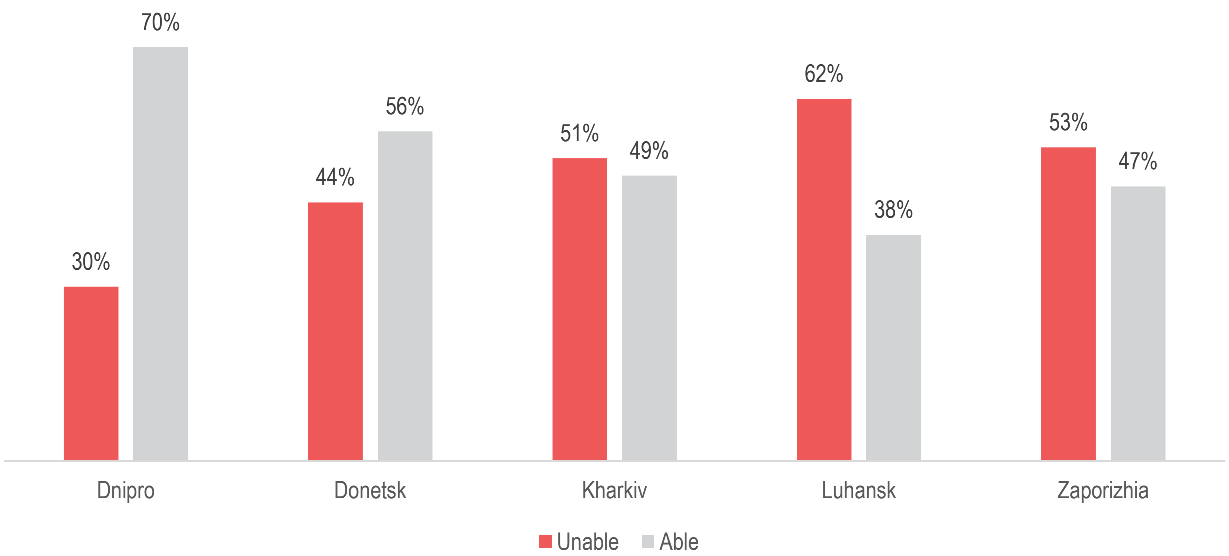
Figure 30: Reported changes in salary since the start of conflict, by oblast



The **reductions in salary reported by household members were steepest in Luhansk**, where 47% of reduced salaries had shrunk between 45 and 54%, and Kharkiv, where 39% of reduced salaries fell into the 45-54% category.

Falling salaries reportedly affected household abilities to meet essential needs, a serious issue across the eastern region. **47% of households surveyed indicated they could not meet their needs from their salaries**, with households in Kharkiv, Zaporizhia, and Luhansk struggling the most as shown in Figure 31. Difficulties in meeting needs were relatively uniform across the eastern oblasts, although Dnipropetrovsk households were noticeably more able to meet needs than other households.

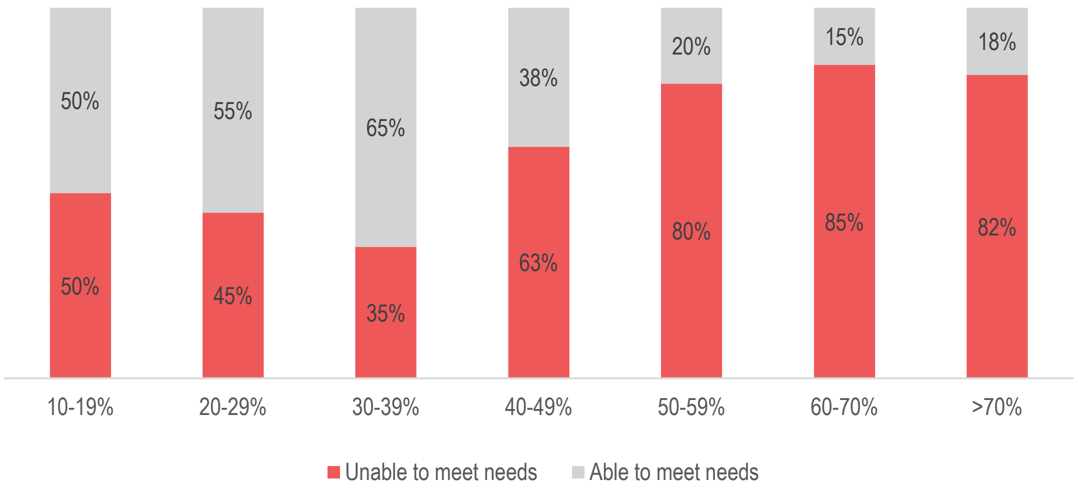
Figure 31: Reported household ability to meet needs from salary by oblast



