

**KSE Center for Food and Land
Use Research (C4FLUR)**

FOOD SECURITY AND POLICY REVIEW IN UKRAINE

May 17 2022

FOREWORD TO THE SERIES

Global view: Russia's invasion of Ukraine amplified the role of Ukraine in ensuring global food security. Blocked exports and endangered current planting campaign in Ukraine surged world market prices and risked not only to undermine country's agri-food sector and overall economy, but also to starve hundreds of millions globally^{1,2}.

Ukraine has been playing an increasing role on the world agricultural market. Only two decades ago Ukraine's grain exports were equivalent to feeding 40 mln people, and already more than 400 mln today. In 2019-2021 Ukraine accounted for nearly 10% of global wheat and 15% of corn exports, 15% of barley exports and nearly 50% of sunflower oil exports³.

Domestic view: Locally, agriculture accounts for about 20% of GDP (if upper- and downstream sectors are accounted for) and for more than 40% of total export

revenues⁴. Aside from being an important sector in terms of GDP and employment (around 15% of the total population of Ukraine⁵), agricultural producers provide the local population with nearly 100% of its staple crops, vegetables and at least 80% of meat consumption⁵. Despite Ukraine's vast agricultural production potential, the war does not only severely impact the global food security, but the domestic food security as well.

By launching the Food Security and Policy Review in Ukraine we aim at providing a regular monitoring of the food security situation in Ukraine and wartime agricultural policy response. It shall assist various stakeholders and interested parties in taking decisions based on facts and evidence.

FOOD AFFORDABILITY INDEX 38% DOWN

Food security is a complex phenomenon that is generally composed of three elements: food availability, access and utilization. We start from the food access or, alternatively, having adequate income or other resources to access food, and use Food Affordability Index (FAI) for monitoring. FAI⁶ is estimated as a ratio of the

¹Russian invasion in Ukraine could threaten global food security and starve hundreds of millions globally. Kyiv School of Economics news, 4 March 2022, <https://kse.ua/ua/about-the-school/news/russian-invasion-in-ukraine-could-threaten-global-food-security-and-starve-hundreds-of-millions-globally/>

²Impact of the Ukraine-Russia conflict on global food security and related matters under the mandate of the Food and Agriculture Organization of the United Nations (FAO). Council. Hundred and sixty-ninth Session, 8 April 2022. <https://www.fao.org/3/ni734en/ni734en.pdf>

³ FAOSTAT

⁴ State Statistics Service of Ukraine

⁵ Own calculations based on data from State Statistics Service of Ukraine

⁶ INDDEx Project (2018), Data4Diets: Building Blocks for Diet-related Food Security Analysis. Tufts University, Boston, MA. <https://inddex.nutrition.tufts.edu/data4diets>. Accessed on 2 May 2022.



average salary⁷ to the price of the basket of food products (see the methodology in Box A.1 of the Annex).

The average price for the “basket of goods” in Ukraine increased by 5.8% in April 18 – April 22 as compared to February 21 – February 25. The increase was the highest in the Kherson region, a substantial part of which has been under the Russian occupation: by 36% over the observed period. Unfortunately, we do not have information on the price data in another region, where a substantial territory is occupied by Russia – Donetsk and Luhansk regions. Replacing the regional price information with the national average is also likely to affect the estimation for the Chernihiv oblast⁸.

Average salaries before and after the invasion⁹ as well as the price of the basket of food products, allows estimating the FAI. FAI measures the number of monthly baskets of food products a person with an average salary could purchase at a given moment. Before the invasion, the FAI score was 12.4, implying that the person with an average salary could buy 12.4 months' worth of food products from our basket. The current FAI score is 7.7, implying 37.9% reduction in purchasing power of an average consumer in Ukraine, thus signaling about a substantial decrease in food access for Ukraine's population.

DOMESTIC FOOD PRICES 6-35% UP

Russia's invasion of Ukraine surged substantially the prices of the main food commodities in Ukraine and its regions (see Figure A.1 in the Annex for details). The absolute champions in a price race were: Kherson oblast with 29.6% growth, while Cherkasy, Mykolaiv, Sumy and Ternopil oblasts have grown by 13.1-10.3%. There are no data available for April in Donetsk and Luhansk regions, where active battles are taking place. Data for Feb-Mar is poorly available for Chernihiv as well due to the city's occupation during this period (see Figure 1 below). Overall in Ukraine, prices for bread, flour, meat, dairy, milk and vegetables increased by 5.6-34.5% depending on the product.

