



Trade Potential Assessment of Value Chains in The Eastern Ukrainian Economy

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List of Abbreviations

AM	Agricultural Machinery
CUFTA	Canada-Ukraine free trade agreement
DO	Donetsk Oblast
GCA	Government Controlled Areas
GRP	Gross Regional Product
JSC	Joint Stock Company
KVED-2010	The National Classification of Economic Activities
LB	Lower Bound
LO	Luhansk Oblast
PC	Packaging and Cardboard
SOE	State Owned Enterprise
SSSU	The State Statistics Service of Ukraine
UAH	Ukrainian Hryvnia
UB	Upper Bound
VA	Value Added
VAR	Value Added Ratio
VC	Value Chain

Executive Summary

Effective from August 1, 2017, the Canada-Ukraine Free Trade Agreement (CUFTA) aims to improve market access conditions for Canadian and Ukrainian companies, including elimination of tariffs. Upon CUFTA's entry into force, Canada immediately eliminated customs duties for 26.5% of its tariff lines resulting in 98.1% of Canada's tariff lines being duty free for imports from Ukraine. At the same time, Ukraine immediately eliminated custom duties for 34.7% of tariff lines and overall, 72.6% of Ukraine's tariff lines became duty free for imports from Canada.

We analyzed Ukrainian enterprises operating within specific value chains: Packaging and Cardboard, Agricultural machinery, Socks, Plastics and Aerospace. Our focus was on detecting the promising products that these companies import from elsewhere, but instead could import from Canada with more profit. The primary target regions are the government controlled areas of Donetsk and Luhansk oblasts. Therefore, all value chains are analyzed for companies located in these two regions. Moreover, Aerospace and Agricultural machinery VCs are analyzed at the national level.

Target value chains form 0.66% of the gross regional product in Donetsk and Luhansk oblasts. The total sales of Donetsk and Luhansk firms are equal to UAH 6.5 billion, while the value added is UAH 1.6 billion in 2018. The total number of firms is 241.

The biggest value chain is Packaging and Cardboard. It contributes approximately UAH 1.2 billion (0.55%) of value added to the gross regional product of the selected regions. Also it has the highest import potential. The second largest value chain is Agricultural machinery which contribute UAH 323 million (0.14%) to the gross regional product in Donetsk and Luhansk regions. The smallest value chains are Plastics, Socks and Aerospace industry. These value chains contribute approximately UAH 43 million of value added (0.01%).

Top import commodities in Donetsk and Luhansk oblasts VCs are:

- Packaging and Cardboard:
 - Waste and scrap of paper and paperboard (UAH 250-300 mln)
 - Paper and paperboard, coated one or both sides with kaolin (china clay) or inorganic substances (UAH 35-41 mln)
 - Wood pulp obtained by a combination of mechanical and chemical pulping processes (UAH 30-35 mln)
- Agricultural machinery:
 - X-ray, alpha, beta, gamma radiation apparatus: generators, control panels and desks, screens etc (UAH 4.5-5 mln)

- Instruments and apparatus; for measuring or checking viscosity, porosity, quantities of heat, sound or light (UAH 250-400K)
- Boards, panels, consoles, desks, cabinets for electricity control and distribution (UAH 300-350K)
- Socks:
 - Cotton yarn (other than sewing thread) containing more than 85% of cotton (UAH 3.5-4 mln)
 - Cotton yarn (other than sewing thread), containing less than 85% of cotton (UAH 150-200K)
 - Base metal mountings, fittings and similar articles (up to UAH 100K)
- Plastics:
 - Machinery for working rubber or plastics or for the manufacture of products from these materials (UAH 650-700K)
 - Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves (up to UAH 100K)
 - Electric soldering, brazing, welding machines and apparatus, electric machines and apparatus for hot spraying of metals or sintered carbides (up to UAH 100K).

At the national level, Aerospace and Agricultural machinery value chains contribute 0.58% to the Gross Domestic Product of Ukraine. Total sales of Aerospace value chains were UAH 23 billion in 2018 (140 firms), Agricultural machinery VC – UAH 37 billion (2,532 firms). Corresponding value added of both VCs is UAH 9 and 11 billion.

Top import commodities in Aerospace and Agricultural machinery value chains are (at HS4 level):

- Agricultural machinery:
 - Tractors; (other than tractors of heading no 8709) (UAH 234-340 mln)
 - Flat-rolled products, width 600mm or more, clad, plated or coated (UAH 178-234 mln)
 - Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce (UAH 113-137 mln)
- Aerospace industry:
 - Turbo-jets, turbo-propellers and other gas turbines (UAH 201-251 mln)
 - Nickel; articles thereof n.e.c. in chapter (UAH 200-250 mln)
 - Titanium; articles thereof, including waste and scrap (UAH 100-150 mln).

In our study “Canada-Ukraine Free Trade Agreement: Patterns and Tendencies” (2020)¹, we analysed the CUFTA impact on Canada-Ukraine bilateral trade. One of the main outcomes of the research was identification of promising goods whose exports Canada could increase to Ukraine.

Based on that list of promising goods from our previous study, we identified 17 promising goods for intensifying Canadian exports to Ukraine through the selected value chains in Donetsk and Luhansk oblasts (at HS6 level). The most promising commodities are:

- Packaging and Cardboard:
 - Kraft paper and paperboard; sack kraft paper, uncoated, unbleached, in rolls or sheets, other than that of heading no. 4802 or 4803 (HS 480421)
 - Finishing agents and dye carriers; to accelerate dyeing or fixing of dye-stuffs, other products and preparations, used in the textile industry (excluding those with a basis of amylaceous substances) (HS 380991)
 - Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials (HS 847710)
- Agricultural machinery:
 - Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823 (HS 482390)
 - Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA (HS 850421)
 - Engines; parts, for engines and motors of heading no. 8412 (HS 841290)
- Plastics:
 - Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials (HS 847710)
 - Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90 (HS847790)
 - Welding machines and apparatus; for resistance welding of metal, fully or partly automatic, whether or not capable of cutting (HS851521).

We also identified 66 promising goods (at HS6 level) for intensifying Canadian exports to Ukraine through Aerospace industry and Agricultural machinery value chains at the national level. The most promising commodities are:

- Aerospace industry:
 - Turbo-jets; of a thrust exceeding 25kN (HS 841112)

¹ <https://kse.ua/kse-research/canada-ukraine-free-trade-agreement-patterns-and-tendencies/>

- Turbines; parts of turbo-jets and turbo-propellers (HS 841191)
- Turbines; parts of gas turbines (excluding turbo-jets and turbo-propellers (HS 841199))
- Agricultural machinery:
 - Tractors; track-laying (HS 870130)
 - Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with tin, thickness of less than 0.5mm (HS 721012)
 - Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with chromium oxides or with chromium and chromium oxides (HS 721050).

Introduction

Canada-Ukraine free trade agreement (CUFTA) came into force on the 1st of August 2017. Since then, it has made a positive impact on the Ukrainian exports to Canada up by +6.5%². There was also a positive impact on exports of some Canadian products: electrical machinery – 6.4%, pharmaceutical products – 3.2%, fish – 2.1%.

It is also important to analyze what Canadian products are perspective to integrate into Ukrainian value chains (VC) in order to make them more competitive. Particularly, our analysis covered such value chains as: Packaging and Cardboard, Agricultural machinery, Socks, Plastics and Aerospace.

We analyzed Ukrainian enterprises operating within these value chains, as well as their international trade. Our focus was on detecting the perspective products that these companies import from elsewhere but instead could import from Canada with more profit.

Our study of these value chains was conducted for government controlled areas (GCA) of Donetsk (DO) and Luhansk (LO) oblasts, as these regions are partially occupied, and their economic development is crucial for the Eastern Ukraine region. Agricultural machinery and Aerospace value chains for the whole territory of Ukraine.

The report is structured in the following way: Chapter 1 provides the general overview of Eastern Ukraine economy and patterns of foreign trade. Chapter 2 provides an explanation of methodological and technical approaches as well as applied assumptions and definitions. Chapter 3 analyzes an economic significance of target VCs to economies of DO/LO and Ukraine. Chapter 4 identifies the promising goods within target VCs whose exports Canada could increase to Ukraine.

² <https://kse.ua/kse-research/canada-ukraine-free-trade-agreement-patterns-and-tendencies/>

Chapter 1. Economy of Donetsk and Luhansk oblast

This section provides the general overview of Eastern Ukraine economy and patterns of foreign trade. The conflict of 2014 significantly affected economies of DO and LO oblast. Both regions lost major economic centers and, as a result, regional economies have shrunk and changed their structure, especially LO.

Donetsk oblast

Figure 1 illustrated the sectoral structure of DO economy. Traditionally, DO economy is dominated by heavy industry (mining, metallurgy, chemistry). The 2014 conflict has not change this pattern. The main economic (nonpublic) sectors are (2018):

- Manufacturing (26%)
- Mining (22%)
- Retail and Wholesalers (7%)
- Real Estate (6%)
- Agriculture (6%)
- Transport (6%)

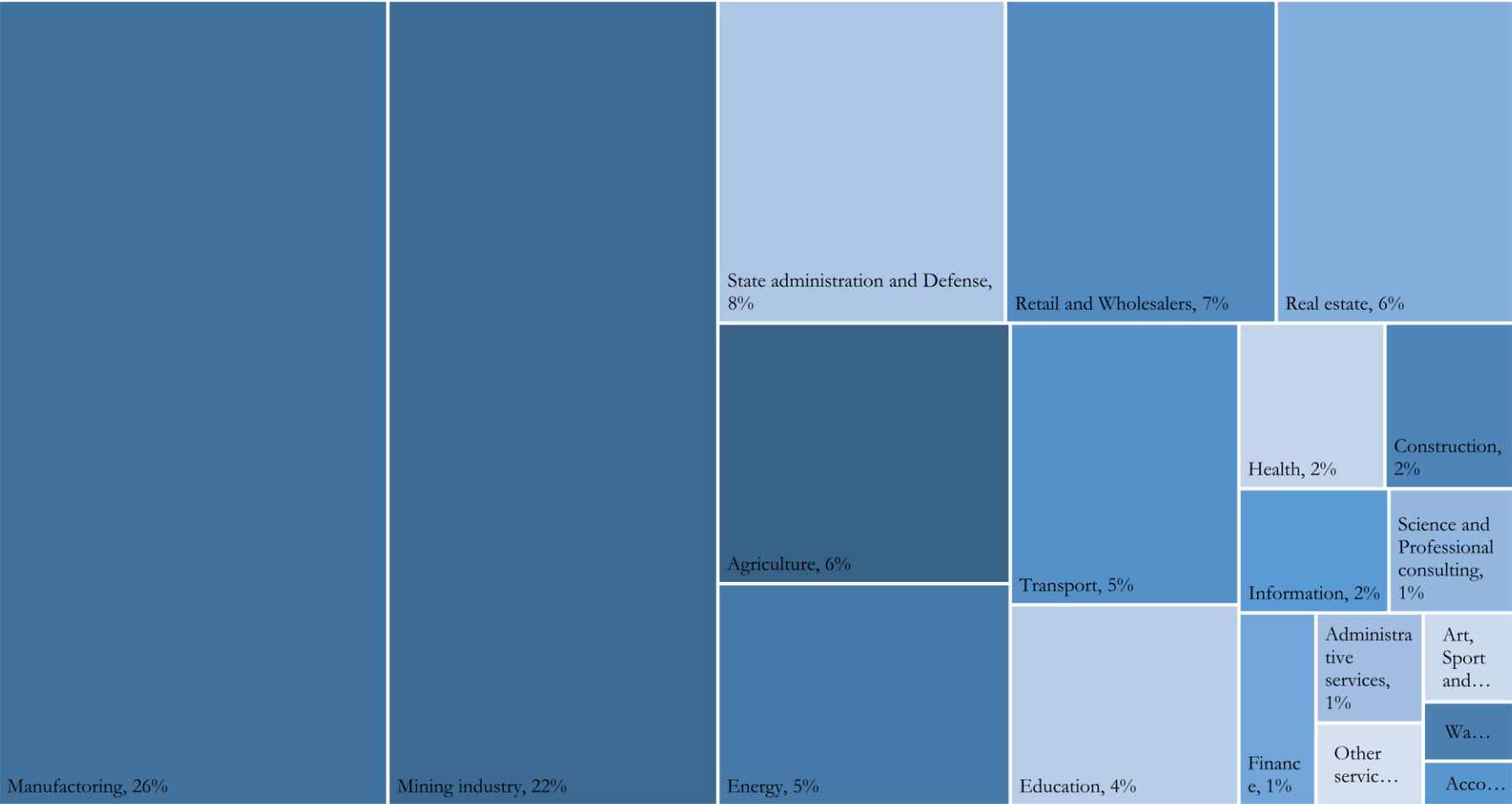
If we move from the high level aggregation to the lowest available (4 digit KVED codes), 5 largest value chains are (Table A1. Appendix A presents TOP 50 VCs in DO):

- Manufacture of basic iron and steel and of ferro-alloys (Manufacturing)
- Mining of hard coal (Mining)
- Casting of iron (Manufacturing)
- Manufacture of coke oven products (Manufacturing)
- Wholesale of waste and scrap (Retail and Wholesalers)

Tables B1 (Appendix B) presents the list of 107 most imported commodities (HS6) in DO in 2019. This list includes commodities with significantly high import volume (more than USD 1 million). Out of 107 commodities, 20 commodities with the highest 2017-2019 growth are:

- Fertilizers, mineral or chemical; containing the three fertilizing elements nitrogen, phosphorus and potassium (HS6 code: 3105200000):

Figure 1. Structure of GRP of DO



Source: The State Statistics Service of Ukraine

- Fabrics, woven; plain weave, printed, of polyester staple fibres, containing less than 85% by weight of such fibres, mixed mainly or solely with cotton, not exceeding 170g/m² (HS6 code: 5513410000)
- Fabrics; knitted or crocheted fabrics of a width exceeding 30 cm, other than those of heading 60.01, containing by weight 5% or more of elastomeric yarn but not containing rubber thread (HS6 code: 6004100000)
- Electric generators; AC generators, (alternators), of an output exceeding 750kVA (HS6 code: 8501640000)
- Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity exceeding 2500cc (HS6 code: 8703330000)
- Seats; with metal frames, upholstered, (excluding medical, surgical, dental, veterinary or barber furniture) (HS6 code: 9401710000)
- Ignition or starting equipment; starter motors and dual purpose starter-generators, of a kind used for spark or compression-ignition internal combustion engines (HS6 code: 8511400000)
- Metal-rolling mills; parts thereof (HS6 code: 8455900000)
- Boilers; central heating boilers (excluding those of heading no. 8402) (HS6 code: 8403100000)
- Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 3000cc (HS6 code: 8703240000)
- Tractors; road, for semi-trailers (HS6 code: 8701200000)
- Glass fibres; woven fabrics (other than of rovings), n.e.c. in item no. 7019.5 (HS6 code: 7019590000)
- Trailers and semi-trailers; (other than tanker type) (HS6 code: 8716390000)
- Ferro-alloys; ferro-nickel (HS6 code: 7202600000)
- Apparatus based on the use of alpha, beta or gamma radiations, including radiography or radiotherapy apparatus; (for other than medical, surgical, dental or veterinary uses) (HS6 code: 9022290000)
- Machine-tools; parts and accessories, tool holders and self-opening dieheads (HS6 code: 8466100000)
- Footwear; n.e.c. in heading no. 6402, covering the ankle, with outer soles and uppers of rubber or plastics (HS6 code: 6402910000)
- Vehicle parts; drive-axles with differential, whether or not provided with other transmission components, and non-driving axles; parts thereof (HS6 code: 8708500000)
- Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity not exceeding 1500cc (HS6 code: 8703310000)

- Transformers; n.e.c. in item no. 8504.2, having a power handling capacity exceeding 500kVA (HS6 code: 8504340000)

Table B2 (Appendix B) presents DO potential importers of these commodities.

Luhansk oblast

Figure 2 illustrated the sectoral structure of LO economy. Traditionally, LO economy is also dominated by heavy industry (mining, metallurgy, chemistry). However, the 2014 conflict has dramatically change this pattern as long as the local industrial enterprises left on the occupied territories. The main economic (nonpublic) sectors are (2018)

- Agriculture (22%)
- Manufacturing (9%)
- Real Estate (9%)
- Energy (8%)
- Retail and Wholesalers (8%)

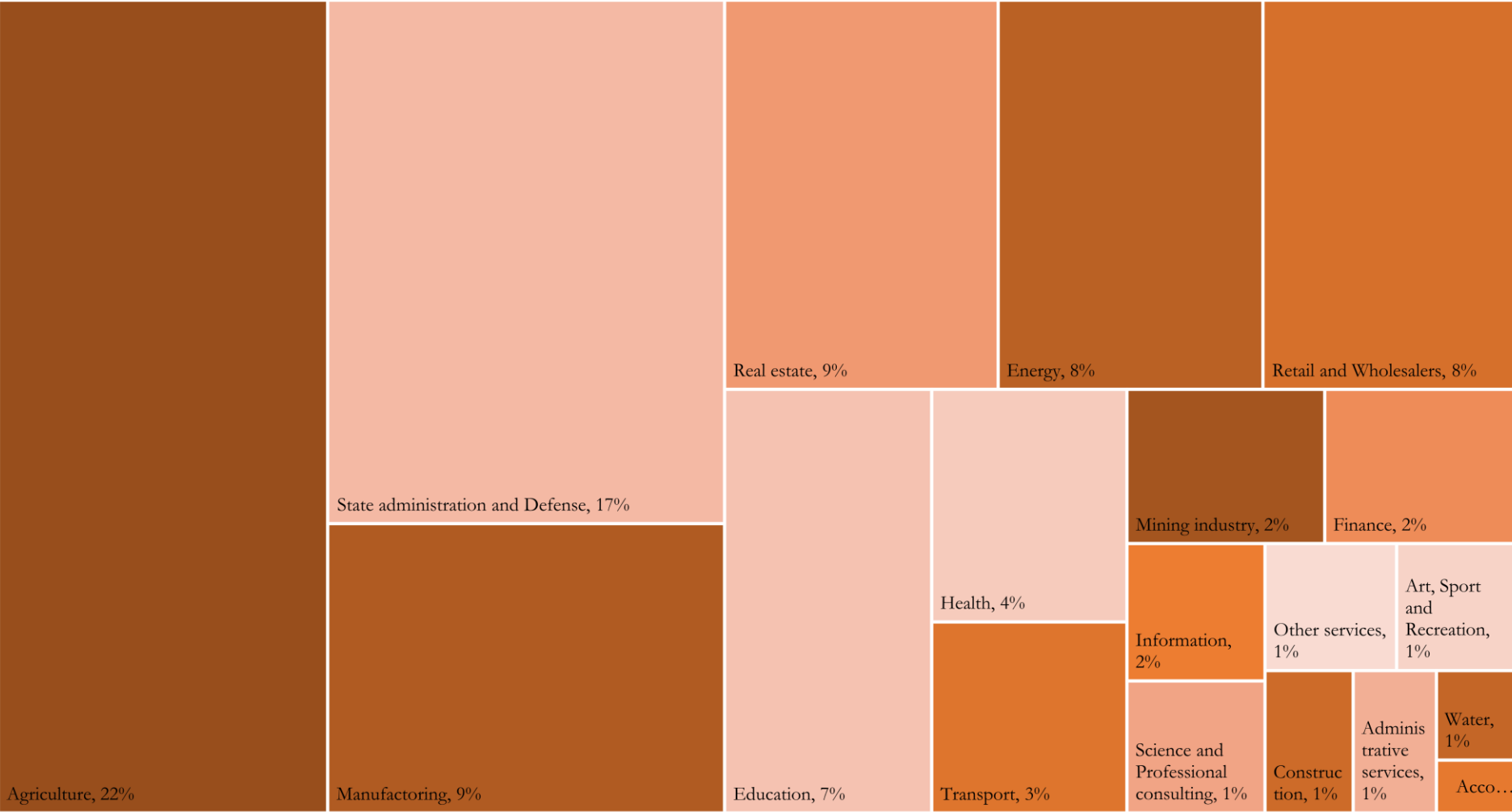
If we move from the high level aggregation to the lowest available (4 digit KVED codes), 5 largest value chains are (Table A2. Appendix A presents TOP 50 VCs in LO):

- Manufacture of fertilizers and nitrogen compounds (Manufacturing)
- Growing of cereals (except rice), leguminous crops and oil seeds (Agriculture)
- Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials (Manufacturing)
- Mining of hard coal (Mining)
- Building of pleasure and sporting boats (Manufacturing)

Tables B3 (Appendix B) presents the list of 47 most imported commodities (HS6) in LO in 2019. This list includes commodities with significantly high import volume (more than USD 500K). Out of 47 commodities, 20 commodities with the highest 2017-2019 growth are:

- Railway or tramway goods vans and wagons; self-discharging, not self-propelled, excluding those of item no. 8606.10 (HS6 code: 8606300000)

Figure 2. Structure of GRP of LO



Source: The State Statistics Service of Ukraine

- Wood pulp; chemical wood pulp, soda or sulphate, (other than dissolving grades), semi-bleached or bleached, of coniferous wood (HS6 code: 4703210000)
- Machine-tools; bending, folding, straightening or flattening machines (including presses), (other than numerically controlled), for working metal (HS6 code: 8462290000)
- Machine-tools; punching or notching machines (including presses), including combined punching and shearing machines, numerically controlled, for working metal (HS6 code: 8462410000)
- Vehicles; for transport of persons (other than those of heading no. 8702) n.e.c. in heading no. 8703, including station wagons and racing cars (HS6 code: 8703900000)
- Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 1500cc but not exceeding 3000cc (HS6 code: 8703230000)
- Paper and paperboard; uncoated, weight more than 150g/m² but less than 225 g/m², in rolls or sheets, n.e.c. in heading no. 4805 (HS6 code: 4805920000)
- Acids; saturated acyclic monocarboxylic acids; acetic acid (HS6 code: 2915210000)
- Fabrics, woven; containing 85% or more by weight of textured polyester filaments, printed (HS6 code: 5407540000)
- Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity exceeding 1500cc but not exceeding 2500cc (HS6 code: 8703320000)
- Metal; catalysts in the form of wire cloth or grill, of platinum (HS6 code: 7115100000)
- Magnesia, fused or dead-burned (sintered); whether or not containing small quantities of other oxides added before sintering, other magnesium oxide, whether or not pure, (not natural magnesium carbonate) (HS6 code: 2519900000)
- Machinery; parts of machinery for making pulp of fibrous cellulosic material (HS6 code: 8439910000)
- Glass; float glass and surface ground or polished glass, in sheets, non-wired, (other than colored throughout the mass (body tinted), opacified, flashed or merely surface ground) (HS6 code: 7005290000)
- Fabrics, woven; of artificial filament yarn, containing 85% or more by weight of artificial filament, strip or the like, printed (HS6 code: 5408240000)
- Fabrics, woven; of carded wool or carded fine animal hair, containing less than 85% by weight of wool or fine animal hair, mixed mainly or solely with man-made staple fibres (HS6 code: 5111300000)

- Machinery; parts of machinery for making or finishing paper or paperboard (HS6 code: 8439990000)
- Uncoated paper and paperboard (not 4801 or 4803); printing, writing or graphic, 10% or less by weight of mechanical or chemi-mechanical processed fibre, weighing 40g/m2 to 150g/m2, in rolls (HS6 code: 4802550000)
- Fibres; waste (including noils, yarn waste and garnetted stock), of synthetic fibres (HS6 code: 5505100000)
- Chemical products, preparations and residual products of the chemical or allied industries, n.e.c. or included in heading no. 3824 (HS6 code: 3824900000)

Table B4(Appendix B) presents LO potential importers of these commodities.

Chapter 2. Methodology

This section describes the general approach applied to assess shares of specific value chains in the economies of the Eastern Ukrainian regions. Particularly, the section provides a list of targeted VCs and regions of interest; defines activities covered by each VC. Further, the section explains technical details and assumptions behind the VC assessment.

Value Chains Definition

Packaging and Cardboard (PC). This value chain includes manufacturing of packaging materials and containers as well as manufacturing of machinery and equipment for inputs production. The national classification of economic activities (KVED-2010) classifies enterprises and individuals covered by the P&C VC as the following groups:

- Manufacture of wooden containers (KVED-2010: 16.24³). This class includes manufacture of wooden packing cases, boxes, trellises, drums and similar packing wooden appliances etc.
- Manufacture of corrugated paper and paperboard, paper and cardboard containers (KVED-2010: 17.21⁴). This class includes production of corrugated and solid paper and cardboard, production of paper bags and sacks etc.
- Manufacture of other articles of paper and paperboard (KVED-2010: 17.29⁵). This class includes production of labels, production of trays for eggs and other paper molded packaging products etc.
- Manufacture of hollow glass (KVED-2010: 23.13⁶). This class includes production of bottles and other containers of glass or crystal, production of drinking vessels and other household articles of glass or crystal.

³ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/16/KVED10_16_24.html

⁴ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/17/KVED10_17_21.html

⁵ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/17/KVED10_17_29.html

⁶ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/23/KVED10_23_13.html

- Manufacture of plastic containers (KVED-2010: 22.22⁷). This class includes production of plastic products for packaging of goods: packages, sacks, containers, boxes, boxes, bottles, bottles, and more.
- Manufacture of other plastic products (KVED-2010: 22.29⁸). This class includes production of plastic roll products (self-adhesive plates, sheets, film, foil, strips, tapes).
- Manufacture of machinery and equipment for paper and paperboard production (KVED-2010: 28.95⁹). This class includes manufacture of machinery for paper and cardboard manufacturing.
- Manufacture of machinery and equipment for plastics and rubber (KVED-2010: 28.96¹⁰). This class includes manufacture of machinery and equipment for the production and treatment of soft rubber or plastics, manufacture of articles made of these materials.

Agricultural machinery (AM). This value chain includes manufacturing and maintenance of machinery and equipment for agriculture. KVED-2010 classifies enterprises and individuals covered by this VC as the following groups:

- Manufacture of machinery and equipment for agriculture and forestry (KVED-2010: 28.30¹¹): tractors, mowers, agricultural machinery for soil preparation, planting or fertilizing etc.
- Repairing and maintenance of industrial machines and equipment (KVED-2010: 33.12¹²): tractors for agriculture and forestry as well as other machinery and equipment for agriculture and forestry.

Socks. This value chain includes manufacturing of hosiery and machinery and equipment for the manufacture of textiles, clothing, fur and leather. KVED-2010 classifies enterprises and individuals covered by this VC as the following groups:

- Manufacture of hosiery (KVED-2010: 14.31¹³). This class includes production of hosiery (socks, stockings and tights).

⁷ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/22/KVED10_22_2.html

⁸ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/22/KVED10_22_29.html

⁹ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/28/KVED10_28_95.html

¹⁰ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/28/KVED10_28_96.html

¹¹ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/28/KVED10_28_30.html

¹² National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/33/KVED10_33_12.html

¹³ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/14/KVED10_14_31.html

- Manufacture of machinery and equipment for the manufacture of textiles, clothing, fur and leather (KVED-2010: 28.94¹⁴). This class includes manufacture of machinery for the preparation, manufacturing, molding, stretching, texturing or cutting of chemical textile fibers, materials or yarn, manufacture of machinery and equipment for fabric processing etc.

Plastics. This value chain includes manufacturing of plastic construction materials, plates, sheets, tubes etc. KVED-2010 classifies enterprises and individuals covered by this VC as the following groups:

- Manufacture of plastic plates, sheets, tubes and profiles (KVED-2010: 22.21¹⁵). This class includes production of semi-finished and finished plastic goods.
- Manufacture of plastic building materials (KVED-2010: 22.23¹⁶). This class includes production of construction products, elastic coatings and artificial stone.

Aerospace. This value chain includes manufacture and maintenance of air and spacecraft. KVED-2010 classifies enterprises and individuals covered by this VC as the following groups:

- Manufacture of air, spacecraft and related equipment (KVED-2010: 30.30¹⁷): manufacturing of airplanes for the carriage of goods or passengers, helicopters, aircraft parts and accessories etc.
- Repairing and maintenance of aircraft and spacecraft (KVED-2010: 33.16¹⁸):

¹⁴National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/28/KVED10_28_94.html

¹⁵ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/22/KVED10_22_21.html

¹⁶ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/22/KVED10_22_23.html

¹⁷ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/30/KVED10_30_30.html

¹⁸ National classification of economic activities, http://kved.ukrstat.gov.ua/KVED2010/33/KVED10_33_16.html

Target Regions

The primary target regions are the GCA of DO and LO. Therefore, all VCs are analyzed for companies located in these two regions. Moreover, Aerospace and Agricultural machinery VCs are analyzed at the national level (Table 1). In total, VCs covers 241 companies in DO/LO and 2,672 companies at the National level.

Table 1. Sectoral and regional coverage of the study

Value Chain	DO/LO	National Level
Packaging and Cardboard	+	
Agricultural machinery	+	+
Socks	+	
Plastics	+	
Aerospace	+	+

Technical Approach

In order to identify promising Canadian exports to Ukraine of specific VCs, a three-step analysis is conducted.

In the first preliminary stage, the analysis of economic significance of target VCs is carried out. As a measure of economic significance of VC, we used a share of VC value added in the regional economy. The general approach to assessment of the share of VCs in the regional economy is to calculate the ratio of VCs value added to gross regional product (GRP). The GRP is aggregated value added of all industries at the regional level (Equation 1).

$$\text{Share of VC Value Added} = \text{VC Value Added} / \text{Gross regional product} \quad (1)$$

Due to data limitations, the information on inputs that companies use for their production is unavailable (The State Statistics Service of Ukraine, SSSU, do not provide these data due to confidentiality) and VC Value Added is evaluated as a fraction of VC

Total Sale(Equation 2). The SSSU provides Value Added Ratios¹⁹ (VAR) at a highly aggregated industry level.

$$\text{VC Value Added} = \text{VC Total Sales} * \text{Value Added Ratio} \quad (2)$$

Therefore, the general formula is transformed into Equation 3:

$$\frac{\text{Share of VC Value Added}}{\text{Gross Regional Product}} = \frac{(\text{VC Total Sales} * \text{Value Added Ratio})}{\text{Gross Regional Product}} \quad (3)$$

In the second stage, to evaluate the reliance of the selected VCs on imported inputs we calculate two import penetration ratios – measures²⁰ of the importance of imports in the domestic economy, either by sector or overall, usually defined as the value of imports divided by the value of apparent consumption.

In the analysis, we use two indicators – the share of imports in VC total sales (Equation 4) and the share of imports in VC production costs (Equation 5):

$$\frac{\text{VC sales import penetration rate}}{\text{Total Sales}} = \frac{\text{VC Total imported inputs}}{\text{VC Total Sales}} \quad (4)$$

$$\frac{\text{Production costs VC import penetration rate}}{\text{VC Production costs}} = \frac{\text{VC Total imported inputs}}{\text{VC Production costs}} \quad (5)$$

In the final stage, the analysis moves to the commodity level. Firstly, we investigate structure of each VC imports and rank commodities according to their share in total VC imports. Then, we compare the list of commodities imported by the target VCs to the promising Canadian exports to Ukraine identified in “Canada-Ukraine Free Trade Agreement: Patterns and Tendencies” (2020)²¹.

¹⁹ Value Added Ratio is a ratio of VA to gross output.

²⁰ http://www.investorwords.com/17630/import_penetration.html

²¹ <https://kse.ua/kse-research/canada-ukraine-free-trade-agreement-patterns-and-tendencies/>

Technically, the analysis of target VCs is described by the following procedure:

- Collecting data about enterprises operating within the selected VCs.
- Calculating shares of the selected VCs in the GRP of Donetsk and Luhansk regions (Aerospace industry and Agricultural machinery – in the GDP of Ukraine).
- Estimating import penetration rates for each VC and industry.
- Identifying goods that are perspective to export from Canada in order to integrate into these VCs.

Data Sources

The main data sources used in the analysis include:

- **The State Statistics Service of Ukraine** provides data on GDP, GRP and Value Added Ratios.
- **RUSLANA Database** assists to identify the list of firms operating in the target VCs and regions as well as provides data on their financial indicators – sales and production costs.

You Control Database provide data on commodities imported by Ukrainian firms. Import data is presented in the interval format: lower bound (LB) and upper bound (UB).

Chapter 3. Share of Value Chain Analysis and Foreign Trade Potential

This section provides results of the assessment of the specific VCs in the economies of Eastern Ukraine regions. Calculations are based on the technical approach described in the previous section and in most cases consist of lower and higher bounds of the value-added share.

Share of Value Chain Analysis

Selected VCs form 0.66% of the GRP in Donetsk and Luhansk oblasts (the detailed analysis of DO/LO economies is presented in Appendix A). The total sales of DO/LO firms are equal to UAH²² 6.5 billion (Table 1), while the value added is UAH 1.6 billion (2018). The total number of firms is 241.

Overall, TOP 5 largest companies are:

- Rubizhne cardboard and packaging mill JSC (Sales 2018 are UAH 4.4 billion).
- Energoinvest (Sales 2018 are UAH 207 million).
- Ukrenergochormet (Sales 2018 are UAH 205 million).
- Resurs-invest LLC (Sales 2018 are UAH 143 million).
- Kristall-99 LLC (Sales 2018 are UAH 89 million).

The chain-by-Chain largest companies are:

- **Packaging and Cardboard:** Rubizhne cardboard and packaging mill private JSC (Sales 2018 are UAH 4.4 billion).
- **Agricultural machinery:** Energoinvest LLC (Sales 2018 are UAH 207 million).
- **Socks:** Rubizhne Socks manufacture LLC (Sales 2018 are UAH 34 million).
- **Plastics:** Interplast LLC (Sales 2018 are UAH 28 million).
- **Aerospace industry:** TOR LLC (Sales 2018 are UAH 9.2 million).

The biggest VC is Packaging and Cardboard. It contributes approximately UAH 1.2 billion (0.55%) of value added to the GRP of the selected regions. The main industry forming the value chain is Manufacture of corrugated paper and paperboard, paper and cardboard containers, which is 0.48 percentage points out of 0.51%.

The second largest VC is Agricultural machinery which contribute 0.14% to the GRP in Donetsk and Luhansk regions. The main industry forming the value chain is

²² Ukrainian hryvnias

Repairing and maintenance of industrial machines and equipment: total sales are UAH 1.32 billion, value added is UAH 320 million (2018).

The smallest VCs are Plastics, Socks and Aerospace industry. These VCs contribute approximately UAH 43 million of VA to DO/LO GRP (0.01%).

Table 2. Economic performance of the selected VCs by industries in Donetsk and Luhansk regions

Value Chain/Industry	KVED code	Total Sales, UAH K	Value Added, UAH K	Share of GRP, %
Packaging and Cardboard		4,791,901	1,161,049	0.51%
Manufacture of wooden containers	1624	127,619	30,921	0.01%
Manufacture of corrugated paper and paperboard, paper and cardboard containers	1721	4,509,197	1,092,552	0.48%
Manufacture of hollow glass	2313	115	28	0.00%
Manufacture of plastic containers	2222	89,087	21,585	0.01%
Manufacture of other plastic products	2229	55,995	13,567	0.01%
Manufacture of machinery and equipment for paper and paperboard production	2895	9,888	2,396	0.00%
Agricultural machinery		1,334,490	323,339	0.14%
Manufacture of machinery and equipment for agriculture and forestry	2830	14,835	3,595	0.00%
Repairing and maintenance of industrial machines and equipment	3312	1,319,655	319,745	0.14%
Socks		36,327	8,802	0.00%
Manufacture of hosiery	1431	36,327	8,802	0.00%
Plastics		131,435	31,846	0.01%
Manufacture of plastic plates, sheets, tubes and profiles	2221	83,013	20,113	0.01%
Manufacture of plastic building materials	2223	48,423	11,733	0.01%
Aerospace		9,226	2,235	0.00%
Manufacture of air, spacecraft and related equipment	3030	9,226	2,235	0.00%

National level: Aerospace industry and Agricultural machinery

Aerospace VC and Agricultural machinery VC contribute 0.58% to the Gross Domestic Product of Ukraine (2018). Total sales of Aerospace VC were UAH 23 billion in 2018 (140 firms), Agricultural machinery VC – UAH 37 billion (2,532 firms). Corresponding value added of both VC is UAH 9 and 11 billion (Table 3).

TOP 5 Aerospace VC largest companies are:

- Motor sich JSC (2018 Sales are UAH 12.9 billion).
- Yuzhmash, SOE (2018 Sales are UAH 1.8 billion).
- Lutsk repair plant, SOE (2018 Sales are UAH 1 billion).
- FED, JSC (2018 Sales are UAH 0.9 billion).
- Aviakon Konotop repair plant, SOE (2018 Sales are UAH 0.8 billion).

TOP 5 Agricultural machinery VC largest companies are:

- Metinvest-Promservis (2018 Sales are UAH 2.7 billion).
- Ukravtozapchastina (2018 Sales are UAH 1.5 billion).
- Elvorti (2018 Sales are UAH 0.9 billion).
- Frunze Plant (2018 Sales are UAH 0.9 billion).

Kryvbas-Belaz-Service (2018 Sales are UAH 0.8 billion).

Table 3. Economic performance of the selected VCs by industries.

Value Chains	Product code	Total Sales, UAH bln	Value Added, UAH bln	Share of GDP, %
<i>Agricultural machinery</i>		<i>37</i>	<i>11</i>	<i>0.32%</i>
Manufacture of machinery and equipment for agriculture and forestry	2830	15.8	4.9	0.14%
Repairing and maintenance of industrial machines and equipment	3312	21.0	6.5	0.18%
<i>Aerospace industry</i>		<i>23</i>	<i>9</i>	<i>0.26%</i>
Manufacture of air, spacecraft and related equipment	3030	22.6	9.3	0.26%
Repairing and maintenance of aircraft and spacecraft	3316	0.4	0.2	0.00%

Source: YouControl, Ruslana, Ukrstat, own calculations

Foreign Trade Potential of Value Chains

Donetsk and Luhansk oblast

This section focuses on target VCs. The total import patterns of DO is presented in Appendix B.

Table 4 illustrates the import penetration indicators assessed for the selected VCs: Sales penetration and Production cost penetration rates.

Packaging and Cardboard VC has the highest relative and absolute import potential. Imported inputs contributed UAH 512-564 million in 2018. In relative terms, it is approximately 11-12% of VC sales and 13-15% of VC production costs.

In relative terms, Socks VC is the second largest importer. In 2018, its imports totaled approximately UAH 4-4.5 million: 11-12% of VC sales and 14-15% of VC production costs.

On the other side, **Plastics VC is the second largest importer in absolute values.** In 2018, it imported products of approximately UAH 9.6-12 million: 3-4% of VC sales and 4-6% of VC production costs.

Companies of Packaging and Cardboard VC mostly import Waste and scrap of paper and paperboard (HS 4707), Paper and paperboard, coated one or both sides with kaolin (china clay) or inorganic substances (HS 4810), and Wood pulp obtained by a combination of mechanical and chemical pulping processes (HS 4705) (Table 5). Firms import more than 20 commodity groups (at HS 4 aggregation level), but the top commodities cover approximately 70% of total VC imports: UAH 250-350, 36-41 and 30-35 million respectively.

Companies of Plastics VC mostly import Machinery for working rubber or plastics or for the manufacture of products from these materials (HS 8477), Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves (HS 8481) and Electric soldering, brazing, welding machines and apparatus, electric machines and apparatus for hot spraying of metals or sintered carbides (HS 8515) Firms import 8 commodity groups (at HS 4 aggregation level), but **Machinery for working rubber or plastics** cover almost a half of total VC imports: UAH 650-700K.

Table 4. Import penetration ratios of the selected VCs by industries

Value Chain	KVED code	Total Sales, UAH K	Production cost, UAH K	Import, UAH K		Import-Total Sales Ratio, %		Import-Production Cost Ratio, %	
				LB	UB	LB	UB	LB	UB
<i>Packaging and Cardboard</i>		<i>4,791,901</i>	<i>3,869,291</i>	<i>512,000</i>	<i>564,600</i>	<i>11%</i>	<i>12%</i>	<i>13%</i>	<i>15%</i>
Manufacture of wooden containers	1624	127,619	102,723	-	-	0%	0%	0%	0%
Manufacture of corrugated paper and paperboard, paper and cardboard containers	1721	4,509,197	3,655,045	503,000	553,500	11%	12%	14%	15%
Manufacture of hollow glass	2313	115	108	-	-	0%	0%	0%	0%
Manufacture of plastic containers	2222	89,087	64,207	2,500	3,600	3%	4%	4%	6%
Manufacture of other plastic products	2229	55,995	41,262	6,500	7,500	12%	13%	16%	18%
Manufacture of machinery and equipment for paper and paperboard production	2895	9,888	5,946	-	-	0%	0%	0%	0%
<i>Agricultural machinery</i>		<i>1,334,490</i>	<i>1,054,709</i>	<i>6,450</i>	<i>7,150</i>	<i>0%</i>	<i>1%</i>	<i>1%</i>	<i>1%</i>
Manufacture of machinery and equipment for agriculture and forestry	2830	14,835	9,788	-	-	0%	0%	0%	0%
Repairing and maintenance of industrial machines and equipment	3312	1,319,655	1,044,921	6,450	7,150	0%	1%	1%	1%
<i>Socks</i>		<i>36,327</i>	<i>29,583</i>	<i>4,000</i>	<i>4,500</i>	<i>11%</i>	<i>12%</i>	<i>14%</i>	<i>15%</i>
Manufacture of hosiery	1431	36,327	29,583	4,000	4,500	11%	12%	14%	15%
<i>Plastics</i>		<i>276,517</i>	<i>214,787</i>	<i>9,650</i>	<i>11,900</i>	<i>3%</i>	<i>4%</i>	<i>4%</i>	<i>6%</i>
Manufacture of plastic plates, sheets, tubes and profiles	2221	83,013	69,690	650	800	1%	1%	1%	1%
Manufacture of plastic containers	2222	89,087	64,207	2,500	3,600	3%	4%	4%	6%
Manufacture of plastic building materials	2223	48,423	39,628	-	-	0%	0%	0%	0%
Manufacture of other plastic products	2229	55,995	41,262	6,500	7,500	12%	13%	16%	18%
<i>Aerospace industry</i>		<i>9,226</i>	<i>8,946</i>	<i>-</i>	<i>-</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Manufacture of air, spacecraft and related equipment	3030	9,226	8,946	-	-	0%	0%	0%	0%

Source: Own calculations based on Ruslana and YouControl databases

Comments: LB – Lower bound, UB – Upper Bound.

Table 5. Top import commodities by VCs in Donetsk and Luhansk oblasts (HS4 level)

Value Chain	Commodity	Import, UAH, K		VC Import Share, %	
		LB	UB	LB	UB
Packaging and Cardboard	Waste and scrap of paper and paperboard	250,000	300,000	57%	56%
	Paper and paperboard, coated one or both sides with kaolin (china clay) or inorganic substances	35,850	40,900	8%	8%
	Wood pulp obtained by a combination of mechanical and chemical pulping processes	30,000	35,000	7%	6%
Agricultural machinery	X-ray, alpha, beta, gamma radiation apparatus: generators, control panels and desks, screens etc	4,500	5,000	70%	53%
	Instruments and apparatus; for measuring or checking viscosity, porosity, quantities of heat, sound or light	250	400	4%	4%
	Boards, panels, consoles, desks, cabinets for electricity control and distribution	300	350	5%	4%
Socks	Cotton yarn (other than sewing thread) containing more than 85% of cotton	3,500	4,000	96%	78%
	Cotton yarn (other than sewing thread), containing less than 85% of cotton	150	200	4%	4%
	Base metal mountings, fittings and similar articles	-	100	0%	2%
Plastics	Machinery for working rubber or plastics or for the manufacture of products from these materials	650	700	100%	47%
	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves	-	100	0%	7%
	Electric soldering, brazing, welding machines and apparatus, electric machines and apparatus for hot spraying of metals or sintered carbides	-	100	0%	7%

Source: Own calculations based on YouControl databases.

Comments: LB – Lower bound, UB – Upper Bound.

Companies of Agricultural machinery VC mostly import X-ray, alpha, beta, gamma radiation apparatus: generators, control panels and desks, screens (53-70%) while Companies of Socks VC - Cotton yarn other than sewing thread (82-100%). On the other side, X-ray, alpha, beta, gamma radiation apparatus: generators, control panels and desks,

screens is an outlier as long as it is imported by the only one large company in DO/LO region (TERMO TEHNO UKRAENA LLC).

The detailed list of commodities imported by VCs in DO/LO is presented in Table C1 (Appendix C).

Table 6 presents a list of key companies-importers of main commodities by target VCs. These companies are:

- "RUBEZHNOYE CARDBOARD PACKAGE MILL" PJSC (EDRPOU code: 01882551)
- "CRYSTAL-99" LLC (EDRPOU code: 30415453)
- TERMO TEKHNO UKRAYINA LLC (EDRPOU code: 35580430)
- EMCC LLC (EDRPOU code: 41587616)
- "RUBIZHANSKA PANCHISHNA MANUFAKTURA" LLC (EDRPOU code: 37218326)
- "ZAVOD REMMASH" LLC (EDRPOU code: 35841616)
- "SIEVIERODONETSK A-PLAST" LLC (EDRPOU code: 41045226)
- "INTERPLAST" LLC (EDRPOU code: 30997968)
- "RUBIZHANSKYI TRUBNYI ZAVOD" LLC (EDRPOU code: 32926466)
- "M-SPEKTR" LLC (EDRPOU code: 38817591)
- "ALTIFORT UKRAINE" LLC (EDRPOU code: 41743153)

National level: Aerospace industry and Agricultural machinery

Aerospace VC and Agricultural machinery VC contribute 0.58% to the Gross Domestic Product of Ukraine (2018). Total sales of Aerospace VC were UAH 23 billion in 2018 (140 firms), Agricultural machinery VC – UAH 37 billion (2,532 firms). Corresponding value added of both VC is UAH 9 and 11 billion (Table 7).

TOP 5 Aerospace VC largest companies are:

- Motor sich JSC (2018 Sales are UAH 12.9 billion).
- Yuzhmash, SOE (2018 Sales are UAH 1.8 billion).
- Lutsk repair plant, SOE (2018 Sales are UAH 1 billion).
- FED, JSC (2018 Sales are UAH 0.9 billion).
- Aviakon Konotop repair plant, SOE (2018 Sales are UAH 0.8 billion).

TOP 5 Agricultural machinery VC largest companies are:

- Metinvest-Promservis (2018 Sales are UAH 2.7 billion).
- Ukravtozapchastina (2018 Sales are UAH 1.5 billion).
- Elvorti (2018 Sales are UAH 0.9 billion).
- Frunze Plant (2018 Sales are UAH 0.9 billion).
- Kryvbas-Belaz-Service (2018 Sales are UAH 0.8 billion).

Table 8 illustrates the import penetration indicators assessed for the selected VCs: Sales penetration and Production cost penetration rates.

Manufacture of machinery and equipment for agriculture and forestry has the highest relative and absolute import potential among the selected industries. Imported inputs contribute 1061-1341 UAH million in 2018. In relative terms, it is approximately 7-8.5% of VC sales and 9-11% of VC production costs.

In absolute and relative terms, manufacture of air, spacecraft and related equipment is the second largest importer. In 2018, it consumed approximately UAH 4-4.5 million of imported products: 5-8% of VC sales and 9-13.5% of VC production costs.

The third largest importer is repairing and maintenance of industrial machines and equipment. In 2018, its imports reached approximately UAH 598-754 million: 3-4% of VC sales and 4-5% of VC production costs.

Import, Sales and Production costs of repairing and maintenance of aircraft and spacecraft are negligible.

Companies of Agricultural machinery VC mostly import Tractors; (other than tractors of heading no 8709) (HS 8701), Flat-rolled products, width 600mm or more, clad, plated or coated (HS 7210) and Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce (HS 8433). Firms import more than 270 commodity groups (at HS 4 aggregation level), but the top commodities cover approximately 27% of total VC import: UAH 234-340, 179-235 and 113-137 million respectively (Table 9).

Companies of Aerospace industry VC mostly import Turbo-jets, turbo-propellers and other gas turbines (HS 8411), Nickel; articles thereof n.e.c. in chapter 75 (HS 7508) and Titanium; articles thereof, including waste and scrap (HS 7202). Firms import more than 120 commodity groups (at HS 4 aggregation level), but the top commodities cover approximately 40-43% of total VC import: UAH 201-251, 200-250 and 100-150 million respectively.

The detailed list of commodities imported by VCs in is presented in Table C2 (Appendix C).

Table 6. Top importers by VCs in Donetsk and Luhansk oblasts (HS4 level).