Greater falls in salaries corresponded with greater inability to meet needs: more than 80% of respondents who reported a decrease of over 50% in salaries said they could not meet their essential household needs with the income from their salary alone. As shown in Figure 32, even smaller drops in salary affected their ability to meet needs. Participants in FGDs confirmed this impression, reporting a variety of problems in meeting needs from inability to pay bills to difficulties in affording medication.

> *"We barely make ends meet. We're a family of four, and the rent, the utilities… you open the bills and want to cry."*
>
> Female FGD participant, Zaporizhia

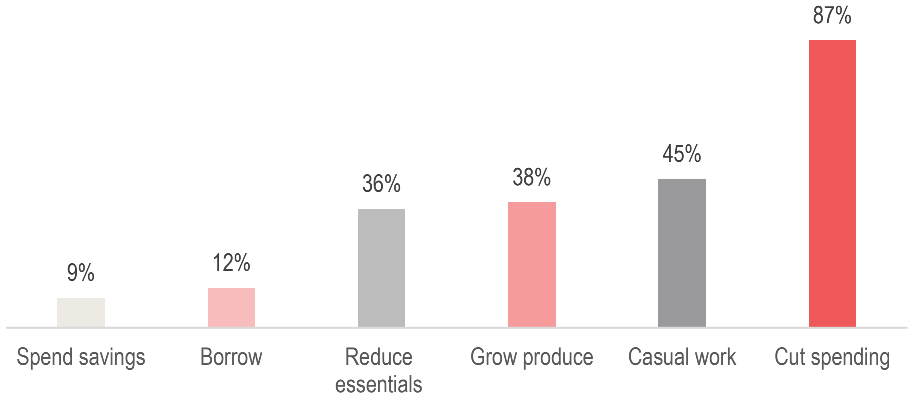
Figure 32: Reported ability to meet needs by size of salary reduction



Households who could not meet their needs through salaries reportedly deployed a variety of coping strategies. **Cutting expenditure was the most commonly-cited strategy**, practised by 87% of households who could not meet their needs. Borrowing money and spending savings - typically options of last resort - were relatively uncommon, while only 3% of households reported selling assets to cope. FGD participants in rural areas reported growing their own food, bartering and swapping food amongst neighbours, and preserving home-grown food for winter as coping strategies, reinforcing the REACH finding that 38% of households were growing their own produce as a coping strategy. It was common for more wealthy FGD participants to report that they were supporting elderly parents in addition to their own households. Figure 33 shows the six most commonly-reported coping strategies amongst the households who were not able to meet their essential needs from salaries.

> *"We had cash reserves, we worked, earned decent salaries. We're still coping but every day it's more and more difficult. Our parents in the NGCA are dependent on medication, we're trying to transfer medicines there because the medications in the NGCA are bad quality. Everything is difficult, but we are surviving."*
>
> Female FGD participant, Zaporizhia

Figure 33: Most reported coping strategies amongst households who cannot meet essential needs



Migrating in search of employment was relatively uncommon, reported by only 8% of households interviewed. However, the assessment did not capture information on single-person households who left the area due to unemployment or households which migrated in their entirety. The Russian Federation was by far the most popular destination for people seeking employment, with 38% of migrants reporting to have gone to this location. The majority of other migrants stayed in the eastern oblasts, although a small number went to Kyiv, while11% did not report their destination.