Most significant changes occurred for wheat flour (17%), buckwheat (27%) and millet (35%). As compared to the January-February period, for example, prices changes for these commodities ranged 0-5%.

Increase in prices for pork (10%), milk (9%), butter (12%), sugar (7%) and cooking oil (13%) with the start of the war was rather noticeable as compared to the pre-war period, when the changes in the respective prices were up to 4%.

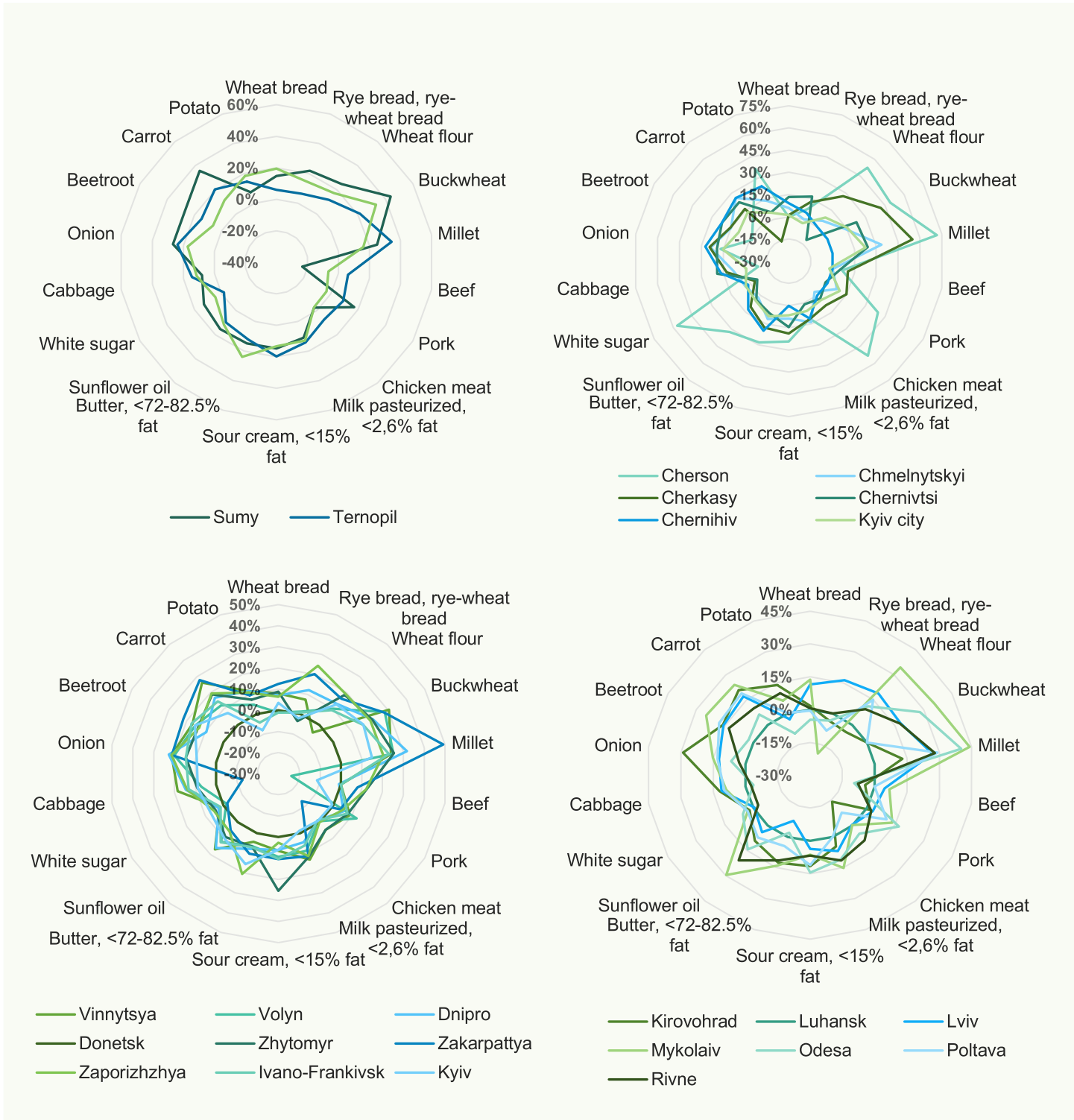
The main reasons behind such growth of the prices were growing world market food and energy prices, precipitated by large-scale destruction of infrastructure, increased logistics costs, business disruptions and breakdowns of supplies and overall supply chains.