Value Chain	Commodity	Importer	
		Name	Code
Packaging and Cardboard	Waste and scrap of paper and paperboard	"RUBEZHNOYE CARDBOARD PACKAGE MILL" PJSC	01882551
	Paper and paperboard, coated one or both sides with kaolin (china clay) or inorganic substances	"RUBEZHNOYE CARDBOARD PACKAGE MILL" PJSC	01882551
		"CRYSTAL-99" LLC	30415453
	Wood pulp obtained by a combination of mechanical and chemical pulping processes	PRIVATE JOINT STOCK COMPANY "RUBEZHNOYE CARDBOARD PACKAGE MILL"	01882551
Agricultural machinery	X-ray, alpha, beta, gamma radiation apparatus: generators, control panels and desks, screens etc	TERMO TEKHNO UKRAYINA LLC	35580430
	Instruments and apparatus; for measuring or checking viscosity, porosity, quantities of heat, sound or light	TERMO TEKHNO UKRAYINA LLC	35580430
		EMCC LLC	41587616
	Boards, panels, consoles, desks, cabinets for electricity control and distribution	TERMO TEKHNO UKRAYINA LLC	35580430
Socks	Cotton yarn (other than sewing thread) containing more than 85% of cotton	"RUBIZHANSKA PANCHISHNA MANUFAKTURA" LLC	37218326
	Cotton yarn (other than sewing thread), containing less than 85% of cotton	"RUBIZHANSKA PANCHISHNA MANUFAKTURA" LLC	37218326
	Base metal mountings, fittings and similar articles	"RUBIZHANSKA PANCHISHNA MANUFAKTURA" LLC	37218326
Plastics	Machinery for working rubber or plastics or for the manufacture of products from these materials	"SIEVIERODONETSK A-PLAST" LLC	41045226
		"INTERPLAST" LLC	30997968
	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves	"RUBIZHANSKY TRUBNYY ZAVOD" LLC	32926466
		"M-SPEKTR" LLC	38817591
		"ALTIFORT UKRAINE" LLC	41743153
	Electric soldering, brazing, welding machines and apparatus, electric machines and apparatus for hot spraying of metals or sintered carbides	"RUBIZHANSKY TRUBNYY ZAVOD" LLC	32926466

Source: Own calculations based on YonControl databases.

Table 7. Economic performance of the selected VCs by industries

Value Chains	Product code	Total Sales, UAH bln	Value Added, UAH bln	Share of GDP, %
<i>Agricultural machinery</i>		<i>37</i>	<i>11</i>	<i>0.32%</i>
Manufacture of machinery and equipment for agriculture and forestry	2830	15.8	4.9	0.14%
Repairing and maintenance of industrial machines and equipment	3312	21.0	6.5	0.18%
<i>Aerospace industry</i>		<i>23</i>	<i>9</i>	<i>0.26%</i>
Manufacture of air, spacecraft and related equipment	3030	22.6	9.3	0.26%
Repairing and maintenance of aircraft and spacecraft	3316	0.4	0.2	0.00%

Source: YouControl, Ruslana, Ukrstat, own calculations

Table 10 presents a list of key companies-importers of main commodities by target VCs. These companies are:

- "UKRAVTOZAPCHASTYNA" LLC (EDRPOU code: 30722204)
- NVP "KHERSONSKYY MASHYNOBUDIVNYY ZAVOD" LLC (EDRPOU code: 35788406)
- TMI LLC (EDRPOU code: 30443517)
- PJSC "PLANT "NIZHYNSILMASH" (EDRPOU code: 14311643)
- "UKREYR" LLC (EDRPOU code: 21507341)
- "HYDROTRUCK-UKRAINE" LTD (EDRPOU code: 39481131)
- "VARIANT AHRO BUD" LLC (EDRPOU code: 39065898)
- "KMZ" PJSC (EDRPOU code: 14311169)
- "TD "IUHELEVATOR" LLC (EDRPOU code: 36622831)
- TEXHA PA, LLC (EDRPOU code: 33063942)
- "KHARKIVPRODMASH" (EDRPOU code: 30034636)
- "TMI" LLC (EDRPOU code: 30443517)
- "NU SP "VERVAT UKRAYINA LTD" LLC (EDRPOU code: 32891926)
- "TORHOVYY DIM MTZ-BELARUS-UKRAYINA" LLC (EDRPOU code: 35723464)
- "AHROMOTORSERVIS" LLC (EDRPOU code: 30456416)
- "PROFIAHRO" LLC (EDRPOU code: 37332646)
- "ZAVOD AVTOSHTAMP LLC (EDRPOU code: 33423425)
- "TEKHNICA"PP (EDRPOU code: 32452979)
- "RENESSANS-TECH" LLC (EDRPOU code: 35116194)
- "ZAKHID-AHROSERVIS PLIUS" LLC (EDRPOU code: 37204601)
- "MZ "SANFLOROMASH" LLC (EDRPOU code: 40478567)
- "LYBID" (EDRPOU code: 23994138)

- "PV HRUP UKRAYINA" LLC (EDRPOU code: 38319207)
- VKP "AHROTEKHEKSPORT" LLC (EDRPOU code: 31459177)
- AT "MOTOR SICH" (EDRPOU code: 14307794)
- "FED" JSC (EDRPOU code: 14315552)

Table 8 Import penetration ratios of the selected VCs by industries in Ukraine

Value Chain	Product code	Total Sales, UAH bln	Production cost, UAH bln	Import, UAH mln		Import-Total Sales Ratio, %		Import-Production Cost Ratio,%	
				LB	UB	LB	UB	LB	UB
<i>Agricultural machinery</i>		<i>37</i>	<i>29</i>						
Manufacture of machinery and equipment for agriculture and forestry	2830	15.8	12.3	1,061	1,341	6.7%	8.5%	8.6%	10.9%
Repairing and maintenance of industrial machines and equipment	3312	21.0	16.5	598	754	2.8%	3.6%	3.6%	4.6%
<i>Aerospace industry</i>		<i>23</i>	<i>13</i>						
Manufacture of air, spacecraft and related equipment	3030	22.6	12.7	1,192	1,719	5.3%	7.6%	9.4%	13.5%
Repairing and maintenance of aircraft and spacecraft	3316	0.4	0.2	5	6	1.2%	1.5%	2.0%	2.4%

Source: YouControl, Ruslana, own calculations

Table 9. Top import commodities by industries in Ukraine (HS4 level)

Value Chain	Commodity	Import, UA, K		VC Import Share, %	
		LB	UB	LB	UB
<i>Agricultural machinery</i>	Tractors; (other than tractors of heading no 8709)	234,000	340,100	12%	13%
	Flat-rolled products, width 600mm or more, clad, plated or coated	178,500	234,600	9%	9%
	Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce	113,150	136,700	6%	5%
<i>Aerospace industry</i>	Turbo-jets, turbo-propellers and other gas turbines	200,700	250,950	16%	17%
	Nickel; articles thereof n.e.c. in chapter 75	200,000	250,100	16%	16%
	Titanium; articles thereof, including waste and scrap	100,000	150,000	8%	10%

Source: YouControl, Ruslana, own calculations

Table 10. Top importers of the selected VCs by industries in Ukraine (HS4 level)

Value Chain	Commodity	Importer	
		Name	Code
<i>Agricultural machinery</i>	Tractors; (other than tractors of heading no 8709)	"UKRAVTOZAPCHASTYNA" LLC	30722204
		NVP "KHERSONSKYY MASHYNOBUDIVNYY ZAVOD" LLC	35788406
		"TMI" LLC	30443517
		"PLANT "NIZHYNSILMASH" PJSC	14311643
		"UKREYR" LLC	21507341
		"HYDROTRUCK-UKRAINE" LTD	39481131
		"TEKHNICA" PP	32452979
	Flat-rolled products, width 600mm or more, clad, plated or coated	"VARIANT AHRO BUD" LLC	39065898
		"KMZ" PJSC	14311169
		"TD "IUHELEVATOR" LLC	36622831
		TEXHA PA, LLC	33063942
		"KHARKIVPRODMASH"	30034636
	Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce	"TMI" LLC	30443517
		"NU SP "VERVAT UKRAYINA LTD" LLC	32891926
		"TORHOVYY DIM MTZ-BELARUS-UKRAYINA" LLC	35723464
		NVP "KHERSONSKYY MASHYNOBUDIVNYY ZAVOD" LLC	35788406
		"UKRAVTOZAPCHASTYNA" LLC	30722204
		"AHROMOTORSERVIS" LLC	30456416
		"PROFIAHRO" LLC	37332646
		"ZAVOD AVTOSHTAMP LLC	33423425
		"TEKHNICA" PP	32452979
		"RENESSANS-TECH" LLC	35116194
		"ZAKHID-AHROSERVIS PLIUS" LLC	37204601
		"MZ "SANFLOROMASH" LLC	40478567
		"LYBID"	23994138
		"PV HRUP UKRAYINA" LLC	38319207
		VKP "AHROTEKHEKSPORT" LLC	31459177
<i>Aerospace industry</i>	Turbo-jets, turbo-propellers and other gas turbines	AT "MOTOR SICH"	14307794
		"FED" JSC	14315552
	Nickel; articles thereof n.e.c. in chapter 75	AT "MOTOR SICH"	14307794
	Titanium; articles thereof, including waste and scrap	AT "MOTOR SICH"	14307794

Source: YouControl, Ruslana, own calculations

Chapter 4. Promising commodities to export from Canada to Ukraine

In our study “Canada-Ukraine Free Trade Agreement: Patterns and Tendencies” (2020)²³, we analysed the CUFTA impact on Canada-Ukraine bilateral trade. One of the main outcomes of the research was identification of promising goods whose exports Canada could increase to Ukraine.

There were 2 criteria for the promising goods identification:

- Positive revealed comparative advantages in this product in Canada and negative - in Ukraine;
- Significant potential for increasing Canada’s exports to Ukrainian market based on the assessment of the gap between current and potential export volumes, or “undertrade” (estimated by the gravity model).

We identified 181 promising goods according to this methodology (Table D1, Appendix D). By comparing and matching these promising commodities with the list of the most significant imports of the target VCs (Tables C1 and C2, Appendix C), we can identify the most promising goods for intensifying Canadian exports to Ukraine through the selected VCs.

Donetsk and Luhansk oblasts

Table D2 (Appendix D) describes 17 promising goods for intensifying Canadian exports to Ukraine through VCs in DO/LO (at HS6 level). Table E1 (Appendix E) provides examples of specific commodities from HS6 group. Chain-by-Chain the most promising commodities are:

- **Packaging and Cardboard:**
 - Kraft paper and paperboard; sack kraft paper, uncoated, unbleached, in rolls or sheets, other than that of heading no. 4802 or 4803 (HS 480421) - Imports (2018) are UAH 20-25 million.

²³ <https://kse.ua/kse-research/canada-ukraine-free-trade-agreement-patterns-and-tendencies/>

Table 11. Promising goods for intensifying Canadian exports to Ukraine through VCs in DO/LO (HS 6 level)

Value Chain	Product	Product code	VC Import, UAH	
			LB	UB
Agricultural machinery	Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823	482390	250,000	300,000
	Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA	850421	200,000	250,000
	Engines; parts, for engines and motors of heading no. 8412	841290	100,000	150,000
	Mountings, fittings and similar articles; for motor vehicles, of base metal	830230	-	100,000
	Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	830210	-	100,000
	Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830249	-	100,000
	Iron or steel; leaf-springs and leaves therefor	732010	-	100,000
	Machinery; for filtering or purifying water	842121	-	100,000
Socks	Mountings, fittings and similar articles; for motor vehicles, of base metal	830230	-	100,000
	Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	830210	-	100,000
	Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830249	-	100,000
	Transmission shafts (including cam shafts and crank shafts) and cranks	848310	-	100,000
	Pulleys and flywheels, including pulley blocks	848350	-	100,000
	Clutches and shaft couplings (including universal joints)	848360	-	100,000
Packaging and Cardboard	Kraft paper and paperboard; sack kraft paper, uncoated, unbleached, in rolls or sheets, other than that of heading no. 4802 or 4803	480421	20,000,000	25,000,000
	Finishing agents and dye carriers; to accelerate dyeing or fixing of dye-stuffs, other products and preparations, used in the textile industry (excluding those with a basis of amylaceous substances)	380991	10,000,000	15,000,000
	Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials	847710	1,500,000	2,000,000
	Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90	847790	1,500,000	2,000,000
	Paper and paperboard; self-adhesive, in rolls or sheets, other than goods of heading no. 4803, 4809, or 4810	481141	-	100,000
Plastics	Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials	847710	1,500,000	2,000,000
	Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90	847790	1,500,000	2,000,000
	Welding machines and apparatus; for resistance welding of metal, fully or partly automatic, whether or not capable of cutting	851521	-	100,000
	Transmission shafts (including cam shafts and crank shafts) and cranks	848310	-	100,000
	Pulleys and flywheels, including pulley blocks	848350	-	100,000
	Clutches and shaft couplings (including universal joints)	848360	-	100,000

Source: YouControl, Ruslana, own calculations

- **Agricultural machinery:**
 - Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823 (HS 482390) - Imports (2018) are UAH 250-300 thousand.
 - Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA (HS 850421) - Imports (HS4, 2018) are UAH 200-250 thousand.
 - Engines; parts, for engines and motors of heading no. 8412 (HS 841290) - Imports (HS4, 2018) are UAH 100-150 thousand.
- **Plastics:** Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials (HS 847790) and Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 847790 (HS 847790) - Imports (HS4, 2018) are UAH 1.5-2 million.

Table E1 (Appendix E) presents a list of key companies-importers of promising commodities by target VCs. All these companies, do not import from Canada:

- EMCC LLC (EDRPOU code: 41587616)
- TERMO TEKHNO UKRAYINA LLC (EDRPOU code: 35580430)
- "ZAVOD REMMASH" (EDRPOU code: 35841616)
- "RUBIZHANSKA PANCHISHNA MANUFAKTURA" LLC (EDRPOU code: 37218326)
- "RUBEZHNOYE CARDBOARD PACKAGE MILL" PJSC (EDRPOU code: 01882551)
- "SIEVIERODONETSK A-PLAST" LLC (EDRPOU code: 41045226)
- "INTERPLAST" LLC (EDRPOU code: 30997968)
- RUBEZH-VH LLC (EDRPOU code: 36518116)
- "RUBIZHANSKY TRUBNYY ZAVOD" LLC (EDRPOU code: 32926466)

National level: Aerospace industry and Agricultural machinery

Table D3 (Appendix D) describes 66 promising goods for intensifying Canadian exports to Ukraine through Aerospace industry and Agricultural machinery VCs. Table F1 (Appendix F) provides examples of specific commodities from HS6 group. Chain-by-Chain the most promising commodities are:

- **Aerospace industry:**

- Turbo-jets; of a thrust exceeding 25kN (HS 841112), Turbines; parts of turbo-jets and turbo-propellers (HS 841191) and Turbines; parts of gas turbines (excluding turbo-jets and turbo-propellers)(HS 841199)- Imports (HS4, 2018) are UAH 200-251 million.
- Nickel; articles thereof n.e.c. in item no. 7508.1 (HS 750890) - Imports (HS4, 2018) are UAH 200-250 million.
- Aircraft and spacecraft; under-carriages and parts thereof (HS 880320) - Imports (HS4, 2018) are UAH 42-48 million.
- **Agricultural machinery:** Tractors; track-laying (HS 870130) - Imports (2018) are UAH 234-340 million.

Table E2 (Appendix E) presents a list of key companies-importers of main commodities by target VCs. Majority of these companies do not import from Canada:

- "AEROPRAKT" LLC (EDRPOU code: 23708049)
- "CHARZ" SOE (EDRPOU code: 08305644)
- "PLANT 410 CA" SOE (EDRPOU code: 01128297)
- "VIK "DEVIRO" LLC(EDRPOU code: 40006469)
- YUZHMAH SOE (EDRPOU code: 14308368)
- "ELMIZ" JSC (EDRPOU code: 24102142)
- "UKREYR" LLC (EDRPOU code: 21507341)
- UKRAVIASNAB (EDRPOU code: 34297117)
- "PLANT "NIZHYNSILMASH" PJSC (EDRPOU code: 14311643)
- VARIANT AHRO BUD LLC (EDRPOU code: 39065898)
- IUHELEVATOR LLC (EDRPOU code: 36622831)
- BERDIANSKI ZHNYVARKY (EDRPOU code: 31071312)
- "UKRAVTOZAPCHASTYNA" LLC (EDRPOU code: 30722204)
- FIRMA SVITLANA - IMPEKS LLC (EDRPOU code: 23373287)
- "THE PLANT "FREGAT" PJSC (EDRPOU code: 14312387)
- "MZ "SANFLOROMASH" LLC (EDRPOU code: 40478567)
- "NU SP "VERVAT UKRAYINA LTD" LLC (EDRPOU code: 32891926)
- HRUP UKRAYINA (EDRPOU code: 38319207)
- AHROTEKHNKA (EDRPOU code: 30802127)
- VKP "SYSTEMY UPRAVLINNIA - KONSYS" LLC (EDRPOU code: 31765778)
- NVP "AHROMASHINVEST" LLC (EDRPOU code: 21871012)
- NVP "KHERSONSKYY MASHYNOBUDIVNYY ZAVOD" LLC (EDRPOU code: 35788406)

- HLUBUR-SERVIS LLC (EDRPOU code: 38333682)
- "ELVORTI" JSC (EDRPOU code: 05784437)
- "ENGINEERING-SERVICE" LLC (EDRPOU code: 41105688)
- OLVI PLIUS LLC (EDRPOU code: 34559318)
- "EXIMROK" LLC (EDRPOU code: 41995179)
- SOLUTION TRADE UKRAINE LTD (EDRPOU code: 41067920)
- "KRASNIANSKE SE "AGROMASH" LLC (EDRPOU code: 00902501)
- PALANDYN – AHRO PP (EDRPOU code: 37343129)
- "BOHUSLAVSKA SILHOSPTEKHNIKA" PJSC (EDRPOU code: 03744178)
- POLIPAMEL UKRAYINA LLC (EDRPOU code: 37855829)
- "BTM TRADE" LLC (EDRPOU code: 40955203)
- SPETSMEKHSERVIS LLC (EDRPOU code: 33660476)
- AZOVGIDRJMASH LTD (EDRPOU code: 41253162)
- DNIPROTRANS DYSEL LLC (EDRPOU code: 33338873)
- AHROREMMASH-SPETSTEKHNIKA LLC (EDRPOU code: 36421771)
- AHROPROMYSLOVA KOMPANIJA BESTA LLC (EDRPOU code: 37593110)
- TEKHELEKTROSERVIS LLC (EDRPOU code: 21)649070)
- "KMZ" PJSC (EDRPOU code: 14311169)
- TEKHNIK MASHYNES INTERNESHENEL LLC (EDRPOU code: 30443517)
- TEKHINHRUP LLC (EDRPOU code: 35871609)
- "HYDROTRUCK-UKRAINE" LTD (EDRPOU code: 39481131)
- AHROMOTORSERVIS LLC (EDRPOU code: 30456416)
- AHROMASH – KALYNA LLC (EDRPOU code: 32320510)
- MAKSAHROTEKH LLC (EDRPOU code: 41195195)
- "UNIVERSAL SERVIS UKRAYINA" LLC (EDRPOU code: 19039522)
- PROMHIDROMASH LLC (EDRPOU code: 41395272)
- ROMENSKYY ZAVOD TRAKTOROZAPCHASTYNA LLC (EDRPOU code: 00235890)
- KOVELSILMASH LLC (EDRPOU code: 31533318)
- TMS LLC (EDRPOU code: 37172711)
- "TORHOVYY DIM MTZ-BELARUS-UKRAYINA" LLC (EDRPOU code: 35723464)
- TRANSKHOLOD LLC (EDRPOU code: 33227227)
- PROFIAHRO LLC (EDRPOU code: 37332646)
- TERMO KINH UKRAYINA LLC (EDRPOU code: 23731798)
- DESSA (EDRPOU code: 40072552)
- LIHUM (EDRPOU code: 30297270)
- "PLOTYTSKA AGROPROMTEKHNIKA2 (EDRPOU code: 38512996)

- "MASHTEKHIMPORT" LLC (EDRPOU code: 35117711)
- PRAYMAKS (EDRPOU code: 36929387)
- "TEKHNKA" LLC (EDRPOU code: 32452979)
- VELES-AHRO LTD. LLC (EDRPOU code: 31427962)
- KHARKIVSKYY MASHYNOBUDIVNYY ZAVOD FED SOE (EDRPOU code: 14310052)
- HIDROSYLA APM PJSC (EDRPOU code: 36119987)
- ZAVOD AVTOSHTAMP LLC (EDRPOU code: 33423425)
- "DNIPROPOLYMERMAH" PJSC (EDRPOU code: 00218615)
- NADIYNI TEKHNOLOHII LLC (EDRPOU code: 40577387)
- "KRONES UKRAYINA" LLC (EDRPOU code: 35059147)
- "FED" JSC (EDRPOU code: 14315552)
- FRUNZE PLANT PJSC (EDRPOU code: 00236010)
- "UMANFERMMASH" PJSC (EDRPOU code: 05765888)
- VKP "SYSTEMY UPRAVLINNIA - KONSYS" LLC (EDRPOU code: 05750295)
- TEXHA PA, LLC (EDRPOU code: 33063942)
- "IT-AGRO" LLC (EDRPOU code: 39800861)
- SEGURO LLC (EDRPOU code: 32985893)
- UMTK LLC (EDRPOU code: 31797087)
- SAYLENS LLC (EDRPOU code: 22954177)
- "FRIGOSERVE"LTD (EDRPOU code: 37495383)
- DNIPROPETROVSKE UCHBOVO-VYROBNYCHE OBIEDNANNIA LUCH UKRAYINSKOHO TOVARYSTVA SLIPYKH (EDRPOU code: 03967576)
- STANKOM-MASH-SERVIS LLC (EDRPOU code: 37969792)
- "GEA WESTFALIA SEPARATOR UKRAINE" SOE (EDRPOU code: 24921971)
- DIUVELSDORF UKRAYINA LLC (EDRPOU code: 37921017)
- UKR.AGRO-SERVICE, LLC (EDRPOU code: 24269988)
- EMCC LLC (EDRPOU code: 41587616)

Appendices

Appendix A. Economy of DO and LO

Table A1. TOP 50 VCs in DO

KVED Code (4 digit)	Industry	Value Chain	Sales, UAH K 2018
2410	Manufacturing	Manufacture of basic iron and steel and of ferro-alloys	160,110,271
0510	Mining industry	Mining of hard coal	44,260,249
2451	Manufacturing	Casting of iron	42,487,666
1910	Manufacturing	Manufacture of coke oven products	28,699,202
4690	Retail and Wholesalers	Wholesale of waste and scrap	13,661,842
3511	Energy	Production of electricity	13,473,648
0111	Agriculture	Growing of cereals (except rice), leguminous crops and oil seeds	11,124,835
4677	Retail and Wholesalers	Wholesale of waste and scrap	10,618,880
2891	Manufacturing	Manufacture of machinery for metallurgy	7,662,555
7112	Science and Professional consulting	Engineering activities and related technical consultancy	7,064,909
0812	Mining industry	Operation of gravel and sand pits; mining of clays and kaolin	7,041,313
3514	Energy	Trade of electricity	5,290,778
4672	Retail and Wholesalers	Wholesale of metals and metal ores	5,163,448
4211	Construction	Construction of roads and motorways	5,161,160
4671	Retail and Wholesalers	Wholesale of solid, liquid and gaseous fuels and related products	4,385,233
4329	Construction	Other construction installation	4,117,564
3020	Manufacturing	Building of pleasure and sporting boats	4,111,007
6820	Real estate	Renting and operating of own or leased real estate	3,808,123
4120	Construction	Construction of residential and non-residential buildings	3,618,646
3530	Energy	Steam and air conditioning supply	3,482,654
2444	Manufacturing	Copper production	3,231,219
9312	Art, Sport and Recreation	Operation of sports facilities	3,135,800
3523	Energy	Trade of gas through mains	3,131,099
6020	Information	Television programming and broadcasting activities	2,875,944
1013	Manufacturing	Production of meat and poultry meat products	2,823,971
3600	Water	Water collection, treatment and supply	2,802,614
3513	Energy	Distribution of electricity	2,624,446
3312	Manufacturing	Repair of machinery	2,612,806
4634	Retail and Wholesalers	Wholesale of beverages	2,434,613
3522	Energy	Distribution of gaseous fuels through mains	2,431,548
4941	Transport	Freight transport by road	2,430,183
4673	Retail and Wholesalers	Wholesale of wood, construction materials and sanitary equipment	2,293,056
5229	Transport	Other transportation support activities	2,251,896

4649	Retail and Wholesalers	Wholesale of other household goods	2,178,492
0893	Mining industry	Extraction of salt	1,930,214
2452	Manufacturing	Casting of steel	1,898,331
2320	Manufacturing	Manufacture of refractory products	1,875,217
4773	Retail and Wholesalers	Retail sale of clothing in specialized stores	1,756,895
2352	Manufacturing	Manufacture of lime and plaster	1,693,904
8610	Health	Hospital activities	1,558,738
0811	Mining industry	Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate	1,545,598
4931	Transport	Urban and suburban passenger land transport	1,137,513
5222	Transport	Service activities incidental to water transportation	1,135,347
4711	Retail and Wholesalers	Retail sale in non-specialized stores with food, beverages or tobacco predominating	1,108,258
2892	Manufacturing	Manufacture of machinery for mining, quarrying and construction	1,073,822
4646	Retail and Wholesalers	Wholesale of pharmaceutical goods	981,294
2562	Manufacturing	Machining	977,217
1072	Manufacturing	Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes	969,110
4511	Retail and Wholesalers	Sale of cars and light motor vehicles	960,467
4621	Retail and Wholesalers	Wholesale of grain, unmanufactured tobacco, seeds and animal feeds	957,497

Source: Ruslana Database.