"I left, went to Moscow. There is no work here, so I had to earn money somehow. That is why I went there.There is a very good attitude towards the inhabitants of the Donbas. There are no permanent jobs there, either, and my family is here, so I've come back."

Male FGD participant, Severodonetsk

CONCLUSION

This report was based on a mixed-methods assessment conducted over a four-month period, encompassing quantitative data collection through reviews of government statistics, surveys of businesses, household surveys, and qualitative data collection through FGDs and KIIs. REACH surveyed 719 businesses and 719 households in eastern Ukraine, in addition to conducting 10 KIIs with universities and labour centres. By using a range of methods, the assessment sought to develop a snapshot of the regional economy and the impact of the conflict on the economy and labour force.

Looking at the overall country, the conflict has had macro-level impacts on the Ukrainian economy. GDP per capita using purchasing power parity has dropped by more than 8% from 2014 to 2015, with current IMF forecasts indicating a slight recovery in 2016 to 94% of 2014 values[20]. This assessment however, focused on understanding the regional nuances of these figures. Ukraine is defined by marked regional differences in terms of official wage levels, rural/urban compositions, internal migration and predominant economic sectors. Understanding these is key to inform livelihood and recovery programmes as the conflict started in an area experiencing broader economic challenges: population decline, aging, and decline in economic output. For example, in 2014 industrial production fell by 10% in Ukraine but dropped by 32% and 42% in Donetsk and Luhansk.

The results of the assessment indicated a direct relationship between conflict and the strength of the regional economy in eastern Ukraine. Although the entire eastern region was affected by decreasing revenues and shrinking workforces, businesses in Kharkiv and Dnipropetrovsk were less impacted than in Luhansk and Zaporizhia, indicating that there are signs of economic recovery in Kharkiv and Dnipropetrovsk. At the individual level, the results indicated that individuals in Luhansk and Donetsk Oblasts were affected more significantly than individuals in other eastern oblasts: they were more likely to lose jobs, and less likely to be able to meet their basic needs. This reflected the difficulties within the heavy industry sector which dominates these two oblasts to a greater degree than the others in eastern Ukraine.

The methodology chosen and the characteristics of the population assessed prevented a thorough understanding of the conflict's impact on universities and labour centres, because only one university was consulted in each oblast and the number of people surveyed who used labour centres was very low; consequently, further investigation of these two types of institutions specifically is required to identify the interactions between these institutions and the population, and to determine how best they can be used to strengthen the regional economy.

Finally, the assessment demonstrated that on a long-term basis resolving the conflict so that investor confidence can increase, trade relationships with Russia can improve, and the movement of people and goods can return to normal will be crucial to the restoration of the Ukrainian economy.

The key recommendations derived from this assessment are:

1. **Supporting skills-based training developed to address skills gaps identified by businesses** for un- or under-employed people in eastern Ukraine, **particularly older people (over 50s)**.

2. **Improving access to credit for businesses and individuals**, particularly small and micro-enterprises, and individuals wishing to start businesses.

3. Assisting businesses with legal and regulatory issues to **accessing European and emerging markets** to diversify their markets following the loss of trade with Russia and the Commonwealth of Independent States.

[20] IMF, 'Ukraine: Selected Issues': http://www.imf.org/en/Publications/CR/Issues/2017/04/04/Ukraine-Selected-Issues-44799 (Ukraine, 2016).