⁷ Since pensions and social payments have not changed its current values by April 22nd, they are considered constant throughout the index. Respectively, they do not affect the value of the index.

⁸ Another way to approximate the missing prices is to use the adjusted average of prices for the respective commodities of the neighboring regions. Because each region has its specificities and, thus, the definition of the “neighbors” in terms of price proximity is not straightforward, the analysis of spatial dependence must be conducted first.

⁹ According to the survey of CEOs and business owners conducted by the Gradus and the Kyiv School of Economics – 22% of businesses remain inactive from April 12- to April 22. 71% of all inactive businesses do not pay salaries to their employees. https://kse.ua/wp-content/uploads/2022/05/Ukrainian_Business_inWar_2Wave_Report_Gradus_KSE_22042022.pdf

FIGURE 1: REGIONAL CHANGES IN FOOD PRICES, %



Source: own calculations based on SSSU

AGRICULTURAL AND LAND POLICIES

There are important changes introduced into the agri-food policy of Ukraine as a response to the problems originated from the Russia's invasion. They are valid for the wartime period and apply to small and medium-sized agricultural producers with a turnover of no more than 20 million euros per year, which is the equivalent of an enterprise that cultivates up to 10,000 hectares. In particular:

- a) all enterprises with annual turnover less than 10 bln UAH (340 mil USD) are eligible for a 2% turnover tax and excepting from VAT and profit taxes;
- b) excise tax on fuel is removed and VAT reduced from 20% to 7%;
- c) cancellation of import duties for majority of imported goods (except for alcohol and tobacco goods), as well as the requirement for domestic labeling;
- d) introduction of fixed currency exchange rate and ban on purchasing of foreign currency by residents;
- e) introduction of 'Critical Import List' that allow entities to make transfers in foreign currencies;
- f) introduction of price margins threshold on critical goods and commodities in the national security matter (up to 10% on cereals, 7 UAH on diesel etc.);
- g) introduction of ban on russian-origin imports;
- h) agricultural enterprises have the right to apply for temporary release of their employees from military duty, under the conditions of meeting specific criteria¹⁰.

Land policy

On April 7 the changes in the legislation on agricultural land relations that are valid during the wartime¹¹ took

place. The major change refers to the lease of agricultural land of state and communal ownership (except for those in permanent use by persons who do not belong to state, municipal enterprises, institutions, organizations), as well as land remaining in the collective ownership of a collective agricultural enterprise, agricultural cooperative, agricultural joint-stock company, unallocated and unclaimed land plots and land shares (units) for the purpose of agricultural production for up to one year. The lease of such land is carried out under the following conditions:

- a) the amount of rent may not exceed 8% of the normative monetary value of the land plot (varies across the land plots in different regions), which is determined from the average normative monetary value of a unit of arable land area in the region;
- b) the tenant of the land plot is not entitled to: compensation of own expenses for land improvement, renewal of the land lease agreement, conclusion of a land lease agreement for a new term using the lessee's preemptive right, sublease of land, establishment of land easement, change of land plots, construction of real estate (buildings, structures) on the land plot, establishment of perennial plantations on the land plot, preemptive right to purchase the leased land in case of its sale, alienation and transfer of the right to use the land plot as a pledge (mortgage), use for own needs of common minerals, peat, forests, water bodies, as well as other useful properties of the land available on the land plot, change of land use type (from agricultural to any other one);
- c) the lease of land is carried out without land auctions.