Table A2. TOP 50 VCs in LO

KVED Code (4 digit)	Industry	Value Chain	Sales, UAH K 2018
2015	Manufacturing	Manufacture of fertilizers and nitrogen compounds	9,666,145
0111	Agriculture	Growing of cereals (except rice), leguminous crops and oil seeds	9,636,692
1712	Manufacturing	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials	3,519,906
0510	Mining industry	Mining of hard coal	2,999,395
3020	Manufacturing	Building of pleasure and sporting boats	2,328,899
5221	Transport	Service activities incidental to land transportation	2,320,555
3514	Energy	Trade of electricity	1,925,171
3523	Energy	Trade of gas through mains	1,899,628
2620	Manufacturing	Manufacture of computers and peripheral equipment	1,422,513
4639	Retail and Wholesalers	Non-specialized wholesale of food, beverages and tobacco	1,365,752
2410	Manufacturing	Manufacture of basic iron and steel and of ferro-alloys	1,204,978
4711	Retail and Wholesalers	Retail sale in non-specialized stores with food, beverages or tobacco predominating	1,043,992
4676	Retail and Wholesalers	Wholesale of other intermediate products	1,038,973
3530	Energy	Steam and air conditioning supply	984,744
2014	Manufacturing	Manufacture of other organic basic chemicals	876,025
7112	Science and Professional consulting	Engineering activities and related technical consultancy	874,473
4671	Retail and Wholesalers	Wholesale of solid, liquid and gaseous fuels and related products	845,731
3600	Water	Water collection, treatment and supply	730,616
4120	Construction	Construction of residential and non-residential buildings	712,716
4690	Retail and Wholesalers	Wholesale of waste and scrap	633,120
4773	Retail and Wholesalers	Retail sale of clothing in specialized stores	622,118
4673	Retail and Wholesalers	Wholesale of wood, construction materials and sanitary equipment	599,678
4675	Retail and Wholesalers	Wholesale of chemical products	595,313
2059	Manufacturing	Manufacture of other chemical products n.e.c.	592,334
4211	Construction	Construction of roads and motorways	527,155
4621	Retail and Wholesalers	Wholesale of grain, unmanufactured tobacco, seeds and animal feeds	477,216
4677	Retail and Wholesalers	Wholesale of waste and scrap	393,210
1041	Manufacturing	Manufacture of oils and fats	389,729
2110	Manufacturing	Manufacture of basic pharmaceutical products	370,081
2314	Manufacturing	Manufacture of glass fibres	335,409
4941	Transport	Freight transport by road	328,233
4634	Retail and Wholesalers	Wholesale of beverages	310,776
6820	Real estate	Renting and operating of own or leased real estate	305,101
4730	Retail and Wholesalers	Retail sale of automotive fuel in specialized stores	279,483
8610	Health	Hospital activities	262,883
5210	Transport	Freight transport by road	242,113
2825	Manufacturing	Manufacture of non-domestic cooling and ventilation equipment	221,620

1061	Manufacturing	Manufacture of grain mill products	213,646
9312	Art, Sport and Recreation	Operation of sports facilities	196,742
0141	Agriculture	Raising of dairycattle	193,958
1051	Manufacturing	Operation of dairies and cheese making	190,513
8621	Health	General medical practice activities	172,114
1091	Manufacturing	Manufacture of prepared feeds for farm animals	168,528
4110	Construction	Development of building projects	153,040
2016	Manufacturing	Manufacture of plastics in primary forms	137,140
4672	Retail and Wholesalers	Wholesale of metals and metal ores	131,086
1105	Manufacturing	Manufacture of beer	131,006
8110	Administrative services	Combined facilities support activities	128,362
2352	Manufacturing	Manufacture of lime and plaster	123,278
1419	Manufacturing	Manufacture of other wearing apparel and accessories	117,666

Source: Ruslana Database.

Appendix B. Import Patterns of DO and LO

Table B1. 107 most imported commodities (HS6) in DO, 2019.

Product code (HS6)	Commodity	Import 2019, USD K,	Share 2019, %	Import Growth 2017/2019, %
020329000	Meat; of swine, n.e.c. in item no. 0203.2, frozen	2215.4	0%	16%
2204210000	Wine; still, in containers holding 2 litres or less	1498.8	0%	216%
2208200000	Spirits obtained by distilling grape wine or grape marc	12761.5	1%	99%
2309900000	Dog or cat food; (not put up for retail sale), used in animal feeding	6839.3	0%	5%
2519900000	Magnesia, fused or dead-burned (sintered); whether or not containing small quantities of other oxides added before sintering, other magnesium oxide, whether or not pure, (not natural magnesium carbonate)	2558.0	0%	-44%
2523290000	Cement; portland, other than white, whether or not artificially colored	1141.1	0%	401%
2529210000	Fluorspar; containing by weight 97% or less of calcium fluoride	1874.4	0%	25%
2701110000	Coal; anthracite, whether or not pulverised, but not agglomerated	142825.5	6%	115%
2701120000	Coal; bituminous, whether or not pulverized, but not agglomerated	1228729.6	55%	1%
2710190000	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c, containing by weight 70% or more of petroleum oils or oils from bituminous minerals; not light oils and preparations	12152.0	1%	46%
2804290000	Gases, rare; other than argon	2210.2	0%	10%
2818200000	Aluminium oxide; other than artificial corundum	1112.3	0%	66%
2836200000	Carbonates; disodium carbonate	3016.1	0%	130%
2849100000	Carbides; of calcium, whether or not chemically defined	2985.2	0%	30%
3105200000	Fertilizers, mineral or chemical; containing the three fertilizing elements nitrogen, phosphorus and potassium	1627.7	0%	N/A
3207200000	Enamels and glazes; vitrifiable enamels and glazes, engobes (slips) and similar preparations	1210.4	0%	-10%
3403190000	Lubricating preparations; (other than for the treatment of textile and similar materials), containing less than 70% (by weight) of petroleum oils or oils obtained from bituminous minerals	1437.3	0%	233%
3824400000	Cements, mortars or concretes; their prepared additives	7225.3	0%	-11%
3824900000	Chemical products, preparations and residual products of the chemical or allied industries, n.e.c. or included in heading no. 3824	5016.4	0%	3%
3926900000	Plastics; other articles n.e.c. in chapter 39	1474.5	0%	52%
4010120000	Rubber; vulcanized, conveyor belts or belting, reinforced only with textile materials	7779.7	0%	1%
4016990000	Rubber; vulcanized (other than hard rubber), articles n.e.c. in heading no. 4016, of non-cellular rubber	1231.2	0%	359%

5513410000	Fabrics, woven; plain weave, printed, of polyester staple fibres, containing less than 85% by weight of such fibres, mixed mainly or solely with cotton, not exceeding 170g/m2	3396.3	0%	N/A
6004100000	Fabrics; knitted or crocheted fabrics of a width exceeding 30 cm, other than those of heading 60.01, containing by weight 5% or more of elastomeric yarn but not containing rubber thread	2064.6	0%	N/A
6402910000	Footwear; n.e.c. in heading no. 6402, covering the ankle, with outer soles and uppers of rubber or plastics	1161.7	0%	1754%
6402990000	Footwear; n.e.c. in heading no. 6402, (other than just covering the ankle), with outer soles and uppers of rubber or plastics	1793.3	0%	160%
6815990000	Stone articles and articles of other mineral substances; n.e.c. or included in heading no. 6815	14395.4	1%	-20%
6903200000	Refractory ceramic goods; containing by weight more than 50% of alumina or of a mixture or compound of alumina and of silica, excluding those of siliceous fossil meals or similar earths	11727.6	1%	41%
7005100000	Glass; float glass and surface ground or polished glass, in sheets, non-wired, having an absorbent reflecting or non-reflecting layer	1308.6	0%	61%
7005290000	Glass; float glass and surface ground or polished glass, in sheets, non-wired, (other than colored throughout the mass (body tinted), opacified, flashed or merely surface ground)	1825.0	0%	-22%
7019590000	Glass fibres; woven fabrics (other than of rovings), n.e.c. in item no. 7019.5	1257.8	0%	3937%
7019900000	Glass fibres; n.e.c. in heading no. 7019	1523.5	0%	11%
7202300000	Ferro-alloys; ferro-silico-manganese	16547.8	1%	-54%
7202410000	Ferro-alloys; ferro-chromium, containing by weight more than 4% of carbon	3854.3	0%	12%
7202600000	Ferro-alloys; ferro-nickel	1326.8	0%	2348%
7202700000	Ferro-alloys; ferro-molybdenum	4587.4	0%	80%
7202920000	Ferro-alloys; ferro-vanadium	18557.9	1%	97%
7202930000	Ferro-alloys; ferro-niobium	18885.4	1%	49%
7207110000	Iron or non-alloy steel; semi-finished products of iron or non-alloy steel; containing by weight less than 0.25% of carbon, of rectangular (including square) cross-section, width less than twice thickness	2850.0	0%	-32%
7210490000	Iron or non-alloy steel; flat-rolled, width 600mm or more, (not corrugated), plated or coated with zinc (not electrolytically)	1221.9	0%	-18%
7213990000	Iron or non-alloy steel; bars and rods, hot-rolled, in irregularly wound coils, n.e.c. in heading no. 7213, of circular cross-section measuring 14mm or more in diameter	1658.3	0%	-62%
7302100000	Iron or steel, railway or tramway track construction material; rails	1223.5	0%	343%
7315820000	Chain; welded link chain, of iron or steel	1606.7	0%	9%
7318150000	Iron or steel; threaded screws and bolts n.e.c. in item no. 7318.1, whether or not with their nuts or washers	1001.9	0%	112%
7321900000	Domestic appliances; non-electric, parts thereof, of iron or steel	1121.9	0%	-14%
7326900000	Iron or steel; articles n.e.c. in heading 7326	3532.9	0%	17%
7502100000	Nickel; unwrought, not alloyed	6365.6	0%	16%
7604210000	Aluminium; alloys, hollow profiles	1290.1	0%	-25%

7901120000	Zinc; unwrought, (not alloyed), containing by weight less than 99.99% of zinc	21405.2	1%	-8%
8207130000	Tools, interchangeable; rock drilling or earth boring tools, with working part of cermets, whether or not power operated	1085.2	0%	47%
8403100000	Boilers; central heating boilers (excluding those of heading no. 8402)	1939.0	0%	25122%
8412210000	Engines; hydraulic power engines and motors, linear acting (cylinders)	5810.0	0%	768%
8412290000	Engines; hydraulic power engines and motors, other than linear acting (cylinders)	2006.6	0%	58%
8413500000	Pumps; reciprocating positive displacement pumps, n.e.c. in heading no. 8413, for liquids	2031.5	0%	449%
8413700000	Pumps; centrifugal, n.e.c. in heading no. 8413, for liquids	4004.2	0%	139%
8414590000	Fans; n.e.c. in item no. 8414.51	1966.5	0%	233%
8421190000	Centrifuges; n.e.c. in heading no. 8421, including centrifugal dryers (but not clothes-dryers)	1704.1	0%	154%
8421210000	Machinery; for filtering or purifying water	1226.5	0%	-75%
8428390000	Elevators and conveyors; continuous-action, for goods or materials, n.e.c. in item no. 8428.20, 8428.31, 8428.32 or 8428.33	2022.5	0%	45%
8428900000	Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426, 8427 or 8428	1962.8	0%	-39%
8429510000	Front-end shovel loaders	2189.1	0%	18%
8429520000	Mechanical shovels, excavators and shovel loaders; with a 360 degree revolving super structure	3193.3	0%	-25%
8430500000	Machinery; for handling earth, minerals or ores, self-propelled, n.e.c. in heading no. 8430	1224.7	0%	549%
8431490000	Machinery; parts of machines handling earth, minerals or ores and n.e.c. in heading no. 8431	1035.7	0%	47%
8454900000	Machines; parts of converters, ladles, ingot moulds and casting machines, of a kind used in metallurgy or in metal foundries	1096.2	0%	-18%
8455900000	Metal-rolling mills; parts thereof	7368.9	0%	35290%
8466100000	Machine-tools; parts and accessories, tool holders and self-opening dieheads	1096.7	0%	1934%
8471500000	Units of automatic data processing machines; processing units other than those of item no. 8471.41 or 8471.49, whether or not containing in the same housing one or two of the following types of unit: storage units, input units or output units	1276.1	0%	11%
8474100000	Machines; for sorting, screening, separating or washing earth, stone, ores or other mineral substances	1468.7	0%	137%
8474200000	Machines; for crushing or grinding earth, stone, ores or other mineral substances	1255.6	0%	-40%
8474390000	Machines; for mixing or kneading mineral substances, excluding concrete mixers and machines for mixing mineral substances with bitumen	1269.4	0%	-14%
8474900000	Machines, for sorting, screening, separating, washing, crushing mineral substances, for agglomerating, shaping or moulding solid fuels, ceramic pastes etc, for forming foundry moulds of sand; parts	1331.3	0%	-31%
8479890000	Machines and mechanical appliances; having individual functions, n.e.c. or included in this chapter	1845.3	0%	5%

8481100000	Valves; pressure reducing, for pipes, boiler shells, tanks, vats or the like	2468.0	0%	-30%
8481200000	Valves; for oleohydraulic or pneumatic transmissions	2148.7	0%	401%
8482100000	Ball bearings	3368.3	0%	235%
8482200000	Bearings; tapered roller bearings, including cone and tapered roller assemblies	2575.8	0%	172%
8482300000	Bearings; spherical roller bearings	2878.1	0%	-5%
8482500000	Bearings; cylindrical roller bearings n.e.c. in heading no. 8482	2176.7	0%	3%
8483100000	Transmission shafts (including cam shafts and crank shafts) and cranks	3382.1	0%	90%
8483400000	Gears and gearing; (not toothed wheels, chain sprockets and other transmission elements presented separately); ball or roller screws; gear boxes and other speed changers, including torque converters	13221.7	1%	84%
8483600000	Clutches and shaft couplings (including universal joints)	1082.7	0%	193%
8483900000	Transmission components; toothed wheels, chain sprockets and other transmission elements presented separately; parts	3089.0	0%	-14%
8501520000	Electric motors; AC motors, multi-phase, of an output exceeding 750W but not exceeding 75kW	4450.2	0%	164%
8501530000	Electric motors; AC motors, multi-phase, of an output exceeding 75kW	7000.9	0%	142%
8501640000	Electric generators; AC generators, (alternators), of an output exceeding 750kVA	2564.1	0%	N/A
8504340000	Transformers; n.e.c. in item no. 8504.2, having a power handling capacity exceeding 500kVA	2532.8	0%	938%
8504400000	Electrical static converters	4858.1	0%	271%
8511400000	Ignition or starting equipment; starter motors and dual purpose starter-generators, of a kind used for spark or compression-ignition internal combustion engines	1244.6	0%	53776%
8537200000	Boards, panels, consoles, desks and other bases; for electric control or the distribution of electricity, (other than switching apparatus of heading no. 8517), for a voltage exceeding 1000 volts	5093.6	0%	153%
8545110000	Carbon electrodes; with or without metal, of a kind used for furnaces	11567.7	1%	8%
8548100000	Waste and scrap of primary cells, primary batteries and electric accumulators; spent primary cells, spent primary batteries and spent electric accumulators	2341.0	0%	171%
8602900000	Rail locomotives and locomotive tenders; other than diesel-electric powered	1296.8	0%	599%
8606300000	Railway or tramway goods vans and wagons; self-discharging, not self-propelled, excluding those of item no. 8606.10	2327.0	0%	305%
8701200000	Tractors; road, for semi-trailers	2325.9	0%	4007%
8703240000	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 3000cc	1725.0	0%	12870%
8703310000	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity not exceeding 1500cc	1516.4	0%	1014%
8703320000	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity exceeding 1500cc but not exceeding 2500cc	5819.0	0%	464%

8703330000	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity exceeding 2500cc	1020.1	0%	N/A
8704100000	Vehicles; dumpers, designed for off-highway use, for transport of goods	1534.5	0%	-26%
8708500000	Vehicle parts; drive-axles with differential, whether or not provided with other transmission components, and non-driving axles; parts thereof	1086.3	0%	1343%
8716390000	Trailers and semi-trailers; (other than tanker type)	1248.4	0%	3656%
9022190000	Apparatus based on the use of x-rays, including radiography or radiotherapy apparatus; for other than medical, surgical, dental or veterinary uses	1012.2	0%	353%
9022290000	Apparatus based on the use of alpha, beta or gamma radiations, including radiography or radiotherapy apparatus; (for other than medical, surgical, dental or veterinary uses)	1648.9	0%	1961%
9102110000	Wrist-watches; electrically operated, with or without a stop-watch, (other than those of heading no. 9101) with mechanical display only	1009.7	0%	451%
9401710000	Seats; with metal frames, upholstered, (excluding medical, surgical, dental, veterinary or barber furniture)	1156.7	0%	55801%
9405100000	Chandeliers and other electric ceiling or wall light fittings; excluding those used for lighting public open spaces or thoroughfares	1158.4	0%	564%

Source: The State Statistics Service, own calculations

Table B2. DO Potential Importers of TOP 20 commodities.

Product code (HS6)	Commodity	Importer	
		Company Name	EDRPOU code
3105200000	Fertilizers, mineral or chemical; containing the three fertilizing elements nitrogen, phosphorus and potassium	APK-INVEST	34626750
		VESCO PJSC	00282049
		EKOPROD	23981928
		KZTS MASHYNING	37388746
		OLEKSANDRIVKA-AGRO LTD	37980355
5513410000	Fabrics, woven; plain weave, printed, of polyester staple fibres, containing less than 85% by weight of such fibres, mixed mainly or solely with cotton, not exceeding 170g/m2	INTERLAYN KOMPANI	43134684
		TK MORIS	43134789
6004100000	Fabrics; knitted or crocheted fabrics of a width exceeding 30 cm, other than those of heading 60.01, containing by weight 5% or more of elastomeric yarn but not containing rubber thread	SERVISKOTLOSAB	41497156
		VITEKS UNION	43139787
		KLAYN LTD	42161612
6402910000	Footwear; n.e.c. in heading no. 6402, covering the ankle, with outer soles and uppers of rubber or plastics	HLORI TREYD KOMPANI	42545341
		LEYTER PROMS	43141361
7019590000	Glass fibres; woven fabrics (other than of rovings), n.e.c. in item no. 7019.5	SKAY HALAKSI	41383864
		FRENCHKORD	42551343
7202600000	Ferro-alloys; ferro-nickel	AZOV STEEL SMELTING COMPANY, LLC	39758946
		ELEKTROSTAL-KURAKHOVO	41491822
		ENERHOMASHPETSSTAL	00210602
		SELENA	37339154
		METALLURGICAL PLANT AZOVSTAL	00191158
		NKMZ PJSC	5763599
		POLYMETSTROY	33980765
8403100000	Boilers; central heating boilers (excluding those of heading no. 8402)	GAZOVYIE TEKHNologii	33771851
		SVYATO-POKROVSKAYA №3 MINE LLC	39649746
8455900000	Metal-rolling mills; parts thereof	MAHMA	31577458
		MARIUPOL METALLURGICAL PLANT NAMED AFTER ILLICH	00191129
		METINVEST ENGINEERING	37732376
8466100000	Machine-tools; parts and accessories, tool holders and self-opening dieheads	BETONMASH	00240052
		ENERHOMASHPETSSTAL	00210602
		KZTS PJSC	00222999
		NKMZ PJSC	05763599
		SMS TECHNICAL SERVICE	38349205
8501640000	Electric generators; AC generators, (alternators), of an output exceeding 750kVA	AZOV KONTROLZ	33012552
		DONBASELEKTROMOTOR	35398045
		DTEK DOBROPILLIYAVUHILLIA	37014600
		ZAVOD OBVAZHNIUVACHIV	00136751
		KRASNOLIMANSKE LLC	32281519
		PIDSHYPNYKZBUT	23602486
		TEKHNO UKRAYINA	35580430

8504340000	Transformers; n.e.c. in item no. 8504.2, having a power handling capacity exceeding 500kVA	AZOV KONTROLZ	33012552
		BIZNES-ON	42141892
		BUDUPRAVLINNIA №12	43184410
		MANUFACTURING COMPANY ELTEKO	36893728
		LAYFEKOSYSTEM	41320956
		FUHLAENDER WINDTECHNOLOGY LLC	37011495
8511400000	Ignition or starting equipment; starter motors and dual purpose starter-generators, of a kind used for spark or compression-ignition internal combustion engines	AHRO STAYL	43141340
		IMPORT TRAST-KOMPANI	42495453
		AZOVINTEKS	24155428
8701200000	Tractors; road, for semi-trailers	BETON NOVA INTERNATIONAL	37320399
		LARGUS UKREINE LLC	38355182
		FRAKHTTRANSSEKSVYS	20390931
8703330000	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity exceeding 2500cc	VOSTOK-STEKLO LLC	33287485
8703240000	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 3000cc		
8703310000	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity not exceeding 1500cc		
8708500000	Vehicle parts; drive-axles with differential, whether or not provided with other transmission components, and non-driving axles; parts thereof	AHRO STAYL	43141340
		VESCO PJSC	00282049
		WEST EAST COMPANY, LLC	41275867
		EKVAYRYNH	42346527
		HUDMISTPROM	42396497
		IMPORT TRAST-KOMPANI	42495453
		LOHIST AKSEL	43108041
		MORIS BLEYD	43051231
		PRAYM TREYDENT	34368271
		URIK STAYL	42724498
8716390000	Trailers and semi-trailers; (other than tanker type)	AZOVELEKTROZBUT	24646600
		BETON NOVA INTERNATIONAL	37320399
		BIZNES-ON	42141892
		PROMREMONT	25607335
		CONCRETE-TRANS LLC	40962797
		LARGUS UKREINE LLC	38355182
		FPH DONPROMENERHO	37604038
		FRAKHTTRANSSEKSVYS	20390931
9022290000	Apparatus based on the use of alpha, beta or gamma radiations, including radiography or radiotherapy apparatus; (for other than medical, surgical, dental or veterinary uses)	TEKHNO UKRAYINA	35580430
9401710000	Seats; with metal frames, upholstered, (excluding medical, surgical, dental, veterinary or barber furniture)	AYRIS INVESTING	43051205
		MORIS BLEYD	43051231
		TEKHNA TK	43134663
		FORTEYNBUD	42580449
		FRESH KAPITAL	42580407

Source: The State Statistics Service, "Exporters-Importers" Database.

Table B3. 47 most imported commodities (HS6) in LO, 2019.