ANNEXES

Annex 1: Terms of Reference

Link to resource centre

Annex 2: List of Assessed Villages

Settlement Name	KOATUU old	Sample Size	Samples Collected	Raion Name	Total Sample Size by Raion
Dnipro	1210100000	48	***48***	Dnipropetrovska	48
Dniprodzerzhynsk	1210400000	8	***8***	Dniprodzerzhynska	8
Zhovti Vody	1210700000	2	***2***	Zhovtovodska	2
Kryvyi Rih	1211000000	29	***29***	Kryvorizka	29
Nikopol	1211600000	6	***6***	Nikopolska	6
Novomoskovsk	1211900000	4	***4***	Novomoskovska	4
Pokrov	1212100000	2	***2***	Ordzhonikidzevska	2
Pavlohrad	1212400000	4	***4***	Pavlohradska	4
Pershotravensk	1212600000	5	***5***	Pershotravenska	5
Synelnykove	1213000000	2	***2***	Synelnykivska	2
Ternivka	1213500000	2	***2***	Ternivska	2
Apostolove	1220310100	1	***1***	Apostolivskyi	4
Hrushivka	1220384401	1	***1***		
Mykhailivka	1220386601	1	***1***		
Nyva Trudova	1220387701	1	***1***		
Vasylkivka	1220755100	1	***1***	Vasylkivskyi	1
Novomykolaivka	1221055800	1	***1***	Verkhnodniprovskyi	1
Pidhorodne	1221411000	2	***2***	Dnipropetrovskyi	9
Yuvileine	1221455800	4	***4***		
Novooleksandrivka	1221486201	1	***1***		
Partyzanske	1221486601	2	***2***		
Lozuvatka	1221884001	1	***1***	Kryvorizkyi	1
Mahdalynivka	1222355100	1	***1***	Mahdalynivskyi	1
Chervonohryhorivka	1222955700	1	***1***	Nikopolskyi	1
Hubynykha	1223255600	1	***1***	Novomoskovskyi	1
Mykolaivka	1223882501	1	***1***	Petropavlivskyi	1
Prosiana	1224255400	1	***1***	Pokrovskyi	1
Solone	1225055100	1	***1***	Solonianskyi	3
Apollonivka	1225055101	1	***1***		
Sursko-Mykhailivka	1225087301	1	***1***		
Shyroke	1225855100	1	***1***	Shyrokivskyi	2
Stepove	1225885901	1	***1***		

Bakhmut	1410300000	10	***10***	Artemivska	14
Soledar	1410370300	2	***2***		
Chasiv Yar	1410370600	2	***2***		
Dymytrov	1411300000	7	***7***	Dymytrivska	7
Dobropillia	1411500000	1	***1***	Dobropilska	2
Bilozerske	1411570500	1	***1***		
Druzhkivka	1411700000	4	***4***	Druzhkivska	4
Mariupol	1412300000	42	***43***	Mariupolska	44
Sartana	1412365300	2	***2***		
Kostiantynivka	1412600000	4	***4***	Kostiantynivska	4
Kramatorsk	1412900000	12	***12***	Kramatorska	14
Shabelkivka	1412947100	1	***1***		
Yasnohirka	1412947700	1	***1***		
Krasnoarmiisk	1413200000	8	***8***	Krasnoarmiiska	9
Rodynske	1413270600	1	***1***		
Selydove	1413800000	2	***2***	Selydivska	4
Tsukuryne	1413846500	1	***1***		
Hirnyk	1413870300	1	***1***		
Sloviansk	1414100000	5	***5***	Slovianska	7
Mykolaivka	1414170300	1	***1***		
Sviatohirsk	1414170500	1	***1***		
Vuhledar	1414800000	2	***2***	Vuhledarska	2
Spasko-Mykhailivka	1420387301	1	***1***	Oleksandrivskyi	1
Siversk	1420910400	1	***1***	Bakhmutskyi	1
Velyka Novosilka	1421255100	2	***2***	Velykonovosilkivskyi	5
Komar	1421282401	1	***1***		
Krasna Poliana	1421283001	2	***2***		
Volnovakha	1421510100	5	***5***	Volnovaskyi	7
Volodymyrivka	1421555600	2	***2***		
Hannivka	1422081101	1	***1***	Dobropilskyi	1
Hrodivka	1422755300	1	***1***	Krasnoarmiiskyi	2
Hryshyne	1422781101	1	***1***		
Drobysheve	1423055400	1	***1***	Krasnolymanskyi	1
Kurakhove	1423310600	2	***2***	Marinskyi	4
Maksymilianivka	1423385001	1	***1***		
Novoukrainka	1423385801	1	***1***		
Manhush	1423955100	1	***1***	Pershotravnevyi	1
Bylbasivka	1424255600	1	***1***	Slovianskyi	3
Raihorodok	1424256200	1	***1***		
Maidan	1424285702	1	***1***		
Ocheretyne	1425555900	1	***1***	Yasynuvatskyi	1
Zaporizhzhia	2310100000	59	***59***	Zaporizka	59