Transit rules

Since April the transit of products of animal origin to the EU has become possible for categories of goods that are authorized for export to the EU from both approved and

¹⁰ Minagro (2022): The procedure for application of temporary release from military duty of employees, <https://minagro.gov.ua/news/poryadok-bronyuvannya-vijskovozobov'yazanih?fbclid=IwAR2IGeU8ZEQfwOhgsPpKjoXTMmdbY7t2WdyRltgtH2nxWlw313W0fjOVeD8>

¹¹ Law of Ukraine (2145-IX) on modification of some legislative acts of Ukraine concerning creation of conditions for maintenance of food

safety in the conditions of martial law, <https://zakon.rada.gov.ua/laws/show/2145-20#Text>



unauthorized facilities, only subject to compliance with the animal health requirements¹².

Simplification of legal procedures

During the period of martial law, the Ministry of Agrarian Policy and the Government of Ukraine simplified the procedures for the following actions:

- a) additional seed certification procedures have been abolished¹³;
- b) simplified labeling of imported food and feed under martial law;
- c) licensing of corn and sunflower oil exports has been revoked, whereas of wheat and a mixture of wheat and rye (meslin) (1001), chicken meat (0207 11, 0207 12, 0207 13, 0207 14) and chicken eggs (0407 21 00 00)¹⁴,¹⁵;
- d) permits (certificates) for the right to transportation, storage, use and trade of pesticides and agrochemicals, issued in accordance with the Law of Ukraine "On Pesticides and Agrochemicals" and valid as of January 1, 2022, is valid for the period of validity martial law in Ukraine and for 90 days following the day of its termination or abolition¹⁶;

e) simplification of control of phytosanitary norms¹⁷;

f) simplified registration of agricultural machinery and equipment during martial law¹⁸ (additional information on agricultural and land policies in Ukraine, see APD-Ukraine.de¹⁹).

¹² KMU (2022): The conditions of transit of animal products through the EU have been changed, <https://www.kmu.gov.ua/news/zmineno-umovi-tranzitu-produkciyi-tvarinnogo-pohodzhennya-cherez-yes>

¹³ Order of the Ministry of Agrarian Policy and Food of Ukraine of March 1, 2022 № 132, <https://minagro.gov.ua/npa/pro-zabezpechennya-silgosptovarovi-robnikiv-nasinnyam-dlya-provedennya-vesnyano-polovih-robit-u-2022-roci?v=624ea86d4de6c>

¹⁴ Decree of Cabinet of Ministers of Ukraine of March 24, 2022 № 352, Kyiv, On Amendments to Annex 5 to the Resolution of the Cabinet of Ministers of Ukraine of December 29, 2021 № 1424, <https://www.kmu.gov.ua/npas/pro-vnesennya-zmin-u-dodatok-5-do-postanovi-kabinetu-ministriv-ukrayini-vid-29-grudnya-2021-r-1424-352>

¹⁵ Decree of Cabinet OF Ministers of Ukraine of April 9, 2022 N 422, Kyiv, About modification of appendices 1 and 5 to the resolution of the Cabinet of Ministers of Ukraine of December 29, 2021 N 1424, <https://ips.ligazakon.net/document/view/kp220422>

¹⁶ Decree of Cabinet of Ministers of Ukraine of March 16, 2022 № 297, Kyiv, About some issues of transportation (transportation), storage, use and trade of pesticides and agrochemicals, <https://zakon.rada.gov.ua/laws/show/297-2022-%D0%BF#Text>

¹⁷ Decree of Cabinet of Ministers of Ukraine from April 1, 2022 № 398, Kyiv, About some issues of phytosanitary measures and procedures in martial law, <https://www.kmu.gov.ua/npas/deyaki-pitannya-zdiysnennya-fitosanitarnih-zahodiv-ta-procedur-v-umovah-voyennogo-stanu-398>

¹⁸ Decree of Cabinet of Ministers of Ukraine of April 12, 2022 № 434, Kyiv, About modification of the Order of departmental registration and deregistration of tractors, self-propelled chassis, self-propelled agricultural, road-building and reclamation machines, agricultural machinery, other mechanisms, <https://www.kmu.gov.ua/npas/pro-vnesennya-zmin-do-poryadku-vidomchoyi-reyestratsiyi-ta-znyattya-z-obliku-traktoriv-samohidnih-shasi-samohidnih-silskogospodarskih-dorozhno-budivelnih-i-meliorativnih-mashin-434>