Product code (HS6)	Commodity	Import 2019, USD K,	Share 2019, %	Import Growth 2017/2019, %
2701110000	Coal; anthracite, whether or not pulverized, but not agglomerated	77029.1	30%	12%
2814100000	Ammonia; anhydrous	25561.5	10%	34%
4707100000	Paper or paperboard; waste and scrap, of unbleached kraft paper or paperboard or corrugated paper or paperboard	15053.9	6%	-56%
3901200000	Ethylene polymers; in primary forms, polyethylene having a specific gravity of 0.94 or more	12823.6	5%	0%
8606300000	Railway or tramway goods vans and wagons; self-discharging, not self-propelled, excluding those of item no. 8606.10	6198.7	2%	N/A
7115100000	Metal; catalysts in the form of wire cloth or grill, of platinum	4496.1	2%	218%
4707900000	Paper or paperboard; waste and scrap, of paper or paperboard n.e.c. in heading no. 4707 and of unsorted waste and scrap	3888.3	2%	30%
3917210000	Plastics; tubes, pipes and hoses thereof, rigid, of polymers of ethylene	3745.2	1%	109%
2902300000	Cyclic hydrocarbons; toluene	2937.0	1%	-19%
3903190000	Styrene polymers; (other than expansible polystyrene), in primary forms	2890.6	1%	-13%
8703230000	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 1500cc but not exceeding 3000cc	2609.1	1%	726%
7019110000	Glass fibres; (including glass wool), chopped strands, of a length of not more than 50mm	2221.4	1%	1%
2915210000	Acids; saturated acyclic monocarboxylic acids; acetic acid	1786.5	1%	340%
2710190000	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c. containing by weight 70% or more of petroleum oils or oils from bituminous minerals; not light oils and preparations	1656.1	1%	-10%
5407540000	Fabrics, woven; containing 85% or more by weight of textured polyester filaments, printed	1600.1	1%	255%
8439990000	Machinery; parts of machinery for making or finishing paper or paperboard	1583.4	1%	73%
4810920000	Paper and paperboard; multi-ply, coated with kaolin or other inorganic substances only, for non-graphic purposes, n.e.c. in heading no. 4810, in rolls or sheets	1546.7	1%	5%
5407520000	Fabrics, woven; containing 85% or more by weight of textured polyester filaments, dyed	1439.3	1%	14%
3809920000	Finishing agents and dye carriers; to accelerate dyeing or fixing of dye-stuffs, other products and preparations, used in the paper industry (excluding those with a basis of amylaceous substances)	1268.5	1%	-10%
8703320000	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity exceeding 1500cc but not exceeding 2500cc	1229.9	0%	245%
4804390000	Kraft paper and paperboard; uncoated, bleached, weight 150g/m2 or less, in rolls or sheets, other than that of heading no. 4802 or 4803	1191.6	0%	31%
5408240000	Fabrics, woven; of artificial filament yarn, containing 85% or more by weight of artificial filament, strip or the like, printed	1129.8	0%	109%
4706200000	Pulp; of fibres derived from recovered (waste and scrap) paper or paperboard	1083.3	0%	-23%
7005290000	Glass; float glass and surface ground or polished glass, in sheets, non-wired, (other than coloured throughout the	1014.9	0%	111%

	mass (body tinted), opacified, flashed or merely surface ground)			
5111300000	Fabrics, woven; of carded wool or carded fine animal hair, containing less than 85% by weight of wool or fine animal hair, mixed mainly or solely with man-made staple fibres	984.9	0%	106%
2905160000	Alcohols; saturated monohydric, octanol (octyl alcohol) and isomers thereof	982.2	0%	-61%
4703210000	Wood pulp; chemical wood pulp, soda or sulphate, (other than dissolving grades), semi-bleached or bleached, of coniferous wood	958.7	0%	N/A
3505100000	Dextrins and other modified starches	911.2	0%	-12%
4805920000	Paper and paperboard; uncoated, weight more than 150g/m2 but less than 225 g/m2, in rolls or sheets, n.e.c. in heading no. 4805	907.3	0%	393%
3917400000	Plastics; tube, pipe and hose fittings (e.g. joints, elbows, flanges)	787.0	0%	-12%
5516140000	Fabrics, woven; printed, containing 85% or more by weight of artificial staple fibres	762.0	0%	13%
5505100000	Fibres; waste (including noils, yarn waste and garnetted stock), of synthetic fibres	759.4	0%	62%
8607210000	Railway or tramway locomotives or rolling stock; parts, air brakes and parts thereof	744.3	0%	-30%
3919900000	Plastics; plates, sheets, film, foil, tape, strip, other flat shapes thereof, self-adhesive, other than in rolls of a width not exceeding 20cm	715.8	0%	39%
3909100000	Amino-resins; urea and thiourea resins, in primary forms	714.5	0%	-69%
3903900000	Styrene polymers; in primary forms, n.e.c. in heading no. 3903	681.1	0%	-9%
3824900000	Chemical products, preparations and residual products of the chemical or allied industries, n.e.c. or included in heading no. 3824	672.1	0%	49%
8607300000	Railway or tramway locomotives or rolling stock; parts, hooks and other coupling devices, buffers and parts thereof	667.2	0%	-20%
2519900000	Magnesia, fused or dead-burned (sintered); whether or not containing small quantities of other oxides added before sintering, other magnesium oxide, whether or not pure, (not natural magnesium carbonate)	638.4	0%	199%
8439910000	Machinery; parts of machinery for making pulp of fibrous cellulosic material	625.8	0%	170%
8462290000	Machine-tools; bending, folding, straightening or flattening machines (including presses), (other than numerically controlled), for working metal	581.2	0%	N/A
5911320000	Textiles; fabrics and felts, endless or fitted with linking devices, of a kind used in paper-making or similar machines, weighing 650g/m2 or more	543.5	0%	-47%
7019190000	Glass fibres; (including glass wool), slivers, yarns and threads	537.0	0%	-21%
8703900000	Vehicles; for transport of persons (other than those of heading no. 8702) n.e.c. in heading no. 8703, including station wagons and racing cars	523.2	0%	6761%
8462410000	Machine-tools; punching or notching machines (including presses), including combined punching and shearing machines, numerically controlled, for working metal	520.5	0%	N/A
4802550000	Uncoated paper and paperboard (not 4801 or 4803); printing, writing or graphic, 10% or less by weight of mechanical or chemi-mechanical processed fibre, weighing 40g/m2 to 150g/m2, in rolls	509.2	0%	68%
4805240000	Paper & paperboard; uncoated, testliner (recycled linerboard), weight 150g/m2, or less, in rolls or sheets	507.6	0%	-28%

Source: The State Statistics Service, own calculations

Table B4. LO Potential Importers of TOP 20 commodities.

Product code (HS6)	Commodity	Importer	
		Company Name	EDRPOU code
Magnesia, fused or dead-burned (sintered); whether or not containing small quantities of other oxides added before sintering, other magnesium oxide, whether or not pure, (not natural magnesium carbonate)	2519900000	33270581	SEVERODONETSK AZOT
Acids; saturated acyclic monocarboxylic acids; acetic acid	2915210000	41423901	VARK
		24202292	KONKORD
		41232638	OMEHA-M
		24195267	TD TANA
		38579406	TEKHNOPULS
		13395997	KHIMPOSTACHALNYK
Chemical products, preparations and residual products of the chemical or allied industries, n.e.c. or included in heading no. 3824	3824900000	23474211	KABRIOLET
		35549206	KORD-HS
		37051658	ORHSYNTEZ
		33270581	SEVERODONETSK AZOT
		33622734	SHIDHIM LCC
Wood pulp; chemical wood pulp, soda or sulphate, (other than dissolving grades), semi-bleached or bleached, of coniferous wood	4703210000	4703	Unidentified
Uncoated paper and paperboard (not 4801 or 4803); printing, writing or graphic, 10% or less by weight of mechanical or chemi-mechanical processed fibre, weighing 40g/m2 to 150g/m2, in rolls	4802550000	4802	Unidentified
Paper and paperboard; uncoated, weight more than 150g/m2 but less than 225 g/m2, in rolls or sheets, n.e.c. in heading no. 4805	4805920000	4805	Unidentified
Fabrics, woven; of carded wool or carded fine animal hair, containing less than 85% by weight of wool or fine animal hair, mixed mainly or solely with man-made staple fibres	5111300000	5111	Unidentified
Fabrics, woven; containing 85% or more by weight of textured polyester filaments, printed	5407540000	5407	Unidentified
Fabrics, woven; of artificial filament yarn, containing 85% or more by weight of artificial filament, strip or the like, printed	5408240000	5408	Unidentified
Fibres; waste (including noils, yarn waste and garnetted stock), of synthetic fibres	5505100000	14338636	TANA
Glass; float glass and surface ground or polished glass, in sheets, non-wired, (other than coloured throughout the mass (body tinted), opacified, flashed or merely surface ground)	7005290000	32792524	LEASING INVEST LLC
Metal; catalysts in the form of wire cloth or grill, of platinum	7115100000	7115	Unidentified
Machinery; parts of machinery for making pulp of fibrous cellulosic material	8439910000	1882551	RUBIZHNE CARDBOARD PACKAGE MILL
Machinery; parts of machinery for making or finishing paper or paperboard	8439990000	1882551	RUBIZHNE CARDBOARD PACKAGE MILL
Machine-tools; bending, folding, straightening or flattening machines (including presses), (other than numerically controlled), for working metal	8462290000	31393258	IMPULS
Machine-tools; punching or notching machines (including presses), including combined punching and shearing machines, numerically controlled, for working metal	8462410000	31393258	IMPULS

Railway or tramway goods vans and wagons; self-discharging, not self-propelled, excluding those of item no. 8606.10	8606300000	34502350	POPASNA RAILWAY-CARRIAGE REPAIR PLANT
Vehicles; for transport of persons (other than those of heading no. 8702) n.e.c. in heading no. 8703, including station wagons and racing cars	8703900000	Unidentified	
Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 1500cc but not exceeding 3000cc	8703230000		
Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), cylinder capacity exceeding 1500cc but not exceeding 2500cc	8703320000		

Source: The State Statistics Service, "Exporters-Importers" Database.

Appendix C. Commodities imported by target value chains

Table C1. List of Commodities imported by target VCs in DO/LO

Value Chain	Product	Product code	Imports	
			LB	UB
Agricultural machinery	X-ray, alpha, beta, gamma radiation apparatus: generators, control panels and desks, screens etc	9022	4,500,000	5,000,000
	Instruments and apparatus; for measuring or checking viscosity, porosity, quantities of heat, sound or light	9027	250,000	400,000
	Boards, panels, consoles, desks, cabinets for electricity control and distribution	8537	300,000	350,000
	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves	8481	-	300,000
	Paper, paperboard, cellulose wadding and webs of cellulose fibres; cut to size or shape, articles of paper pulp, paper and paper-board, cellulose wadding or webs of cellulose fibres, n.e.c. in chapter 48	4823	250,000	300,000
	Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40	4016	150,000	300,000
	Electric transformers, static converters (e.g. rectifiers) and inductors	8504	200,000	250,000
	Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts or fittings for instruments or apparatus, other than such elements of glass not optically worked	9002	200,000	250,000
	Other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss	8514	-	200,000
	Engines and motors; n.e.c. (e.g. reaction engines, hydraulic power engines, pneumatic power engines)	8412	100,000	150,000
	Electric motors and generators (excluding generating sets)	8501	100,000	150,000
	Electrical insulators of any material	8546	100,000	150,000
	Iron or steel; articles, n.e.c. in chapter 73	7326	-	100,000
	Tubes, pipes and hoses, of vulcanised rubber (other than hard rubber), with or without their fittings (e.g. joints, elbows, flanges)	4009	-	100,000
	Hand sieves and hand riddles	9604	-	100,000
	Machines and appliances for testing the hardness, strength, compressibility, elasticity of other mechanical properties of materials (e.g. metals, wood, textiles, paper, plastics)	9024	-	100,000
	Balances; of a sensitivity of 5cg or better, with or without weights	9016	-	100,000
	Tube or pipe fittings (e.g. couplings, elbows, sleeves), of iron or steel	7307	-	100,000
	Base metal mountings, fittings and similar articles	8302	-	100,000
	Springs and leaves for springs, of iron or steel	7320	-	100,000
	Machinery and mechanical appliances; having individual functions, n.e.c. in this chapter	8479	-	100,000
	Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores in solid form, shaping, moulding machinery for solid mineral fuels	8474	-	100,000

Value Chain	Product	Product code	Imports	
			LB	UB
	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus for liquids or gases	8421	-	100,000
	Other		300,000	450,000
Socks	Cotton yarn (other than sewing thread) containing more than 85% of cotton	5205	3,500,000	4,000,000
	Cotton yarn (other than sewing thread), containing less than 85% of cotton	5206	150,000	200,000
	Base metal mountings, fittings and similar articles	8302	-	100,000
	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves	8481	-	100,000
	Machinery, auxiliary; for use with machines of heading no. 8444 to 8447 (e.g. dobbies, jacquards, automatic stop motions, shuttle changing mechanisms) parts, accessories for machines of heading no. 8444, 8447	8448	-	100,000
	Transmission shafts (including cam and crank) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers; flywheels and pulleys; clutches and shaft couplings	8483	-	100,000
	Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40	4016	-	100,000
	Electrical apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8535, 8536 and 8537	8538	-	100,000
	Yarn (other than sewing thread) of synthetic staple fibres, not put up for retail sale	5509	-	100,000
	Knives and cutting blades, for machines or for mechanical appliances	8208	-	100,000
Packaging and Cardboard	Other		-	100,000
	Waste and scrap of paper and paperboard	4707	250,000,000	300,000,000
	Paper and paperboard, coated one or both sides with kaolin (china clay) or inorganic substances	4810	35,850,000	40,900,000
	Wood pulp obtained by a combination of mechanical and chemical pulping processes	4705	30,000,000	35,000,000
	Uncoated kraft paper and paperboard, in rolls or sheets, other than that of heading no. 4802 or 4803	4804	20,000,000	25,000,000
	Pulps of fibres derived from recovered (waste and scrap) paper or paperboard or of other fibrous cellulosic material	4706	15,000,000	20,000,000
	Machinery; for making pulp of fibrous cellulosic material, or for making or finishing paper or paperboard	8439	11,500,000	17,000,000
	Dextrins and other modified starches (e.g. pregelatinised or esterified starches); glues based on starches or on dextrins or other modified starches	3505	10,000,000	15,000,000
	Textile products and articles for technical uses; specified in note 7 to this chapter	5911	10,000,000	15,000,000
	Finishing agents, dye carriers to accelerate the dyeing, fixing of dyestuffs, other products and preparations, of a kind used in the textile, paper, leather or like industries, n.e.c. or included	3809	10,000,000	15,000,000
	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls	3919	6,500,000	7,500,000
	Acrylic polymers in primary forms	3906	6,000,000	6,500,000
	Machinery for working rubber or plastics or for the manufacture of products from these materials	8477	1,500,000	2,000,000
	Uncoated paper and paperboard n.e.c., in rolls or sheets	4805	450,000	500,000
	Plastics; builders' wares n.e.c. or included	3925	-	100,000

Value Chain	Product	Product code	Imports	
			LB	UB
	Tubes, pipes and hoses and fittings thereof (for example, joints, elbows, flanges), of plastics	3917	-	100,000
	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves	8481	-	100,000
	Mechanical appliances for projecting, dispersing or spraying liquids or powders; fire extinguishers, spray guns, steam, sand blasting machines	8424	-	100,000
	Articles of plastics and articles of other materials of heading no. 3901 to 3914, n.e.c. in chapter 39	3926	-	100,000
	Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40	4016	-	100,000
	Paper, paperboard, cellulose wadding and webs of cellulose fibres, coated, impregnated, covered, surface-coloured, decorated or printed, rolls or sheets, other than goods of heading no. 4803, 4809, or 4810	4811	-	100,000
	Other		35,000,000	40,000,000
Plastics	Machinery for working rubber or plastics or for the manufacture of products from these materials	8477	650,000	700,000
	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves	8481	-	100,000
	Electric soldering, brazing, welding machines and apparatus, electric machines and apparatus for hot spraying of metals or sintered carbides	8515	-	100,000
	Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40	4016	-	100,000
	Transmission shafts (including cam and crank) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers; flywheels and pulleys; clutches and shaft couplings	8483	-	100,000
	Screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter-pins, washers (including spring washers) and similar articles, of iron or steel	7318	-	100,000
	Circuits; printed	8534	-	100,000
	Machine-tools; for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron beam, ionic-beam, or plasma arc processes; water-jet cutting machines	8456	-	100,000
	Machine-tools; (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard plastics or rubber or similar hard materials	8465	-	100,000

Source: YouControl, Ruslana, own calculations

Table C2. List of Commodities imported by Aerospace industry and Agricultural machinery VCs in Ukraine (Up to UAH 500,000)

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
Aerospace industry	Turbo-jets, turbo-propellers and other gas turbines	8411	200,700,000	250,950,000
	Nickel; articles thereof n.e.c. in chapter 75	7508	200,000,000	250,100,000
	Titanium; articles thereof, including waste and scrap	8108	100,000,000	150,000,000
	Nickel; bars, rods, profiles and wire	7505	85,150,000	90,200,000
	Navigational instruments and appliances; direction finding compasses	9014	62,250,000	69,250,000
	Nickel; plates, sheets, strip and foil	7506	55,000,000	60,000,000
	Aircraft; parts of heading no. 8801 or 8802	8803	42,250,000	48,100,000
	Stainless steel bars and rods, angles, shapes and sections	7222	35,000,000	40,000,000
	Measuring or checking instruments, appliances and machines, n.e.c. or included in this chapter; profile projectors	9031	26,000,000	31,600,000
	Ignition or starting equipment; used for spark-ignition or compression-ignition internal combustion engines; generators and cut outs used in conjunction with such engines	8511	25,000,000	30,000,000
	Petroleum oils and oils from bituminous minerals, not crude; preparations n.e.c, containing by weight 70% or more of petroleum oils or oils from bituminous minerals; these being the basic constituents of the preparations; waste oils	2710	25,000,000	30,000,000
	Electric motors and generators (excluding generating sets)	8501	21,350,000	26,850,000
	Transmission apparatus for radio-broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras, digital cameras and video camera recorders	8525	14,850,000	15,900,000
	Instruments and apparatus; for measuring or checking viscosity, porosity, quantities of heat, sound or light	9027	10,000,000	15,000,000
	Machinery and mechanical appliances; having individual functions, n.e.c. in this chapter	8479	10,000,000	15,000,000
	Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not	9025	7,500,000	8,000,000
	Radar apparatus, radio navigational aid apparatus and radio remote control apparatus	8526	5,900,000	7,750,000
	Mechanical appliances for projecting, dispersing or spraying liquids or powders; fire extinguishers, spray guns, steam, sand blasting machines	8424	3,500,000	4,100,000
	Transmission apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8525 to 8528	8529	3,000,000	3,700,000
	Motor vehicles; parts and accessories, of heading no. 8701 to 8705	8708	2,500,000	3,000,000
	Ball or roller bearings	8482	2,200,000	2,750,000
	Electric generating sets and rotary converters	8502	2,000,000	2,500,000
	Boards, panels, consoles, desks, cabinets for electricity control and distribution	8537	1,500,000	2,300,000
	Reciprocating or rotary internal combustion piston engines	8407	1,500,000	2,200,000
	Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses, rangefinders	9015	1,500,000	2,000,000
	Aluminium; plates, sheets and strip, thickness exceeding 0.2mm	7606	1,500,000	2,000,000

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
	Instruments, apparatus for measuring or checking the flow, level, pressure of liquids, gases (e.g. flow meters, heat meters etc), not instruments and apparatus of heading no. 9014, 9015, 9028 or 9032	9026	1,000,000	1,900,000
	Engines and motors; n.e.c. (e.g. reaction engines, hydraulic power engines, pneumatic power engines)	8412	1,500,000	1,900,000
	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus for liquids or gases	8421	1,000,000	1,700,000
	Parachutes (including dirigible parachutes and paragliders) and rotochutes; parts thereof and accessories thereto	8804	1,250,000	1,550,000
	Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors	8544	1,000,000	1,500,000
	Tractors; (other than tractors of heading no 8709)	8701	1,000,000	1,500,000
	Pig iron and spiegeleisen in pigs, blocks or other primary forms	7201	1,000,000	1,500,000
	Machine-tools; for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron beam, ionic-beam, or plasma arc processes; water-jet cutting machines	8456	1,000,000	1,500,000
	Gas, liquid or electricity supply or production meters, including calibrating meters therefor	9028	1,000,000	1,500,000
	Parts suitable for use solely or principally with the engines of heading no. 8407 or 8408	8409	1,000,000	1,500,000
	Aluminium; tubes and pipes	7608	1,150,000	1,350,000
	Iron or steel; articles, n.e.c. in chapter 73	7326	400,000	1,150,000
	Lubricating preparations and those used in oil or grease treatment of textile and similar materials; excluding preparations containing 70% or more (by weight) of petroleum or bituminous mineral oils	3403	1,050,000	1,150,000
	Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan whether or not fitted with filters	8414	900,000	1,150,000
	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves	8481	700,000	1,050,000
	Microscopes, compound optical; including those for photomicrography, cinephotomicrography or microprojection	9011	950,000	1,000,000
	Pulley tackle and hoists other than skip hoists; winches and capstans; jacks	8425	800,000	950,000
	Telephone sets, including telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data (including wired/wireless networks), excluding items of 8443, 8525, 8527, or 8528	8517	450,000	900,000
	Lamps; portable, electric, designed to function by their own source of energy (e.g. dry batteries, accumulators, magnetos), excluding lighting equipment of heading no. 8512	8513	800,000	850,000
	Base metal mountings, fittings and similar articles	8302	650,000	800,000
	Parts & accessories suited for use only/mainly with machines of headings 8456-8465, including work/tool holders, self-opening dieheads, dividing heads & other special attachments for the machines; tool holders for any type of tool for working in the hand	8466	650,000	700,000

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
	Woven fabrics of synthetic filament yarn, including woven fabrics obtained from materials of heading no. 5404	5407	600,000	700,000
	Paints, varnishes; (enamels and lacquers) based on synthetic polymers or chemically modified natural polymers, dispersed or dissolved in a non-aqueous medium	3208	600,000	650,000
	Containers for compressed or liquefied gas, of iron or steel	7311	600,000	650,000
	Electric accumulators, including separators therefor; whether or not rectangular (including square)	8507	400,000	650,000
	Iron or non-alloy steel; bars and rods, not further worked than forged, hot-rolled, hot drawn or hot-extruded, but including those twisted after rolling	7214	500,000	550,000
	Regulating or controlling instruments and apparatus; automatic type	9032	450,000	500,000
	Machine-tools; (including presses) for working metal by forging, hammering or die-stamping, for bending, folding, straightening, flattening, shearing or punching metal	8462	450,000	500,000
	Screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter-pins, washers (including spring washers) and similar articles, of iron or steel	7318	-	500,000
	Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits, for a voltage not exceeding 1000 volts; connectors for optical fibres, optical fibre bundles or cables	8536	-	500,000
	Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40	4016	-	500,000
	Other		260,100,000	312,800,000
Agricultural machinery	Tractors; (other than tractors of heading no 8709)	8701	234,000,000	340,100,000
	Iron or non-alloy steel; flat-rolled products, width 600mm or more, clad, plated or coated	7210	178,500,000	234,600,000
	Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading no 8437	8433	113,150,000	136,700,000
	Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers	8432	90,750,000	108,600,000
	Diodes, transistors, similar semiconductor devices; including photovoltaic cells assembled or not in modules or panels, light-emitting diodes (LED), mounted piezo-electric crystals	8541	65,850,000	71,250,000
	Machining centres, unit construction machines (single station) and multi-station transfer machines for working metal	8457	54,250,000	61,450,000
	Transmission shafts (including cam and crank) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers; flywheels and pulleys; clutches and shaft couplings	8483	47,750,000	59,850,000
	Screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter-pins, washers (including spring washers) and similar articles, of iron or steel	7318	39,200,000	49,800,000
	Compression-ignition internal combustion piston engines (diesel or semi-diesel engines)	8408	36,500,000	47,300,000
	Motor vehicles; parts and accessories, of heading no. 8701 to 8705	8708	36,950,000	47,200,000
	Machine-tools; (including presses) for working metal by forging, hammering or die-stamping, for bending, folding, straightening, flattening, shearing or punching metal	8462	34,150,000	46,000,000
	Machinery parts; used solely or principally with the machinery of heading no. 8425 to 8430	8431	31,900,000	40,950,000
	Tools, interchangeable; for hand tools, whether or not power-operated, or for machine tools (pressing, stamping,	8207	28,450,000	39,500,000

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
	punching, drilling etc), including dies for drawing or extruding metal, and rock drilling or earth boring tools			
	Alloy steel flat-rolled products, of a width 600mm or more	7225	28,000,000	35,100,000
	Iron or non-alloy steel; bars and rods, not further worked than forged, hot-rolled, hot drawn or hot-extruded, but including those twisted after rolling	7214	28,350,000	34,400,000
	Pumps; for liquids, whether or not fitted with measuring device, liquid elevators	8413	24,850,000	31,150,000
	Iron or steel (excluding cast iron); tubes, pipes and hollow profiles (not seamless), n.e.c. in chapter 73	7306	24,750,000	30,700,000
	Cloth (including endless bands), grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel	7314	24,500,000	30,000,000
	Fertilizers; mineral or chemical, potassic	3104	25,000,000	30,000,000
	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus for liquids or gases	8421	17,050,000	22,450,000
	Iron or steel; articles, n.e.c. in chapter 73	7326	13,300,000	21,000,000
	Moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals, or ores; pile drivers and extractors; snow ploughs and snow blowers	8430	15,450,000	20,600,000
	Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426 or 8427 (e.g. lifts, escalators, conveyors, teleferics)	8428	14,200,000	20,550,000
	Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps other than air conditioning machines of heading no. 8415	8418	17,400,000	19,350,000
	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves	8481	11,500,000	17,600,000
	Trailers and semi-trailers; other vehicles, not mechanically propelled; parts thereof	8716	13,500,000	16,500,000
	Engines and motors; n.e.c. (e.g. reaction engines, hydraulic power engines, pneumatic power engines)	8412	12,250,000	16,100,000
	Iron or non-alloy steel; flat-rolled products, width less than 600mm, clad, plated or coated	7212	14,000,000	16,000,000
	Machine-tools; for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron beam, ionic-beam, or plasma arc processes; water-jet cutting machines	8456	13,750,000	15,950,000
	Electric accumulators, including separators therefor; whether or not rectangular (including square)	8507	10,000,000	15,100,000
	Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan whether or not fitted with filters	8414	10,100,000	14,350,000
	Tubes, pipes and hoses, of vulcanised rubber (other than hard rubber), with or without their fittings (e.g. joints, elbows, flanges)	4009	10,750,000	13,300,000
	Lathes for removing metal	8458	10,250,000	13,150,000
	Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40	4016	7,150,000	12,850,000
	Alloy steel bars, rods, shapes and sections; hollow drill bars and rods, of alloy or non-alloy steel	7228	10,100,000	12,250,000
	Machinery and mechanical appliances; having individual functions, n.e.c. in this chapter	8479	10,400,000	12,150,000
	Electric transformers, static converters (e.g. rectifiers) and inductors	8504	9,900,000	12,050,000