Berdiansk	2310400000	18	*18*	Berdianska	18
Melitopol	2310700000	14	*14*	Melitopolska	14
Tokmak	2311000000	2	*2*	Tokmatska	2
Enerhodar	2312500000	4	*4*	Enerhodarska	4
Yakymivka	2320355100	1	*1*	Yakymivskyi	3
Kyrylivka	2320355400	1	*1*		
Novodanylivka	2320382401	1	*1*		
Andriivka	2320655200	1	*1*	Berdianskyi	2
Dmytrivka	2320681501	1	*1*		
Vasylivka	2320910100	3	*3*	Vasylivskyi	5
Dniprorudne	2320910400	1	*1*		
Mala Bilozerka	2320983301	1	*1*		
Velyka Bilozerka-1	2321180101	1	*1*	Velykobilozerskyi	1
Vesele	2321255100	1	*1*	Veselivskyi	2
Chkalove	2321286801	1	*1*		
Vilniansk	2321510100	1	*1*	Vilnianskyi	4
Bohatyrivka	2321582703	1	*1*		
Mykhailivka	2321584001	1	*1*		
Solone	2321587201	1	*1*		
Huliaipole	2321810100	1	*1*	Huliaipilskyi	2
Komsomolske	2321883001	1	*1*		
Balabyne	2322155300	2	*2*	Zaporizkyi	3
Bilenke	2322180801	1	*1*		
Kamianka-Dniprovska	2322410100	1	*1*	Kamiansko-Dniprovskyi	5
Blahovishchenka	2322480501	1	*1*		
Velyka Znamianka	2322481801	1	*1*		
Vodiane	2322482401	1	*1*		
Dniprovka	2322484601	1	*1*		
Novobohdanivka	2323082001	1	*1*	Melitopolskyi	3
Novomykolaivka	2323082401	1	*1*		
Terpinnia	2323085101	1	*1*		
Mykhailivka	2323355100	1	*1*	Mykhailivskyi	1
Orikhiv	2323910100	1	*1*	Orikhivskyi	3
Mala Tokmachka	2323982501	1	*1*		
Nesterianka	2323983301	1	*1*		
Polohy	2324210100	1	*2*	Polohivskyi	2
Kinski Rozdory	2324282401	1	*1*		
Pryazovske	2324555100	1	*1*	Pryazovskyi	3
Novovasylivka	2324555400	1	*1*		
Oleksandrivka	2324580301	1	*1*		
Yelyseivka	2324881601	1	*1*	Prymorskyi	1
Rozivka	2324955100	1	*1*	Rozivskyi	1
Lysychansk	4411800000	29	*29*	Lysychanska	34