¹⁹ Neuigkeiten aus der Agrar- und Ernährungspolitik, <https://www.apd-ukraine.de/de/publikationen/neuigkeiten-aus-der-agrar-und-ernhrungspolitik>



ANNEX

Box A.1: Methodology applied for estimating the Food affordability index (FAI)

The FAI is calculated using the regional daily prices for 21 critical food products collected by the State Statistics Service of Ukraine (SSSU). For February 24-25, though, there are five regions (Zaporizhzhia, Luhansk, Kharkiv, and Kherson) with no price information available due to high intensity of hostilities. If the food prices are missing for February 24- or 25, or both – we estimated the weekly average price of food products using only days for which the food prices information was available. There is also no price data available for two regions in the active war zone (Donetsk and Luhansk) for April 18 – April 22, and for the temporarily occupied Crimea for the entire period. We replace the product's price in the region with the national average price for the given period in case of missing regional prices.

Overall, prices are available for 23 regions (except for occupied Crimea, Donetsk, and Luhansk regions), 6 of which have indications of unstable physical access to food. We consider a region having an unstable physical food access when there is no price information available for at least one basic food product for at least one day in the week of April 18 – to April 22.

The most difficult situation with stable physical food access was observed in the Chernihiv region, which stayed under the Russian occupation for almost a month. Problem were observed for pasta, poultry, milk, and butter, and prices for flour, oatmeal, buckwheat, millet, beef, pork, and sour cream were missing for the entire week of April 18 – April 22.

On top of Chernihiv region, there are five other regions with unstable access to some of the food products. There is no price information available for wheat bread in the Kherson region, for buckwheat and beef in the Poltava region, and for oatmeal in the Kirovohrad region. Kirovohrad and Sumy regions also have unstable access to buckwheat, while Zhytomyr region has irregular access to oatmeal.

The costs of monthly consumption basket is based on the selected 21 food products and using the estimates of average monthly consumption pattern of these products adopted by the Ukrainian Cabinet of Ministers' consumer basket. Although there are regional differences in the consumption patterns, we are constructing a single basket of goods on the national level to ensure better price comparability.²⁰

To proxy the incomes with the salaries using the structural changes in the job market. According to the survey of CEOs and business owners conducted by the Gradus and the Kyiv School of Economics – 22% of businesses remained inactive from April 12- to April 22. 71% of all inactive businesses did not pay salaries to their employees. Among operational businesses (78% of all businesses), if we exclude the category that responded with "difficult to respond," – 23% are not paying salaries. Therefore, based on the survey results, approximately 36% of employees lost their job and now have to rely on employment benefits instead of the salary. Employment benefits range from 650 UAH to 10,000 UAH, with the average benefit of approximately 4,000 UAH.