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
	Bulldozers, graders, levellers, scrapers, angledozers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers, self-propelled	8429	9,900,000	11,150,000
	Parts suitable for use solely or principally with the engines of heading no. 8407 or 8408	8409	9,200,000	11,150,000
	Air conditioning machines; comprising a motor driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated	8415	10,000,000	11,000,000
	Base metal mountings, fittings and similar articles	8302	7,350,000	10,400,000
	Agricultural, horticultural, forestry, poultry-keeping, bee-keeping machinery; including germination plant fitted with mechanical or thermal equipment; poultry incubators and brooders	8436	8,950,000	10,350,000
	Mechanical appliances for projecting, dispersing or spraying liquids or powders; fire extinguishers, spray guns, steam, sand blasting machines	8424	7,950,000	10,250,000
	Compounded rubber, unvulcanised, in primary forms or in plates, sheets or strip	4005	9,100,000	10,250,000
	Boards, panels, consoles, desks, cabinets for electricity control and distribution	8537	7,000,000	10,100,000
	Fork-lift and other works trucks; fitted with lifting or handling equipment	8427	7,650,000	9,600,000
	Electric motors and generators (excluding generating sets)	8501	5,750,000	9,350,000
	Lubricating preparations and those used in oil or grease treatment of textile and similar materials; excluding preparations containing 70% or more (by weight) of petroleum or bituminous mineral oils	3403	7,750,000	8,700,000
	Structures of iron or steel and parts thereof; plates, rods, angles, shapes, sections, tubes and the like, prepared for use in structures	7308	7,500,000	8,300,000
	Tube or pipe fittings (e.g. couplings, elbows, sleeves), of iron or steel	7307	4,600,000	7,400,000
	Ball or roller bearings	8482	5,150,000	7,150,000
	Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits; for a voltage exceeding 1000 volts	8535	6,500,000	7,100,000
	Tubes, pipes and hoses and fittings thereof (for example, joints, elbows, flanges), of plastics	3917	5,000,000	7,050,000
	Fertilizers; mineral or chemical, phosphatic	3103	6,500,000	7,000,000
	Chain and parts thereof, of iron or steel	7315	4,750,000	6,600,000
	Machinery, plant (not domestic), or laboratory equipment; electrically heated or not, (excluding items in 85.14) for the treatment of materials by a process involving change of temperature; including instantaneous or non electric storage water heaters	8419	5,300,000	6,300,000
	Parts & accessories suited for use only/mainly with machines of headings 8456-8465, including work/tool holders, self-opening dieheads, dividing heads & other special attachments for the machines; tool holders for any type of tool for working in the hand	8466	3,700,000	6,300,000
	Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores in solid form, shaping, moulding machinery for solid mineral fuels	8474	4,700,000	6,050,000
	Petroleum oils and oils from bituminous minerals, not crude; preparations n.e.c, containing by weight 70% or more	2710	5,000,000	5,700,000

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
	of petroleum oils or oils from bituminous minerals; these being the basic constituents of the preparations; waste oils			
	Furnaces and ovens; industrial or laboratory, including incinerators, non-electric	8417	4,950,000	5,550,000
	Works trucks, self-propelled, (not fitted with lifting or handling equipment), for factories, warehouses etc, for short distance transport of goods, tractors used on railway station platforms; parts thereof	8709	4,500,000	5,500,000
	Milking machines and dairy machinery	8434	4,500,000	5,500,000
	Copper; bars, rods and profiles	7407	5,000,000	5,500,000
	Railway or tramway locomotives or rolling stock; parts thereof	8607	4,100,000	5,250,000
	Ignition or starting equipment; used for spark-ignition or compression-ignition internal combustion engines; generators and cut outs used in conjunction with such engines	8511	4,000,000	5,200,000
	X-ray, alpha, beta, gamma radiation apparatus: generators, control panels and desks, screens etc	9022	4,500,000	5,000,000
	Iron or non-alloy steel, angles, shapes and sections	7216	3,600,000	4,950,000
	Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors	8544	2,350,000	4,500,000
	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	7304	3,450,000	4,250,000
	Other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss	8514	2,800,000	4,150,000
	Derricks, cranes, including cable cranes, mobile lifting frames, straddle carriers and works trucks fitted with a crane	8426	3,350,000	4,050,000
	Machine-tools; (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other than lathes of heading no. 8458	8459	3,150,000	4,000,000
	Articles of plastics and articles of other materials of heading no. 3901 to 3914, n.e.c. in chapter 39	3926	1,750,000	3,950,000
	Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits, for a voltage not exceeding 1000 volts; connectors for optical fibres, optical fibre bundles or cables	8536	1,150,000	3,600,000
	Instruments and apparatus; for measuring or checking viscosity, porosity, quantities of heat, sound or light	9027	2,750,000	3,500,000
	New pneumatic tyres, of rubber	4011	2,750,000	3,500,000
	Gas, liquid or electricity supply or production meters, including calibrating meters therefor	9028	2,600,000	3,450,000
	Instruments, apparatus for measuring or checking the flow, level, pressure of liquids, gases (e.g. flow meters, heat meters etc), not instruments and apparatus of heading no. 9014, 9015, 9028 or 9032	9026	1,900,000	3,400,000
	Padlocks and locks (key, combination, electrically operated) of base metal; clasps and frames with clasps incorporating locks, of base metal, keys for any or the foregoing articles, of base metal	8301	2,200,000	3,100,000
	Springs and leaves for springs, of iron or steel	7320	2,100,000	3,050,000
	Iron or non-alloy steel; bars and rods, hot-rolled, in irregularly wound coils	7213	2,500,000	3,000,000
	Measuring or checking instruments, appliances and machines, n.e.c. or included in this chapter; profile projectors	9031	1,900,000	2,850,000

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
	Dish washing machines; machinery for cleaning, drying, filling, closing, sealing, capsuling or labelling bottles, cans, boxes, bags, etc, machinery for aerating beverages	8422	2,450,000	2,800,000
	Plastics; plates, sheets, film, foil and strip (not self-adhesive); non-cellular and not reinforced, laminated, supported or similarly combined with other materials, n.e.c. in chapter 39	3920	2,150,000	2,800,000
	Knives and cutting blades, for machines or for mechanical appliances	8208	1,600,000	2,750,000
	Bodies; (including cabs) for the motor vehicles of heading no. 8701 to 8705	8707	2,200,000	2,750,000
	Containers for compressed or liquefied gas, of iron or steel	7311	2,200,000	2,750,000
	Electric soldering, brazing, welding machines and apparatus, electric machines and apparatus for hot spraying of metals or sintered carbides	8515	1,750,000	2,550,000
	Chassis; fitted with engines, for the motor vehicles of heading no. 8701 to 8705	8706	2,000,000	2,500,000
	Machinery n.e.c. in this chapter, for the industrial preparation or manufacture of food or drink; other than machinery for extraction or preparation of animal or fixed vegetable fats or oils	8438	1,500,000	2,400,000
	Conveyor or transmission belts or belting, of vulcanised rubber	4010	1,600,000	2,400,000
	Iron or non-alloy steel; flat-rolled products, width less than 600mm, not clad, plated or coated	7211	1,700,000	2,250,000
	Iron or non-alloy steel; bars and rods, n.e.c. in chapter 72	7215	1,500,000	2,100,000
	Lamps, light fittings; including searchlights, spotlights and parts thereof, n.e.c.; illuminated signs, name-plates and the like, having permanently fixed light source and parts thereof n.e.c. or included	9405	1,350,000	2,000,000
	Copper tubes and pipes	7411	1,500,000	2,000,000
	Machines; for making up paper pulp, paper or paperboard, including cutting machines of all kinds	8441	1,500,000	2,000,000
	Electric water, space, soil heaters; electro-thermic hair-dressing apparatus; hand dryers, irons; electro-thermic appliances for domestic purposes; electro heating resistors, not of heading no. 8545	8516	1,000,000	1,900,000
	Plastics; builders' wares n.e.c. or included	3925	1,550,000	1,800,000
	Moulding boxes for metal foundry, moulding patterns, moulds for metals (excluding ingot moulds), metal carbides, glass, mineral materials, rubber or plastics	8480	1,000,000	1,700,000
	Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal; sets or assortments of gaskets and similar joints, dissimilar in composition, put up in pouches, envelopes or similar packings; mechanical seals	8484	700,000	1,600,000
	Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight testing instruments	9018	1,000,000	1,600,000
	Mechano-therapy, massage appliances; psychological aptitude testing apparatus; ozone, oxygen, aerosol therapy, artificial respiration or other therapeutic respiration apparatus	9019	1,000,000	1,500,000
	Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not	9025	700,000	1,450,000
	Tools; for working in the hand, pneumatic, hydraulic or with self-contained electric or non-electric motor	8467	1,000,000	1,400,000

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
	Regulating or controlling instruments and apparatus; automatic type	9032	650,000	1,350,000
	Electrical apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8535, 8536 and 8537	8538	550,000	1,350,000
	Ceramic goods; (e.g. retorts, crucibles, muffles, nozzles, plugs, supports cupels, tubes, pipes, sheaths, rods) excluding those of siliceous fossil meals or of similar siliceous earths	6903	950,000	1,100,000
	Weighing machines; excluding balances of a sensitivity of 5cg or better, including weight operated counting or checking machines and weights of all kinds	8423	900,000	1,000,000
	Breathing appliances and gas masks; excluding protective masks having neither mechanical parts nor replaceable filters and excluding apparatus of item no. 9019.20	9020	950,000	1,000,000
	Plastic articles for the conveyance or packing of goods; stoppers, lids, caps and other closures of plastics	3923	350,000	1,000,000
	Machines for cleaning, sorting, grading seed, grain, dried leguminous vegetables; machinery used in the milling industry for the working of cereals or dried leguminous vegetables, not farm type machinery	8437	900,000	1,000,000
	Iron or non-alloy steel; flat-rolled products, width 600mm or more, cold-rolled (cold-reduced), not clad, plated or coated	7209	800,000	850,000
	Seats (not those of heading no. 9402), whether or not convertible into beds and parts thereof	9401	800,000	850,000
	Pulley tackle and hoists other than skip hoists; winches and capstans; jacks	8425	-	800,000
	Machine-tools; for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal, sintered metal carbides or cermets by means of grinding stones, abrasives or polishing products	8460	600,000	800,000
	Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated	7312	450,000	750,000
	Iron or non-alloy steel; flat-rolled products of a width of 600mm or more, hot-rolled, not clad, plated or coated	7208	500,000	700,000
	Electrical machines and apparatus; having individual functions, not specified or included elsewhere in this chapter	8543	450,000	700,000
	Machinery parts; not containing electrical connectors, insulators, coils, contacts or other electrical features, n.e.c. in this chapter	8487	550,000	700,000
	Machine-tools; (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard plastics or rubber or similar hard materials	8465	500,000	700,000
	Gymnastics, athletics, other sports (including table tennis) or outdoor games equipment, n.e.c. in this chapter, swimming pools and paddling pools	9506	650,000	700,000
	Tubing; flexible, with or without fittings, of base metal	8307	550,000	700,000
	Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, not laser diodes; other optical appliances and instruments n.e.c. in this chapter	9013	500,000	650,000
	Tools, hand; saws and blades for saws of all kinds (including slitting, slotting or toothless blades)	8202	350,000	600,000
	Electric generating sets and rotary converters	8502	450,000	550,000
	Cermets; articles thereof, including waste and scrap	8113	400,000	550,000
	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls	3919	100,000	550,000

Value Chain	Product	Product Code	Imports, UAH	
			LB	UB
	Plastic plates, sheets, film, foil and strip n.e.c. in chapter 39	3921	400,000	550,000
	Trunks; suit, camera, jewellery, cutlery cases; travel, tool, similar bags; wholly or mainly covered by leather, composition leather, plastic sheeting, textile materials, vulcanised fibre, paperboard	4202	150,000	500,000
	Radar apparatus, radio navigational aid apparatus and radio remote control apparatus	8526	350,000	500,000
	Registers, account books, diaries and similar; albums for samples or collections, of paper or paperboard	4820	450,000	500,000
	Paper, paperboard, cellulose wadding and webs of cellulose fibres; cut to size or shape, articles of paper pulp, paper and paper-board, cellulose wadding or webs of cellulose fibres, n.e.c. in chapter 48	4823	250,000	500,000
	Prepared glues and other prepared adhesives, n.e.c. or included; products suitable for use as glues or adhesives, put up for retail sale as glues or adhesives, not exceeding 1kg net weight	3506	250,000	500,000
	Electro-magnets; permanent magnets, intended permanent magnets; electro-magnetic, permanent magnet chucks, clamps, similar; electromagnetic couplings, clutches, brakes; electro-magnetic lifting heads	8505	-	500,000
	Other		345,350,016	420,200,000

Source: YouControl, Ruslana, own calculations

Appendix D. Promising commodities to export from Canada to Ukraine

Table D1. 181 commodities with significant trade potential (over USD 50,000) to Ukraine

Product code	Product	Export 2018	Trade Potential 2018
870323	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 1500cc but not exceeding 3000cc	2 803 394	7 832 978
870322	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 1000cc but not exceeding 1500cc	43 108	5 832 216
880240	Aeroplanes and other aircraft; of an unladen weight exceeding 15,000kg	-	2 963 424
870829	Vehicles; parts and accessories, of bodies, other than safety seat belts	69 926	2 240 300
870422	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), for transport of goods, (of a g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes), n.e.c. in item no 8704.1	-	1 494 660
271112	Petroleum gases and other gaseous hydrocarbons; liquefied, propane	-	1 426 123
390120	Ethylene polymers; in primary forms, polyethylene having a specific gravity of 0.94 or more	-	1 388 243
870431	Vehicles; spark-ignition internal combustion piston engine, for transport of goods, (of a g.v.w. not exceeding 5 tonnes), n.e.c. in item no 8704.1	7 621	1 382 079
840734	Engines; reciprocating piston engines, of a kind used for the propulsion of vehicles of chapter 87, of a cylinder capacity exceeding 1000cc	-	1 182 262
870210	Vehicles; public transport type (carries 10 or more passengers), compression-ignition internal combustion piston engine (diesel or semi-diesel)	3 083	1 033 961
870423	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), for transport of goods, (of a g.v.w. exceeding 20 tonnes), n.e.c. in item no 8704.1	-	984 996
20130	Meat; of bovine animals, boneless cuts, fresh or chilled	-	966 822
841191	Turbines; parts of turbo-jets and turbo-propellers	-	963 172
870324	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 3000cc	1 172 553	944 805
401120	Rubber; new pneumatic tyres, of a kind used on buses or lorries	-	910 570
470321	Wood pulp; chemical wood pulp, soda or sulphate, (other than dissolving grades), semi-bleached or bleached, of coniferous wood	-	864 592
841199	Turbines; parts of gas turbines (excluding turbo-jets and turbo-propellers)	-	860 543
730890	Iron or steel; structures and parts thereof, n.e.c. in heading 7308	366	819 334
841112	Turbo-jets; of a thrust exceeding 25kN	-	814 150
390190	Ethylene polymers; in primary forms, n.e.c. in heading no. 3901	-	709 469
271113	Petroleum gases and other gaseous hydrocarbons; liquefied, butanes	-	708 391
870880	Vehicle parts; suspension systems and parts thereof (including shock-absorbers)	28 127	704 777
760120	Aluminium; unwrought, alloys	-	586 575
30214	Fish; fresh or chilled, Atlantic salmon (<i>Salmo salar</i>) and Danube salmon (<i>Hucho hucho</i>), excluding fillets, livers, roes, and other fish meat of heading 0304	-	550 260
190590	Food preparations; bakers' wares n.e.c. in heading no. 1605, whether or not containing cocoa; communion wafers, empty cachets suitable for pharmaceutical use, sealing wafers, rice papers and similar products	102	497 266
300439	Medicaments; containing hormones (but not insulin), adrenal cortex hormones or antibiotics, for therapeutic or prophylactic uses, packaged for retail sale	-	451 579
740811	Copper; wire, of refined copper, of which the maximum cross-sectional dimension exceeds 6mm	-	444 172
842720	Fork-lift and other works trucks; fitted with lifting or handling equipment, self-propelled by other than electric motor	-	435 086
841391	Pumps; parts thereof	137 790	410 977

Product code	Product	Export 2018	Trade Potential 2018
392010	Plastics; plates, sheets, film, foil and strip (not self-adhesive), of polymers of ethylene, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	109 878	404 132
210390	Sauces and preparations therefor; mixed condiments and mixed seasonings	-	401 001
848071	Moulds; for rubber or plastics, injection or compression types	-	400 582
870893	Vehicle parts; clutches and parts thereof	4 199	393 278
830230	Mountings, fittings and similar articles; for motor vehicles, of base metal	493	338 294
848310	Transmission shafts (including cam shafts and crank shafts) and cranks	68 742	337 955
842710	Fork-lift and other works trucks; fitted with lifting or handling equipment, self-propelled by electric motor	12 954	326 253
20319	Meat; of swine, n.e.c. in item no. 0203.1, fresh or chilled	-	326 201
842890	Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426, 8427 or 8428	11 784	316 383
300420	Medicaments; containing antibiotics (other than penicillins, streptomycins or their derivatives), for therapeutic or prophylactic uses, packaged for retail sale	-	308 421
740400	Copper; waste and scrap	-	308 026
820730	Tools, interchangeable; (for machine or hand tools, whether or not power-operated), tools for pressing, stamping or punching	4 464	305 908
392321	Ethylene polymers; sacks and bags (including cones), for the conveyance or packing of goods	-	287 173
880230	Aeroplanes and other aircraft; of an unladen weight exceeding 2000kg but not exceeding 15,000kg	-	286 272
870590	Vehicles; break-down lorries, road-sweepers, spraying lorries, mobile workshops, mobile radiological units, and other special purpose vehicles n.e.c. in heading no. 8705	-	285 779
940540	Lamps and light fittings; electric, n.e.c. in heading no. 9405	-	285 252
480255	Uncoated paper and paperboard (not 4801 or 4803); printing, writing or graphic, 10% or less by weight of mechanical or chemi-mechanical processed fibre, weighing 40g/m ² to 150g/m ² , in rolls	-	282 696
392350	Plastics; stoppers, lids, caps and other closures, for the conveyance or packing of goods	289	268 448
722830	Steel, alloy; bars and rods, hot-rolled, hot-drawn or extruded	-	265 410
440320	Wood; coniferous, in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated	-	260 048
630900	Clothing; worn, and other worn articles	101 412	253 673
392390	Plastics; articles for the conveyance or packing of goods n.e.c. in heading no. 3923	-	243 626
160232	Meat preparations; of the poultry of heading no. 0105, (i.e. of fowls of the species Gallus domesticus)	-	239 640
870810	Vehicles; bumpers and parts thereof, for the vehicles of heading no. 8701 to 8705	17 247	238 929
721012	Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with tin, thickness of less than 0.5mm	-	228 714
940510	Chandeliers and other electric ceiling or wall light fittings; excluding those used for lighting public open spaces or thoroughfares	24 168	228 193
480300	Tissue, towel, napkin stock or similar; for household or sanitary use, cellulose, wadding webs of cellulose fibres, in rolls exceeding 36cm in width or rectangular sheets with one side more than 36cm in unfolded state	2 593	210 299
330590	Hair preparations; n.e.c. in heading no. 3305	68 809	207 794
90121	Coffee; roasted, not decaffeinated	-	206 960
271320	Petroleum bitumen; obtained from bituminous minerals	-	197 694
481920	Paper and paperboard; folding cartons, boxes and cases, of non-corrugated paper or paperboard	-	192 419
841582	Air conditioning machines; containing a motor driven fan, other than window or wall types, incorporating a refrigerating unit	-	190 069
880320	Aircraft and spacecraft; under-carriages and parts thereof	-	175 028
330410	Cosmetic and toilet preparations; lip make-up	-	174 498

Product code	Product	Export 2018	Trade Potential 2018
200410	Vegetable preparations; potatoes, prepared or preserved otherwise than by vinegar or acetic acid, frozen	-	171 974
940320	Furniture; metal, other than for office use	18 964	170 947
330720	Perfumery, cosmetic or toilet preparations; personal deodorants and antiperspirants	-	170 113
81040	Fruit, edible; cranberries, bilberries and other fruits of the genus vaccinium, fresh	-	169 527
903149	Optical instruments and appliances; for measuring or checking, n.e.c. in chapter 90	9 534	168 107
290250	Cyclic hydrocarbons; styrene	-	167 550
261390	Molybdenum ores and concentrates; other than roasted	-	167 464
722530	Steel, alloy; flat-rolled, width 600mm or more, hot-rolled, in coils	-	163 802
841290	Engines; parts, for engines and motors of heading no. 8412	23 746	161 724
70200	Vegetables; tomatoes, fresh or chilled	-	161 550
841981	Machinery, plant and equipment; for making hot drinks, for cooking or heating food	-	160 938
720827	Iron or non-alloy steel; in coils, without patterns in relief, flat-rolled, of a width 600mm or more, hot-rolled, pickled, of a thickness of less than 3mm	-	160 024
853190	Signalling apparatus; parts of the electric, sound or visual apparatus of heading no. 8531	-	159 863
491199	Printed matter; n.e.c. in heading no. 4911	1 048	156 069
761090	Aluminium; structures (excluding prefabricated buildings of heading no. 9406) and parts of structures, n.e.c. in heading no. 7610, plates, rods, profiles, tubes and the like	-	156 051
20312	Meat; of swine, hams, shoulders and cuts thereof, with bone in, fresh or chilled	-	154 644
852910	Reception and transmission apparatus; aerials and aerial reflectors of all kinds and parts suitable for use therewith	26 000	154 281
720421	Ferrous waste and scrap; of stainless steel	-	152 837
870790	Vehicles; bodies (including cabs) for the motor vehicles of heading no. 8701, 8702, 8704 or 8705	-	149 609
121490	Forage products including swedes, mangolds, fodder roots, hay, sainfoin, clover, forage kale, lupines, vetches etc., pelletised or otherwise	-	148 644
880212	Helicopters; of an unladen weight exceeding 2000kg	-	146 233
847710	Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials	-	144 266
400510	Rubber; unvulcanised, compounded with carbon black or silica, in primary forms or in plates, sheets or strip	-	143 776
190410	Food preparations; obtained by the swelling or roasting of cereals or cereal products	-	137 512
480421	Kraft paper and paperboard; sack kraft paper, uncoated, unbleached, in rolls or sheets, other than that of heading no. 4802 or 4803	-	136 759
310420	Fertilizers, mineral or chemical; potassic, potassium chloride	-	136 069
200819	Nuts and other seeds; whether or not containing added sugar, other sweetening matter or spirit (excluding ground-nuts except in mixtures)	-	133 865
480100	Newsprint; made of fibres by a chemi-mechanical process or of a weight, per m ² , of more than 57g but not more than 65g, in rolls or sheets	-	130 861
271119	Petroleum gases and other gaseous hydrocarbons; liquefied, n.e.c. in heading no. 2711	-	129 468
730900	Reservoirs, tanks, vats and similar containers; for any material (excluding compressed or liquefied gas), of iron or steel, capacity exceeding 300l, whether or not lined or heat insulated	-	126 415
330420	Cosmetic and toilet preparations; eye make-up	-	126 408
441239	Plywood; as specified in Subheading Note 2 to this Chapter, consisting only of sheets of wood (not bamboo), each ply 6mm or thinner, not containing an outer ply of non-coniferous or tropical wood	-	125 700
410150	Hides and skins; raw, whole, of bovine or equine animals, of a weight per skin exceeding 16 kg	-	124 860