Novodruzhesk	4411870400	2	***2***		
Pryvillia	4411870700	3	***3***		
Rubizhne	4412500000	19	***20***	Rubizhanska	19
Sieverodonetsk	4412900000	28	***32***	Sievierodonetska	30
Borivske	4412945200	2	***2***		
Bilovodsk	4420655100	2	***2***	Bilovodskyi	3
Semykozivka	4420689501	1	***1***		
Bilokurakyne	4420955100	1	***3***	Bilokurakynskyi	2
Pavlivka	4420987201	1	***1***		
Kreminna	4421610100	5	***5***	Kreminskyi	7
Krasnorichenske	4421655400	1	***1***		
Kudriashivka	4421681901	1	***1***		
Markivka	4422555100	1	***1***	Markivskyi	1
Milove	4422855100	3	***3***	Milovskyi	4
Mykilske	4422884401	1	***1***		
Novoaidar	4423155100	5	***5***	Novoaidarskyi	9
Oleksiivka	4423180501	1	***1***		
Bakhmutivka	4423180701	1	***1***		
Dmytrivka	4423182301	1	***1***		
Smolianynove	4423187101	1	***1***		
Novopskov	4423355100	3	***3***	Novopskovskyi	6
Kamianka	4423382501	1	***1***		
Mozhniakivka	4423383201	1	***1***		
Osynove	4423384701	1	***1***		
Svatove	4424010100	7	***7***	Svativskyi	11
Nyzhnia Duvanka	4424055400	1	***1***		
Miluvatka	4424083501	1	***1***		
Mistky	4424084001	2	***2***		
Chuhynka	4424886501	1	***1***	Stanychno-Luhanskyi	2
Shyrokyi	4424887001	1	***1***		
Starobilsk	4425110100	4	***4***	Starobilskyi	7
Butove	4425180201	1	***1***		
Pishchane	4425180203	1	***1***		
Lyman	4425182001	1	***1***		
Troitske	4425455100	3	***3***	Troitskyi	3
Kharkiv	6310100000	74	***75***	Kharkivska	74
Izium	6310400000	2	***2***	Iziumska	2
Kivsharivka	6310745400	1	***1***	Kupianska	2
Kupiansk-Vuzlovyi	6310745700	1	***1***		
Lozova	6311000000	4	***4***	Lozivska	6
Paniutyne	6311045400	2	***2***		
Liubotyn	6311200000	1	***1***	Liubotynska	1
Pervomaiskyi	6311500000	2	***2***	Pervomaiska	2

Chuhuiv	6312000000	1	*1*	Chuhuivska	1
Balakliia	6320210100	1	*1*	Balakliiskyi	3
Andriivka	6320255300	1	*1*		
Savyntsi	6320255700	1	*1*		
Barvinkove	6320410100	1	*1*	Barvinkivskyi	1
Bohodukhiv	6320810100	1	*1*	Bohodukhivskyi	1
Valky	6321210100	1	*1*	Valkivskyi	1
Vovchansk	6321610100	2	*2*	Vovchanskyi	3
Vilcha	6321655500	1	*1*		
Zidky	6321755300	1	*1*	Zmiivskyi	5
Slobozhanske	6321755600	2	*2*		
Heniivka	6321782001	1	*1*		
Taranivka	6321786001	1	*1*		
Kolodiazne	6321882001	1	*1*	Dvorichanskyi	1
Derhachi	6322010100	3	*3*	Derhachivskyi	7
Peresichne	6322056500	2	*2*		
Solonytsivka	6322057600	2	*2*		
Dovzhyk	6322682501	1	*1*	Zolochivskyi	1
Chervonyi Oskil	6322888001	1	*1*	Iziumskyi	1
Shelestove	6323281001	1	*1*	Kolomatskyi	1
Krasnohrad	6323310100	2	*2*	Krasnohradskyi	3
Natalyne	6323383001	1	*1*		
Krasnokutsk	6323555100	2	*2*	Krasnokutskyi	5
Kostiantynivka	6323555400	1	*1*		
Koziivka	6323583201	1	*1*		
Kolontaiv	6323583701	1	*1*		
Senkove	6323786501	1	*1*	Kupianskyi	1
Orilka	6323955700	1	*1*	Lozivskyi	1
Oleksiivka	6324580501	1	*1*	Pervomaiskyi	1
Sakhnovshchyna	6324855100	2	*2*	Sakhnovshchynskyi	2
Babai	6325155300	1	*1*	Kharkivskyi	10
Bezliudivka	6325155600	2	*2*		
Budy	6325156100	2	*2*		
Vasyshcheve	6325156400	1	*1*		
Vysokyi	6325156700	1	*1*		
Pisochyn	6325157900	1	*1*		
Pokotylivka	6325158200	1	*1*		
Rohan	6325158500	1	*1*		
Novopokrovka	6325456200	1	*1*	Chuhuivskyi	2
Lebiazhe	6325484501	1	*1*		

Annex 3: HH Questionnaire

Link to resource centre

Annex 4: Enterprise Questionnaire

Link to resource centre