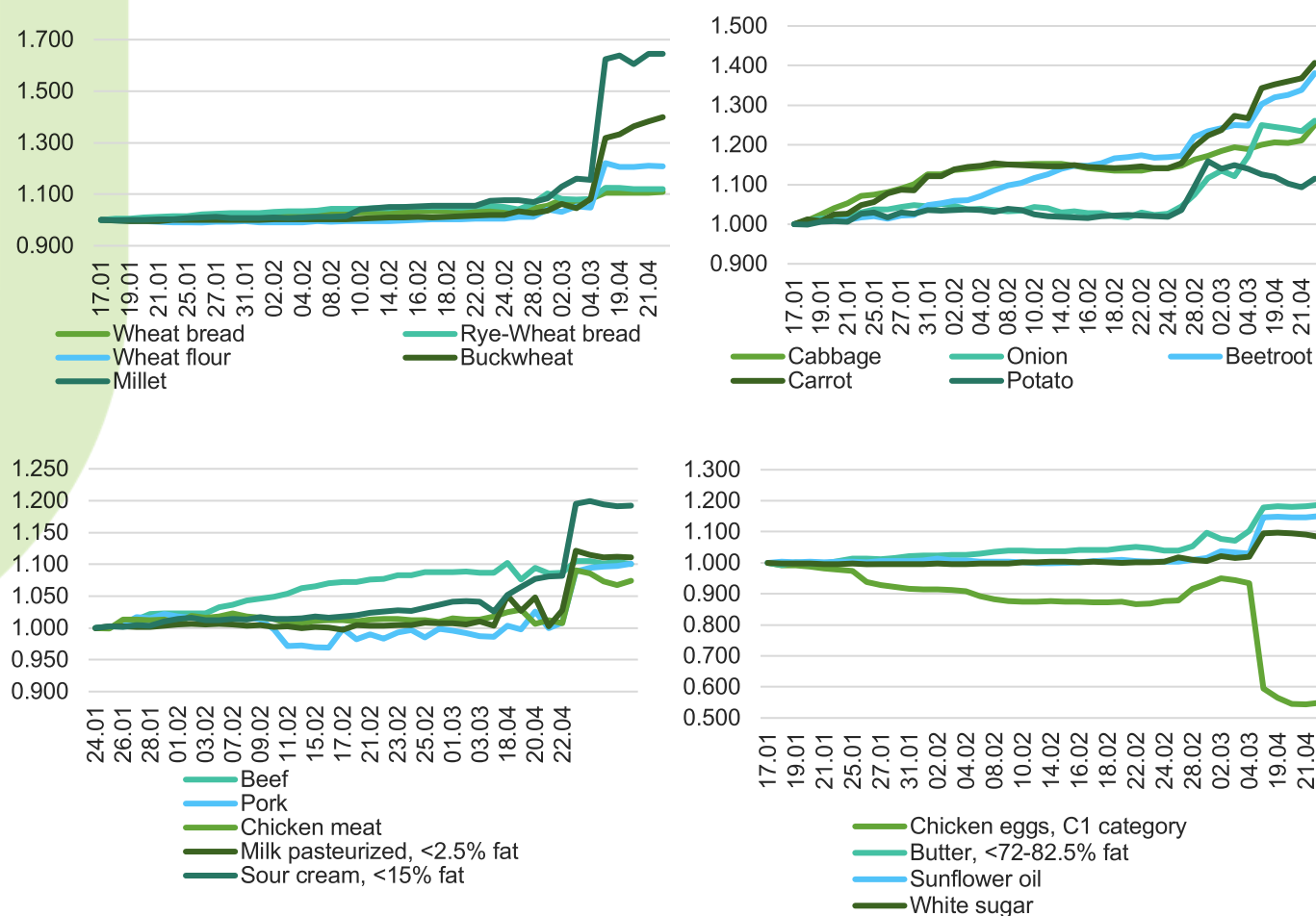
Only 26% of operational firms and 6% of inactive firms keep paying full salaries, and only 2% of companies in each category pay above the pre-invasion level. The remaining respondents indicated one of four levels of salaries related to the pre-invasion levels: up to 30% of the pre-invasion salary, 30-49%, 50-69% and 70-99% of the pre-invasion salaries.

The average salary in Ukraine for November 2021 – January 2022 was 15,438 UAH per month (according to SSSU). Using these data and the survey above described, we conclude that the average earnings of people who were employed before the invasion decreased to 10,155 UAH per month, or by over a third (34% decrease in average nominal earnings, including the employment benefits for those who lost the job).

²⁰ While in reality, change in relative price between different food categories changes consumption patterns such that relatively cheaper products face higher demand - we are using the same basket throughout the whole observation period.



Figure A.1: Indices of daily prices for the main food commodities in Ukraine, January 17 – April 22, 17.01=1.00



Source: own calculations based on SSSU

The views and opinions expressed are those of the authors and do not reflect the position of KSE, C4FLUR or of the partners.

Contact persons:

Roman Neyter and Mariia Bogonos

KSE Center for Food and Land Use Research

agrifood@kse.org.ua

kse.ua

Acknowledgements:

This work is supported by the Food and Agriculture Organization of the United Nations, the World Bank and the European Bank of Reconstruction and Development.

The authors are grateful to Denys Palamarchuk, head of the experts team of the EC's project IPRSA and to Oleksandr Sikachyna, agricultural markets and policy expert, for their very valuable support and comments.