Product code	Product	Export 2018	Trade Potential 2018
720826	Iron or non-alloy steel; in coils, without patterns in relief, flat-rolled, of a width 600mm or more, hot-rolled, pickled, of a thickness of 3mm or more but less than 4.75mm	-	124 490
481141	Paper and paperboard; self-adhesive, in rolls or sheets, other than goods of heading no. 4803, 4809, or 4810	-	120 479
830120	Locks; of a kind used for motor vehicles (key, combination or electrically operated), of base metal	98	119 714
760720	Aluminium; foil, backed with paper, paperboard, plastics or similar backing materials, of a thickness (excluding any backing) not exceeding 0.2mm	21	119 455
848350	Pulleys and flywheels, including pulley blocks	104 840	115 452
210410	Soups and broths and preparations therefor	5 631	115 003
730820	Iron or steel; structures and parts thereof, towers and lattice masts	-	112 868
721050	Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with chromium oxides or with chromium and chromium oxides	-	112 763
482390	Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823	49	112 313
890399	Yachts and other vessels; for pleasure or sports, rowing boats and canoes, n.e.c. in heading no. 8903, other than inflatable	-	111 166
30441	Fish fillets; fresh or chilled, salmon, Pacific (<i>Oncorhynchus nerka</i> , <i>Oncorhynchus gorbuscha</i> , <i>Oncorhynchus keta</i> , <i>Oncorhynchus tshawytscha</i> , <i>Oncorhynchus kisutch</i> , <i>Oncorhynchus masou</i> and <i>Oncorhynchus rhodurus</i>), Atlantic (<i>Salmo salar</i>), Danube (<i>Hucho hucho</i>)	-	107 003
392049	Plastics; polymers of vinyl chloride, containing by weight, less than 6% of plasticisers; plates, sheets, film, foil and strip (not self-adhesive), non-cellular and not reinforced, laminated, supported or similarly combined with other materials	-	105 758
390311	Styrene polymers; expansible polystyrene, in primary forms	-	104 940
847790	Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90	83 785	103 795
381700	Mixed alkylbenzenes and mixed alkyl-naphthalenes, other than those of heading no. 2707 or 2902	-	102 532
390130	Ethylene polymers; in primary forms, ethylene-vinyl acetate copolymers	-	102 030
70960	Vegetables; fruits of the genus capsicum or of the genus pimenta, fresh or chilled	-	100 141
320649	Colouring matter; other preparations n.e.c. in item no. 3206.4	-	98 735
150790	Vegetable oils; soya-bean oil and its fractions, other than crude, whether or not refined, but not chemically modified	-	97 965
830210	Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	-	97 255
320990	Paints and varnishes; (based on polymers other than acrylic or vinyl), dispersed or dissolved in an aqueous medium	-	96 616
940340	Furniture; wooden, for kitchen use	-	95 557
190120	Food preparations; mixes and doughs for the preparation of bread, pastry, cakes, biscuits and other bakers' wares	-	94 529
70190	Vegetables; potatoes (other than seed), fresh or chilled	-	94 338
843120	Machinery; parts of the machinery of heading no. 8427	1 258	93 391
901580	Surveying equipment; articles n.e.c. in heading no. 9015, including hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances (excluding compasses)	56 010	92 413
150210	Tallow; other than those of heading 1503	-	92 335
940290	Furniture; for medical, surgical, veterinary use (e.g. operating tables, examination tables, hospital beds with mechanical fittings) and parts thereof	1 543	91 435
470311	Wood pulp; chemical wood pulp, soda or sulphate, (other than dissolving grades), unbleached, of coniferous wood	-	90 990
843141	Machinery parts; buckets, shovels, grabs and grips, for the machinery of heading no. 8426 and 8430	-	90 138
310230	Fertilizers, mineral or chemical; nitrogenous, ammonium nitrate, whether or not in aqueous solution	-	90 021
440799	Wood; sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, thicker than 6mm, n.e.c. in heading no. 4407	-	89 925

Product code	Product	Export 2018	Trade Potential 2018
950699	Equipment for outdoor games and recreation n.e.c. in heading no. 9506	943	88 149
902300	Instruments, apparatus and models; designed for demonstrational purposes (in education or exhibitions), unsuitable for other uses	335	87 812
180620	Chocolate & other food preparations containing cocoa; in blocks, slabs or bars weighing more than 2kg or in liquid, paste, powder, granular or other bulk form in containers or immediate packings, content exceeding 2kg	-	87 734
320810	Paints and varnishes; based on polyesters, dispersed or dissolved in a non-aqueous medium	-	86 338
481820	Paper articles; handkerchiefs, cleansing or facial tissues and towels	-	84 529
851521	Welding machines and apparatus; for resistance welding of metal, fully or partly automatic, whether or not capable of cutting	-	82 758
590310	Textile fabrics; impregnated, coated, covered or laminated with poly(vinyl chloride)	-	82 738
262099	Slag, ash and residues; (not from the manufacture of iron or steel), containing mainly metals or their compounds, n.e.c. in heading no. 2620	-	81 076
710691	Metals; silver, unwrought, (but not powder)	-	79 860
380991	Finishing agents and dye carriers; to accelerate dyeing or fixing of dye-stuffs, other products and preparations, used in the textile industry (excluding those with a basis of amylaceous substances)	-	79 680
620193	Anoraks (including ski-jackets), wind-cheaters, wind-jackets and similar articles; men's or boys', of man-made fibres, other than those of heading no. 6203 (not knitted or crocheted)	4 468	77 169
901910	Mechano-therapy appliances; massage apparatus and psychological aptitude-testing apparatus	3	76 868
340130	Organic surface-active products and preparations for washing the skin, in the form of liquid or cream and put up for retail sale, whether or not containing soap	3 714	75 999
580632	Fabrics, narrow woven fabrics, n.e.c. in heading no. 5806, of man-made fibres (excluding goods of heading no. 5807)	-	75 744
940599	Lamps and light fittings; parts thereof, of materials other than glass or plastics	-	75 328
730830	Iron or steel; structures and parts thereof, doors, windows and their frames and thresholds for doors	-	75 273
281410	Ammonia; anhydrous	-	74 975
480261	Uncoated paper and paperboard (not 4801 or 4803); over 10% by weight of mechanical or chemi-mechanical processed fibre, in rolls	-	74 849
330491	Cosmetic and toilet preparations; powders, whether or not compressed (excluding lip, eye, manicure or pedicure preparations)	-	74 315
250300	Sulphur of all kinds; other than sublimed, precipitated and colloidal sulphur	-	74 054
842121	Machinery; for filtering or purifying water	244 768	73 405
281700	Zinc; oxide and peroxide	-	71 188
200899	Fruit, nuts and other edible parts of plants; prepared or preserved, whether or not containing added sugar, other sweetening matter or spirit, n.e.c. in heading no. 2008	9 602	68 882
810520	Cobalt; mattes and other intermediate products of cobalt metallurgy, unwrought cobalt, powders	-	68 086
830249	Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	17 048	67 515
848360	Clutches and shaft couplings (including universal joints)	22 954	66 756
160249	Meat preparations; of swine, meat or meat offal (including mixtures), prepared or preserved, n.e.c. in heading no. 1602	-	66 694
732010	Iron or steel; leaf-springs and leaves therefor	-	66 629
901590	Surveying equipment; parts and accessories for articles of heading no. 9015	2 712	64 781
841583	Air conditioning machines; containing a motor driven fan, other than window or wall types, not incorporating a refrigerating unit	-	63 812
20649	Offal, edible; of swine, (other than livers), frozen	-	63 083
870130	Tractors; track-laying	-	62 884

Product code	Product	Export 2018	Trade Potential 2018
761010	Aluminium; structures (excluding prefabricated buildings of heading no. 9406) and parts of structures, doors, windows and their frames and thresholds for doors	-	61 766
850421	Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA	-	61 449
848079	Moulds; for rubber or plastics, other than injection or compression types	-	61 240
290512	Alcohols; saturated monohydric, propan-1-ol (propyl alcohol) and propan-2-ol (isopropyl alcohol)	-	60 470
843840	Machinery; industrial, brewery machinery	-	59 797
620293	Anoraks (including ski-jackets), wind-cheaters, wind-jackets and similar articles; women's or girls', of man-made fibres, other than those of heading no. 6204 (not knitted or crocheted)	3 220	59 464
300630	Pharmaceutical goods; opacifying preparations for x-ray examinations, diagnostic reagents designed to be administered to the patient	-	58 474
290531	Alcohols; acyclic, diols; ethylene glycol (ethanediol)	-	58 437
710692	Metals; silver, semi-manufactured	-	57 693
350300	Gelatin (including gelatin in rectangular sheets, whether or not surface-worked or coloured) and gelatin derivatives; isinglass; other glues of animal origin, excluding casein glues of heading no. 3501	6 986	57 568
720429	Ferrous waste and scrap; of alloy steel (excluding stainless)	-	55 055
880529	Ground flying trainers and parts thereof; other than air combat simulators and parts thereof	-	53 609
681099	Cement, concrete or artificial stone; articles (other than prefabricated structural components for building or civil engineering), whether or not reinforced, n.e.c. in heading no. 6810	-	53 293
871680	Vehicles; n.e.c. in heading no. 8716	30	53 076
848250	Bearings; cylindrical roller bearings n.e.c. in heading no. 8482	-	52 698
871631	Tanker trailers and tanker semi-trailers	-	52 456
701939	Glass fibres; webs, mattresses, boards and similar non-woven products excluding mats and thin sheets	9	52 360
391690	Plastics; monofilament, of plastics n.e.c. in heading no. 3916, cross-sectional dimension exceeds 1mm, rods, sticks and profile shapes, whether or not surface-worked but not otherwise worked	-	52 255
280700	Sulphuric acid; oleum	-	51 750
750890	Nickel; articles thereof n.e.c. in item no. 7508.1	-	51 499
200811	Nuts; ground-nuts, whether or not containing added sugar, other sweetening matter or spirit	-	50 248

Source: Own Calculations based on UN Comtrade <https://kse.ua/kse-research/canada-ukraine-free-trade-agreement-patterns-and-tendencies/>

Table D2. Promising goods for intensifying Canadian exports to Ukraine through VCs in DO/LO (HS 6 level).

Value Chain	Product	Product code	VC Import, HS4, UAH	
			LB	UB
Agricultural machinery	Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823	482390	250,000	300,000
	Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA	850421	200,000	250,000
	Engines; parts, for engines and motors of heading no. 8412	841290	100,000	150,000
	Mountings, fittings and similar articles; for motor vehicles, of base metal	830230	-	100,000
	Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	830210	-	100,000
	Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830249	-	100,000
	Iron or steel; leaf-springs and leaves therefor	732010	-	100,000
	Machinery; for filtering or purifying water	842121	-	100,000
Socks	Mountings, fittings and similar articles; for motor vehicles, of base metal	830230	-	100,000
	Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	830210	-	100,000
	Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830249	-	100,000
	Transmission shafts (including cam shafts and crank shafts) and cranks	848310	-	100,000
	Pulleys and flywheels, including pulley blocks	848350	-	100,000
	Clutches and shaft couplings (including universal joints)	848360	-	100,000
Packaging and Cardboard	Kraft paper and paperboard; sack kraft paper, uncoated, unbleached, in rolls or sheets, other than that of heading no. 4802 or 4803	480421	20,000,000	25,000,000
	Finishing agents and dye carriers; to accelerate dyeing or fixing of dye-stuffs, other products and preparations, used in the textile industry (excluding those with a basis of amylaceous substances)	380991	10,000,000	15,000,000
	Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials	847710	1,500,000	2,000,000
	Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90	847790	1,500,000	2,000,000
	Paper and paperboard; self-adhesive, in rolls or sheets, other than goods of heading no. 4803, 4809, or 4810	481141	-	100,000
Plastics	Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials	847710	1,500,000	2,000,000
	Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90	847790	1,500,000	2,000,000
	Welding machines and apparatus; for resistance welding of metal, fully or partly automatic, whether or not capable of cutting	851521	-	100,000
	Transmission shafts (including cam shafts and crank shafts) and cranks	848310	-	100,000
	Pulleys and flywheels, including pulley blocks	848350	-	100,000
	Clutches and shaft couplings (including universal joints)	848360	-	100,000

Source: YouControl, Ruslana, own calculations

Table D3. Promising goods for intensifying Canadian exports to Ukraine through Aerospace industry and Agricultural machinery VCs (HS 6 level).

Value Chain	Product	Product code	VC Import HS4, UAH	
			LB	UB
Aerospace industry	Turbo-jets; of a thrust exceeding 25kN	841112	200,700,000	250,950,000
	Turbines; parts of turbo-jets and turbo-propellers	841191	200,700,000	250,950,000
	Turbines; parts of gas turbines (excluding turbo-jets and turbo-propellers)	841199	200,700,000	250,950,000
	Nickel; articles thereof n.e.c. in item no. 7508.1	750890	200,000,000	250,100,000
	Aircraft and spacecraft; under-carriages and parts thereof	880320	42,250,000	48,100,000
	Optical instruments and appliances; for measuring or checking, n.e.c. in chapter 90	903149	26,000,000	31,600,000
	Reception and transmission apparatus; aerials and aerial reflectors of all kinds and parts suitable for use therewith	852910	3,000,000	3,700,000
	Vehicles; bumpers and parts thereof, for the vehicles of heading no. 8701 to 8705	870810	2,500,000	3,000,000
	Vehicles; parts and accessories, of bodies, other than safety seat belts	870829	2,500,000	3,000,000
	Vehicle parts; suspension systems and parts thereof (including shock-absorbers)	870880	2,500,000	3,000,000
	Vehicle parts; clutches and parts thereof	870893	2,500,000	3,000,000
	Bearings; cylindrical roller bearings n.e.c. in heading no. 8482	848250	2,200,000	2,750,000
	Engines; reciprocating piston engines, of a kind used for the propulsion of vehicles of chapter 87, of a cylinder capacity exceeding 1000cc	840734	1,500,000	2,200,000
	Surveying equipment; articles n.e.c. in heading no. 9015, including hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances (excluding compasses)	901580	1,500,000	2,000,000
	Surveying equipment; parts and accessories for articles of heading no. 9015	901590	1,500,000	2,000,000
	Machinery; for filtering or purifying water	842121	1,000,000	1,700,000
	Tractors; track-laying	870130	1,000,000	1,500,000
	Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	830210	650,000	800,000
	Mountings, fittings and similar articles; for motor vehicles, of base metal	830230	650,000	800,000
	Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830249	650,000	800,000
	Paints and varnishes; based on polyesters, dispersed or dissolved in a non-aqueous medium	320810	600,000	650,000
Agricultural machinery	Tractors; track-laying	870130	234,000,000	340,100,000
	Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with tin, thickness of less than 0.5mm	721012	178,500,000	234,600,000
	Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with chromium oxides or with chromium and chromium oxides	721050	178,500,000	234,600,000
	Transmission shafts (including cam shafts and crank shafts) and cranks	848310	47,750,000	59,850,000
	Pulleys and flywheels, including pulley blocks	848350	47,750,000	59,850,000
	Clutches and shaft couplings (including universal joints)	848360	47,750,000	59,850,000
	Vehicles; bumpers and parts thereof, for the vehicles of heading no. 8701 to 8705	870810	36,950,000	47,200,000
	Vehicles; parts and accessories, of bodies, other than safety seat belts	870829	36,950,000	47,200,000
	Vehicle parts; suspension systems and parts thereof (including shock-absorbers)	870880	36,950,000	47,200,000
	Vehicle parts; clutches and parts thereof	870893	36,950,000	47,200,000
	Machinery; parts of the machinery of heading no. 8427	843120	31,900,000	40,950,000

Machinery parts; buckets, shovels, grabs and grips, for the machinery of heading no. 8426 and 8430	843141	31,900,000	40,950,000
Tools, interchangeable; (for machine or hand tools, whether or not power-operated), tools for pressing, stamping or punching	820730	28,450,000	39,500,000
Steel, alloy; flat-rolled, width 600mm or more, hot-rolled, in coils	722530	28,000,000	35,100,000
Pumps; parts thereof	841391	24,850,000	31,150,000
Fertilizers, mineral or chemical; potassic, potassium chloride	310420	25,000,000	30,000,000
Machinery; for filtering or purifying water	842121	17,050,000	22,450,000
Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426, 8427 or 8428	842890	14,200,000	20,550,000
Tanker trailers and tanker semi-trailers	871631	13,500,000	16,500,000
Vehicles; n.e.c. in heading no. 8716	871680	13,500,000	16,500,000
Engines; parts, for engines and motors of heading no. 8412	841290	12,250,000	16,100,000
Steel, alloy; bars and rods, hot-rolled, hot-drawn or extruded	722830	10,100,000	12,250,000
Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA	850421	9,900,000	12,050,000
Air conditioning machines; containing a motor driven fan, other than window or wall types, incorporating a refrigerating unit	841582	10,000,000	11,000,000
Air conditioning machines; containing a motor driven fan, other than window or wall types, not incorporating a refrigerating unit	841583	10,000,000	11,000,000
Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	830210	7,350,000	10,400,000
Mountings, fittings and similar articles; for motor vehicles, of base metal	830230	7,350,000	10,400,000
Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830249	7,350,000	10,400,000
Rubber; unvulcanised, compounded with carbon black or silica, in primary forms or in plates, sheets or strip	400510	9,100,000	10,250,000
Fork-lift and other works trucks; fitted with lifting or handling equipment, self-propelled by electric motor	842710	7,650,000	9,600,000
Fork-lift and other works trucks; fitted with lifting or handling equipment, self-propelled by other than electric motor	842720	7,650,000	9,600,000
Iron or steel; structures and parts thereof, towers and lattice masts	730820	7,500,000	8,300,000
Iron or steel; structures and parts thereof, doors, windows and their frames and thresholds for doors	730830	7,500,000	8,300,000
Iron or steel; structures and parts thereof, n.e.c. in heading 7308	730890	7,500,000	8,300,000
Bearings; cylindrical roller bearings n.e.c. in heading no. 8482	848250	5,150,000	7,150,000
Machinery, plant and equipment; for making hot drinks, for cooking or heating food	841981	5,300,000	6,300,000
Rubber; new pneumatic tyres, of a kind used on buses or lorries	401120	2,750,000	3,500,000
Optical instruments and appliances; for measuring or checking, n.e.c. in chapter 90	903149	1,900,000	2,850,000
Locks; of a kind used for motor vehicles (key, combination or electrically operated), of base metal	830120	2,200,000	3,100,000
Iron or steel; leaf-springs and leaves therefor	732010	2,100,000	3,050,000
Plastics; plates, sheets, film, foil and strip (not self-adhesive), of polymers of ethylene, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	392010	2,150,000	2,800,000
Plastics; polymers of vinyl chloride, containing by weight, less than 6% of plasticisers; plates, sheets, film, foil and strip (not self-adhesive), non-cellular and not reinforced, laminated, supported or similarly combined with other materials	392049	2,150,000	2,800,000
Vehicles; bodies (including cabs) for the motor vehicles of heading no. 8701, 8702, 8704 or 8705	870790	2,200,000	2,750,000
Welding machines and apparatus; for resistance welding of metal, fully or partly automatic, whether or not capable of cutting	851521	1,750,000	2,550,000
Machinery; industrial, brewery machinery	843840	1,500,000	2,400,000
Chandeliers and other electric ceiling or wall light fittings; excluding those used for lighting public open spaces or thoroughfares	940510	1,350,000	2,000,000
Moulds; for rubber or plastics, injection or compression types	848071	1,000,000	1,700,000

Moulds; for rubber or plastics, other than injection or compression types	848079	1,000,000	1,700,000
Mechano-therapy appliances; massage apparatus and psychological aptitude-testing apparatus	901910	1,000,000	1,500,000
Ethylene polymers; sacks and bags (including cones), for the conveyance or packing of goods	392321	350,000	1,000,000
Plastics; stoppers, lids, caps and other closures, for the conveyance or packing of goods	392350	350,000	1,000,000
Iron or non-alloy steel; in coils, without patterns in relief, flat-rolled, of a width 600mm or more, hot-rolled, pickled, of a thickness of 3mm or more but less than 4.75mm	720826	500,000	700,000
Iron or non-alloy steel; in coils, without patterns in relief, flat-rolled, of a width 600mm or more, hot-rolled, pickled, of a thickness of less than 3mm	720827	500,000	700,000
Equipment for outdoor games and recreation n.e.c. in heading no. 9506	950699	650,000	700,000
Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls	3919	100,000	550,000
Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823	482390	250,000	500,000

Source: YouControl, Ruslana, own calculations

Appendix E. Potential importers of Canadian commodities

Table E1. Companies-importers of promising commodities in DO/LO.

Value Chain	Product	Product code	Importer	
			Name	Code
Agricultural machinery	Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823	482390	EMCC LLC	41587616
	Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA	850421	TERMO TEKHNO UKRAYINA LLC	35580430
	Engines; parts, for engines and motors of heading no. 8412	841290	"ZAVOD REMMASH" LLC	35841616
	Mountings, fittings and similar articles; for motor vehicles, of base metal - Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal - Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830230 - 830210 - 830249	"ZAVOD REMMASH" LLC	35841616
			"RUBIZHANSKA PANCHISHNA MANUFAKTURA" LLC	37218326
	Iron or steel; leaf-springs and leaves therefor	732010	"ZAVOD REMMASH" LLC	35841616
	Machinery; for filtering or purifying water	842121	"ZAVOD REMMASH" LLC	35841616
Socks	Mountings, fittings and similar articles; for motor vehicles, of base metal - Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal - Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830230 - 830210 - 830249	"RUBIZHANSKA PANCHISHNA MANUFAKTURA" LLC	37218326
	Transmission shafts (including cam shafts and crank shafts) and cranks - Pulleys and flywheels, including pulley blocks - Clutches and shaft couplings (including universal joints)	848310 - 848350 - 848360	"RUBIZHANSKA PANCHISHNA MANUFAKTURA" LLC	37218326
Packaging and Cardboard	Kraft paper and paperboard; sack kraft paper, uncoated, unbleached, in rolls or sheets, other than that of heading no. 4802 or 4803	480421	"RUBEZHNOYE CARDBOARD PACKAGE MILL" PJSK	01882551
	Finishing agents and dye carriers; to accelerate dyeing or fixing of dye-stuffs, other products and preparations, used in the textile industry (excluding those with a basis of amylaceous substances)	380991	"RUBEZHNOYE CARDBOARD PACKAGE MILL" PJSK	01882551
	Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials - Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90	847710 - 847790	"SIEVIERODONETSK A-PLAST" LLC	41045226
			"INTERPLAST" LLC	30997968
	Paper and paperboard; self-adhesive, in rolls or sheets, other than goods of heading no. 4803, 4809, or 4810	481141	RUBEZH-VH LLC	36518116
Plastics	Machinery; injection-moulding machines, for working rubber or plastics or for the	847710 - 847790	"SIEVIERODONETSK A-PLAST" LLC	41045226

	manufacture of products from these materials - Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90		"INTERPLAST" LLC	3099796 8
	Welding machines and apparatus; for resistance welding of metal, fully or partly automatic, whether or not capable of cutting	851521	"RUBIZHANSKYI TRUBNIY ZAVOD" LLC	3292646 6
	Transmission shafts (including cam shafts and crank shafts) and cranks - Pulleys and flywheels, including pulley blocks - Clutches and shaft couplings (including universal joints)	848310 - 848350 - 848360	"INTERPLAST" LLC	3099796 8
			"RUBIZHANSKA PANCHISHNA MANUFATURA" LLC	3721832 6

Source: YouControl, Ruslana, own calculations

Table E2. Companies-importers of Aerospace and Agricultural machinery VCs of promising commodities at national level.

Value Chain	Product	Product code	Importer	
			Name	Code
Aerospace industry	Turbo-jets; of a thrust exceeding 25kN - Turbines; parts of turbo-jets and turbo-propellers - Turbines; parts of gas turbines (excluding turbo-jets and turbo-propellers)	841112 - 841191 -841199	AT "MOTOR SICH"	14307794
			"FED" JSC	14315552
	Nickel; articles thereof n.e.c. in item no. 7508.1	750890	AT "MOTOR SICH"	14307794
	Aircraft and spacecraft; under-carriages and parts thereof	880320	AT "MOTOR SICH"	14307794
			"AEROPRAKT" LLC	23708049
			CHARZ" SOE	08305644
	Optical instruments and appliances; for measuring or checking, n.e.c. in chapter 90	903149	AT "MOTOR SICH"	14307794
			"FED" SOE	14315552
	Reception and transmission apparatus; aerials and aerial reflectors of all kinds and parts suitable for use therewith	852910	"PLANT 410 CA" SOE	01128297
			"VIK "DEVIRO" LLC	40006469
	Vehicles; bumpers and parts thereof, for the vehicles of heading no. 8701 to 8705 - Vehicles; parts and accessories, of bodies, other than safety seat belts - Vehicle parts; suspension systems and parts thereof (including shock-absorbers) - Vehicle parts; clutches and parts thereof	870810 - 870829 - 870880 - 870893	YUZHMAH SOE	14308368
	Bearings; cylindrical roller bearings n.e.c. in heading no. 8482	848250	KHARKIVSKYY MASHYNOBUDIVNYY ZAVOD FED SOE	14310052
	Engines; reciprocating piston engines, of a kind used for the propulsion of vehicles of chapter 87, of a cylinder capacity exceeding 1000cc	840734	KHIMICHNI AVIATSIYNI TEKHOLOHIYI LLC	25194181
	Surveying equipment; articles n.e.c. in heading no. 9015, including hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances (excluding compasses) - Surveying equipment; parts and accessories for articles of heading no. 9015	901580 - 901590	"ELMIZ" JSC	24102142
	Machinery; for filtering or purifying water	842121	"FED" JSC	14315552
	Tractors; track-laying	870130	"UKREYR" LLC	21507341
	Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal - Mountings, fittings and similar articles; for motor vehicles, of base metal - Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830210 - 830230 - 830249	"PLANT 410 CA" SOE	01128297
	Paints and varnishes; based on polyesters, dispersed or dissolved in a non-aqueous medium	320810	UKRAVIASNAB LLC	34297117
	Tractors; track-laying	870130	"UKRAVTOZAPCHASTYNA" LLC	30722204

Agricultural machinery			NVP "KHERSONSKYY MASHYNOBUDIVNYY ZAVOD" LLC	35788406
			"TMI" LLC	30443517
			"PLANT "NIZHYNSILMASH" PJSC	14311643
			"HYDROTRUCK-UKRAINE" LTD	39481131
			PP "TEKHNKA"	32452979
	Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with tin, thickness of less than 0.5mm - Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with chromium oxides or with chromium and chromium oxides	721012 - 721050	VARIANT AHRO BUD LLC	39065898
			PJSC "KMZ"	14311169
			IUHELEVATOR LLC	36622831
	Transmission shafts (including cam shafts and crank shafts) and cranks - Pulleys and flywheels, including pulley blocks - Clutches and shaft couplings (including universal joints)	848310 - 848350 - 848360	TEXHA PA, LLC	33063942
			PJSC "UMANFERMMASH"	05765888
			BERDIANSKI ZHNYVARKY	31071312
			TMS LLC	37172711
			EPIROC UKRAINE LLC	34818882
			"UKRAVTOZAPCHASTYNA" LLC	30722204
			"MASHTEKHIMPORT" LLC	35117711
			FIRMA SVITLANA - IMPEKS LLC	23373287
			PJSC "THE PLANT "FREGAT"	14312387
			"KRONES UKRAYINA" LLC	35059147
			"MZ "SANFLOROMASH" LLC	40478567
			"UNIVERSAL SERVIS UKRAYINA" LLC	19039522
			DE "GEA WESTFALIA SEPARATOR UKRAINE"	24921971
			"TORHOVYY DIM MTZ-BELARUS-UKRAYINA" LLC	35723464
			ROFIAHRO LLC	37332646
			"NU SP "VERVAT UKRAYINA LTD" LLC	32891926
			PV HRUP UKRAYINA	38319207
			TEKHNİK MASHYNES INTERNESHENEL LLC	30443517
			PJSC HIDROSYLA APM	36119987
			PP AHROTEKHNKA	30802127
			NVP "AHROMASHINVEST" LLC	21871012
	Vehicles; bumpers and parts thereof, for the vehicles of heading no. 8701 to 8705 - Vehicles; parts and accessories, of bodies, other than safety seat belts - Vehicle parts; suspension systems and parts thereof (including shock-absorbers) - Vehicle parts; clutches and parts thereof	870810 - 870829 - 870880 - 870893	EPIROC UKRAINE LLC	34818882
			"TORHOVYY DIM MTZ-BELARUS-UKRAYINA" LLC	35723464
			JSC "KHARKIVSKYI TRACTORNYI ZAVOD"	05750295
			VKP "SYSTEMY UPRAVLINNIA - KONSYS" LLC	31765778
			"UNIVERSAL SERVIS UKRAYINA" LLC	19039522
			NVP "AHROMASHINVEST" LLC	21871012
			NVP "KHERSONSKYY MASHYNOBUDIVNYY ZAVOD" LLC	35788406
			"MASHTEKHIMPORT" LLC	35117711
	Machinery; parts of the machinery of heading no. 8427 - Machinery parts; buckets, shovels, grabs and grips, for the	843120 - 843141	"TRANSKHOLOD" LLC	33227227
			HLUBUR-SERVIS LLC	38333682
			"UNIVERSAL SERVIS UKRAYINA" LLC	19039522
			JSC "ELVORTI"	05784437

machinery of heading no. 8426 and 8430		"ENGINEERING-SERVICE" LLC	41105688
		PJSC "UMANFERMMASH"	05765888
		AHROMOTORSERVIS LLC	30456416
		"EXIMROK" LLC	41995179
Tools, interchangeable; (for machine or hand tools, whether or not power-operated), tools for pressing, stamping or punching	820730	OLVI PLIUS LLC	34559318
		"EXIMROK" LLC	41995179
		SOLUTION TRADE UKRAINE LTD	41067920
		FRUNZE PLANT PJSC	00236010
Steel, alloy; flat-rolled, width 600mm or more, hot-rolled, in coils	722530	PJSC HIDROSYLA APM	36119987
		"KRASNIAANSKE SE "AGROMASH" LLC	00902501
		TEXHA PA, LLC	33063942
Pumps; parts thereof	841391	PP PALANDYN - AHRO	37343129
		"BOHUSLAVSKA SILHOSPTEKHNKA"	03744178
		EPIROC UKRAINE LLC	34818882
		"MASHTEKHIMPORT" LLC	35117711
		POLIPAMEL UKRAYINA LLC	37855829
		"UNIVERSAL SERVIS UKRAYINA" LLC	19039522
		"BTM TRADE" LLC	40955203
		SPETSMEKHSERVIS LLC	33660476
		ME AZOVGIDRJ MASH LTD	41253162
		PJSC HIDROSYLA APM	36119987
		DNIPROTRANS DYSEL LLC	33338873
		JSC "KHARKIVSKYI TRACTORNYI ZAVOD"	05750295
		"FRIGOSERVE" LTD	37495383
Fertilizers, mineral or chemical; potassic, potassium chloride	310420	AHROPROMYSLOVA KOMPANIJA BESTA LLC	36421771
			37593110
Machinery; for filtering or purifying water	842121	DE "GEA WESTFALIA SEPARATOR UKRAINE"	37593110
		TEKHELEKTROSERVIS LLC	24921971
		UNIVERSAL SERVICE UKRAINE LTD	21649070
		PJSC "KMZ"	19039522
		JSC "FED"	14311169
		TEKHNİK MASHYNES INTERNESHENEL LLC	14315552
		FRUNZE PLANT PJSC	30443517
Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426, 8427 or 8428	842890	FRUNZE PLANT PJSC	00236010
		PJSC "UMANFERMMASH"	05765888
		TEKHINHRUP LLC	35871609
Tanker trailers and tanker semi-trailers - Vehicles; n.e.c. in heading no. 8716	871631 - 871680	"KRONES UKRAYINA" LLC	35059147
		"HYDROTRUCK-UKRAINE" LTD	39481131
		PJSC "UMANFERMMASH"	05765888
		PROFIAHRO LLC	05765888
		AHROMOTORSERVIS LLC	37332646
		AHROMASH - KALYNA LLC	30456416
Engines; parts, for engines and motors of heading no. 8412	841290	MAKSAHROTEKH LLC	32320510
		PJSC HIDROSYLA APM	41195195
		"UNIVERSAL SERVIS UKRAYINA" LLC	4195195
Steel, alloy; bars and rods, hot-rolled, hot-drawn or extruded	722830	PROMHIDROMASH	41395272
		ROMENSKYY ZAVOD TRAKTOROZAPCHASTYNA LLC	19039522
		KOVELSILMASH LLC	41395272

		PJSC HIDROSYLA APM	36119987
		VELES-AHRO LTD.	31427962
Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA	850421	"DNIPROPOLYMERMAH" PJSC	00218615
		TMS LLC	37172711
Air conditioning machines; containing a motor driven fan, other than window or wall types, incorporating a refrigerating unit - Air conditioning machines; containing a motor driven fan, other than window or wall types, not incorporating a refrigerating unit	841582 - 841583	TERMO KINH UKRAYINA LLC	23731798
		"TORHOVYY DIM MT'Z-BELARUS-UKRAYINA" LLC	35723464
- Mountings, fittings and similar articles; for motor vehicles, of base metal	830210	EPIROC UKRAINE LLC	34818882
Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	-	TRANSKHOLOD LLC	33227227
Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830230	TEXHA PA, LLC	33063942
	-	KRONES UKRAYINA LLC	35059147
	830249	PROFIAHRO LLC	37332646
		TERMO KINH UKRAYINA LLC	23731798
Rubber; unvulcanised, compounded with carbon black or silica, in primary forms or in plates, sheets or strip	400510	SP DESSA	40072552
		SP LIHUM	30297270
		"PLOTYT'SKA AGROPROMTEKHNIKA2 LLC	38512996
Fork-lift and other works trucks; fitted with lifting or handling equipment, self-propelled by electric motor - Fork-lift and other works trucks; fitted with lifting or handling equipment, self-propelled by other than electric motor	842710 - 842720	"MASHTEKHIMPORT" LLC	35117711
		PRAYMAKS	36929387
		PP "TEKHNIKA"	32452979
Iron or steel; structures and parts thereof, towers and lattice masts - Iron or steel; structures and parts thereof, doors, windows and their frames and thresholds for doors - Iron or steel; structures and parts thereof, n.e.c. in heading 7308	730820 - 730830 - 730890	TEXHA PA, LLC	33063942
Bearings; cylindrical roller bearings n.e.c. in heading no. 8482	848250	VELES-AHRO LTD.	31427962
		DP KHARKIVSKYY MASHYNOBUDIVNYY ZAVOD FED	14310052
		PJSC "UMANFERMMASH"	05765888
		PJSC HIDROSYLA APM	36119987
		"KRONES UKRAYINA" LLC	35059147
Machinery, plant and equipment; for making hot drinks, for cooking or heating food	841981	ZAVOD AVTOSHTAMP LLC	33423425
		"DNIPROPOLYMERMAH" PJSC	00218615
		NADIYNI TEKHNOLOHIYI LLC	40577387
Rubber; new pneumatic tyres, of a kind used on buses or lorries	401120	"TT-AGRO" LLC	05784437
Optical instruments and appliances; for measuring or checking, n.e.c. in chapter 90	903149	TOV "KRONES UKRAYINA" LLC	35059147
		JSC "FED"	14315552
Locks; of a kind used for motor vehicles (key, combination or electrically operated), of base metal	830120	"FRIGOSERVE" LTD	37495383
		FRUNZE PLANT PJSC	00236010
		TEXHA PA, LLC	33063942
Iron or steel; leaf-springs and leaves therefor	732010	PJSC "UMANFERMMASH"	05765888
		TOV DIUVELSDORF UKRAYINA LLC	37921017
		TZOV VKP "SYSTEMY UPRAVLINIA - KONSYS" LLC	05750295

Plastics; plates, sheets, film, foil and strip (not self-adhesive), of polymers of ethylene, non-cellular and not reinforced, laminated, supported or similarly combined with other materials - Plastics; polymers of vinyl chloride, containing by weight, less than 6% of plasticisers; plates, sheets, film, foil and strip (not self-adhesive), non-cellular and not reinforced, laminated, supported or similarly combined with other materials	392010 - 392049	TEXHA PA, LLC	33063942
Vehicles; bodies (including cabs) for the motor vehicles of heading no. 8701, 8702, 8704 or 8705	870790	"IT-AGRO" LLC	39800861
Welding machines and apparatus; for resistance welding of metal, fully or partly automatic, whether or not capable of cutting	851521	SEGURO LLC	32985893
		UMTK LLC	31797087
Machinery; industrial, brewery machinery	843840	SAYLENS LLC	22954177
Chandeliers and other electric ceiling or wall light fittings; excluding those used for lighting public open spaces or thoroughfares	940510	"FRIGOSERVE"LTD	37495383
Moulds; for rubber or plastics, injection or compression types - Moulds; for rubber or plastics, other than injection or compression types	848071 - 848079	DNIPROPETROVSKE UCHBOVO-VYROBNYCHE OBIEDNANNIA LUCH UKRAYINSKOHO TOVARYSTVA SLIPYKH	03967576
Mechano-therapy appliances; massage apparatus and psychological aptitude-testing apparatus	901910	STANKOM-MASH-SERVIS LLC	37969792
Ethylene polymers; sacks and bags (including cones), for the conveyance or packing of goods - Plastics; stoppers, lids, caps and other closures, for the conveyance or packing of goods	392321 - 392350	DE "GEA WESTFALIA SEPARATOR UKRAINE"	24921971
Iron or non-alloy steel; in coils, without patterns in relief, flat-rolled, of a width 600mm or more, hot-rolled, pickled, of a thickness of 3mm or more but less than 4.75mm - Iron or non-alloy steel; in coils, without patterns in relief, flat-rolled, of a width 600mm or more, hot-rolled, pickled, of a thickness of less than 3mm	720826 - 720827	DIUVELSDORF UKRAYINA LLC	37921017
		UKR.AGRO-SERVICE, LLC	24269988
Equipment for outdoor games and recreation n.e.c. in heading no. 9506	950699	STANKOM-MASH-SERVIS LLC	37969792
Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823	482390	EMCC LLC	41587616

Source: YouControl, Ruslana, own calculations

Appendix F. Detailed visualization of promising commodities

Table F1. Specific visualization of promising commodities.

Product (HS6)	Product Code (HS6)	Specific commodities	Reference
Fertilizers, mineral or chemical; potassic, potassium chloride	310420	Potassium chloride	https://www.exportimportstatistics.com/HS-Codes/Potassium-chloride-Hs-Codes-31042000.aspx
Paints and varnishes; based on polyesters, dispersed or dissolved in a non-aqueous medium	320810	Enamels, Lacquers, Varnishes	https://www.exportimportstatistics.com/HS-Codes/Based-on-polyesters-Hs-Codes-320810.aspx
Finishing agents and dye carriers; to accelerate dyeing or fixing of dye-stuffs, other products and preparations, used in the textile industry (excluding those with a basis of amylaceous substances)	380991	Textile assistant mordanting, desizing, dispersing, emulsifying and water proofing agents, Prepared textile glazings, dressings and mordants	https://www.exportimportstatistics.com/HS-Codes/Of-a-kind-used-in-the-textile-or-like-industries-Hs-Codes-380991.aspx
Plastics; plates, sheets, film, foil and strip (not self-adhesive), of polymers of ethylene, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	392010	PRIMARY FORMS - Rigid, Flexible plain	https://www.exportimportstatistics.com/HS-Codes/Of-polymers-of-ethylene-Hs-Codes-392010.aspx
Plastics; polymers of vinyl chloride, containing by weight, less than 6% of plasticisers; plates, sheets, film, foil and strip (not self-adhesive), non-cellular and not reinforced, laminated, supported or similarly combined with other materials	392049		https://www.exportimportstatistics.com/HS-Codes/Other-Hs-Codes-39204900.aspx
Ethylene polymers; sacks and bags (including cones), for the conveyance or packing of goods	392321	PRIMARY FORMS - Of polymers of ethylene	https://www.exportimportstatistics.com/hs-code/39232100.aspx
Plastics; stoppers, lids, caps and other closures, for the conveyance or packing of goods	392350	Stoppers, lids, caps and other closures	https://www.exportimportstatistics.com/hs-code/39235000.aspx
Rubber; unvulcanised, compounded with carbon black or silica, in primary forms or in plates, sheets or strip	400510	Natural rubber, balata, gutta-percha, guayule, chicle and similar natural gums, in primary forms or in plates, sheets or strip - Compounded with carbon black or silica	https://www.exportimportstatistics.com/hs-code/40051000.aspx
Rubber; new pneumatic tyres, of a kind used on buses or lorries	401120	Radials	https://www.exportimportstatistics.com/HS-Codes/Of-a-kind-used-on-buses-or-lorries-Hs-Codes-401120.aspx
Kraft paper and paperboard; sack kraft paper, uncoated, unbleached, in rolls or sheets, other than that of heading no. 4802 or 4803	480421	Newspprint, in rolls or sheets - Unbleached	https://www.exportimportstatistics.com/HS-Codes/Unbleached-Hs-Codes-48042100.aspx

Paper and paperboard; self-adhesive, in rolls or sheets, other than goods of heading no. 4803, 4809, or 4810	481141	Newsprint, in rolls or sheets - Self-adhesive	https://www.exportimportstatistics.com/hs-code/48114100.aspx
Paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibres; articles n.e.c. in heading no. 4823	482390	Braille paper, Cellulose in sole board or sheet, Packing and wrapping paper, Paper for cigarette filter tips, Paper cone for loud speaker, Patterns made of papers for leather footwear, Patterns made of paper for articles of apparel and clothing accessories, Products consisting of sheets of paper or paper board, impregnated, coated or covered with plastics (including thermoset resins or mixtures thereof or chemical formulations containing melamine, phenol or urea formaldehyde with or without curing agents or catalysts), Decorative laminates, Pre-punched cards, Monotype and newstape paper in strips with perforated edges, Typewriting paper cut to size, Plain or embossed seals made of paper, laminated paper or paper gaskets	
Iron or non-alloy steel; in coils, without patterns in relief, flat-rolled, of a width 600mm or more, hot-rolled, pickled, of a thickness of 3mm or more but less than 4.75mm	720826		
Iron or non-alloy steel; in coils, without patterns in relief, flat-rolled, of a width 600mm or more, hot-rolled, pickled, of a thickness of less than 3mm	720827		
Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with tin, thickness of less than 0.5mm	721012		
Iron or non-alloy steel; flat-rolled, width 600mm or more, plated or coated with chromium oxides or with chromium and chromium oxides	721050		
Steel, alloy; flat-rolled, width 600mm or more, hot-rolled, in coils	722530		
Steel, alloy; bars and rods, hot-rolled, hot-drawn or extruded	722830		
Iron or steel; structures and parts thereof, towers and lattice masts	730820	Lattice masts	https://www.exportimportstatistics.com/HS-Codes/Towers-and-lattice-masts-Hs-Codes-730820.aspx

Iron or steel; structures and parts thereof, doors, windows and their frames and thresholds for doors	730830	Doors, windows and their frames and thresholds for doors	https://www.exportimportstatistics.com/HS-Codes/Doors-Hs-Codes-73083000.aspx
Iron or steel; structures and parts thereof, n.e.c. in heading 7308	730890	Beams, channels, pillars and girders, Drop rods, Hatchway, rails and bulkheads for ships or boats, Galvanised tension bars, Structures and super structures for mining, Truss rods, Tubular steel poles for electric transmission and distribution lines,	https://www.exportimportstatistics.com/HS-Codes/Other-Hs-Codes-730890.aspx
Iron or steel; leaf-springs and leaves therefor	732010	Springs and leaves for springs for motor, vehicles, railways and tramways	https://www.exportimportstatistics.com/HS-Codes/Leaf-springs-and-leaves-therefor-Hs-Codes-732010.aspx
Nickel; articles thereof n.e.c. in item no. 7508.1	750890	Electroplating anodes, Nickel screen,	https://www.exportimportstatistics.com/HS-Codes/Other-Hs-Codes-750890.aspx
Tools, interchangeable; (for machine or hand tools, whether or not power-operated), tools for pressing, stamping or punching	820730	Tools for pressing, stamping or punching: DOUBLE ROTARY TABLET PRESS, ACCESSORIES FOR PHARMACEUTICAL MACHINERY TABLETING	https://www.exportimportstatistics.com/hs-code/82073000.aspx
Locks; of a kind used for motor vehicles (key, combination or electrically operated), of base metal	830120	Locks of a kind used for motor vehicles	https://www.exportimportstatistics.com/hs-code/83012000.aspx
Hinges; suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like, of base metal	830210	Hinges	https://www.exportimportstatistics.com/hs-code/830210.aspx
Mountings, fittings and similar articles; for motor vehicles, of base metal	830230	STEEL CLAMPS, FLANGE PLATE EXHUAUST FLANGE,	https://www.exportimportstatistics.com/hs-code/830230.aspx
Mountings, fittings and similar articles; suitable for other than buildings or furniture, of base metal	830249		https://www.exportimportstatistics.com/HS-Codes/Other-Hs-Codes-83024900.aspx
Engines; reciprocating piston engines, of a kind used for the propulsion of vehicles of chapter 87, of a cylinder capacity exceeding 1000cc	840734	Fuel elements and Machinery and apparatus for isotopic separation - For motor cars: RADIATOR FAN, SWITCH,TURBOCHARGER,WIPER,POWER STEARING,	https://www.exportimportstatistics.com/HS-Codes/Of-a-cylinder-capacity-exceeding-1000-cc-Hs-Codes-840734.aspx
Turbo-jets; of a thrust exceeding 25kN	841112		https://www.exportimportstatistics.com/HS-Codes/Of-a-thrust-exceeding-25-kN-Hs-Codes-84111200.aspx

Turbines; parts of turbo-jets and turbo-propellers	841191	Fuel elements and Machinery and apparatus for isotopic separation - Of turbo-jets or turbo-propellers: PARTS FOR GAS TURBINE AND ACCESSORIES, BUCKET SET COMPRESSOR, TURBINE BLADES, AEROPLANE ENGINE PARTS	https://www.exportimportstatistics.com/HS-Codes/Of-turbo-jets-or-turbo-propellers-Hs-Codes-84119100.aspx
Turbines; parts of gas turbines (excluding turbo-jets and turbo-propellers)	841199		
Engines; parts, for engines and motors of heading no. 8412	841290	Fuel elements and Machinery and apparatus for isotopic separation - Of steam engines incorporating boilers, Of hydraulic engines and motors : DISSOLVED AIR FLOATATION UNIT, AUTOMOTIVE PARTS, SPARE PARTS & ACCESSORIES OF TWO WHEELERS, METAL FITTED/BONDED/UN-BONDED RUBBER PARTS, SPADES MADE OF STEEL, ALUMINIUM CAST ARTICLES, HYDRAULIC TORQUE CONVERTER, HYDRAULIC HOSES, HYDRAULIC PUMP UNIT	https://www.exportimportstatistics.com/HS-Codes/Parts-Hs-Codes-841290.aspx
Pumps; parts thereof	841391	Parts of Reciprocating, Centrifugal, Deep well turbine, rotary pumps and hand pumps for handling water	https://www.exportimportstatistics.com/HS-Codes/Of-pumps-Hs-Codes-841391.aspx
Air conditioning machines; containing a motor driven fan, other than window or wall types, incorporating a refrigerating unit	841582	Split air-conditioner two tones and above	https://www.exportimportstatistics.com/HS-Codes/Other-Hs-Codes-841582.aspx
Air conditioning machines; containing a motor driven fan, other than window or wall types, not incorporating a refrigerating unit	841583		https://www.exportimportstatistics.com/HS-Codes/Not-incorporating-a-refrigerating-unit-Hs-Codes-841583.aspx
Machinery, plant and equipment; for making hot drinks, for cooking or heating food	841981	Industrial friers, Other industrial kitchen machines: WATER TESTING EQUIPMENTS, PART OF WATER TREATMENT PLANT, GRINDER MACHINE, TOASTER BATCH BUN, ICE CURSHER	https://www.exportimportstatistics.com/HS-Codes/For-making-hot-drinks-or-for-cooking-or-heating-food-Hs-Codes-841981.aspx

Machinery; for filtering or purifying water	842121	Ion exchanger plant/apparatus, Household type filters:STAINLESS STEEL WATER FILTERS, WATER DEMINERALISER PLANT CONTROL PANEL	https://www.exportimportstatistics.com/HS-Codes/For-filtering-or-purifying-water-Hs-Codes-842121.aspx
Fork-lift and other works trucks; fitted with lifting or handling equipment, self-propelled by electric motor	842710	Self-propelled trucks powered by an electric motor	https://www.exportimportstatistics.com/HS-Codes/Self-propelled-trucks-powered-by-an-electric-motor-Hs-Codes-84271000.aspx
Fork-lift and other works trucks; fitted with lifting or handling equipment, self-propelled by other than electric motor	842720	Other self-propelled trucks: DIESEL KORKLIFT 3 TON, GODREJ DIESEL FORKLIFT, GODREJ DDISELFORLIFT 3TON	https://www.exportimportstatistics.com/HS-Codes/Other-self-propelled-trucks-Hs-Codes-84272000.aspx
Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426, 8427 or 8428	842890	Dust trapping equipment, Coal handling plants	https://www.exportimportstatistics.com/HS-Codes/Other-machinery-Hs-Codes-842890.aspx
Machinery; parts of the machinery of heading no. 8427	843120	HORIZONTAL FORM/FILL/SEAL MACHINE, CONVEYOR ROLLERS89	https://www.exportimportstatistics.com/HS-Codes/Of-machinery-of-heading-8427-Hs-Codes-843120.aspx
Machinery parts; buckets, shovels, grabs and grips, for the machinery of heading no. 8426 and 8430	843141	Buckets, shovels, grabs, and grips	https://www.exportimportstatistics.com/hs-code/84314100.aspx
Machinery; industrial, brewery machinery	843840	Brewery machinery	https://www.exportimportstatistics.com/hs-code/84384000.aspx
Machinery; injection-moulding machines, for working rubber or plastics or for the manufacture of products from these materials	847710	PLASTIC EXTRUSION PLANT	https://www.exportimportstatistics.com/hs-code/84771000.aspx
Machinery; parts of the machines of heading no. 8477, n.e.c. in item no. 8477.90	847790	Part of PLASTIC EXTRUSION PLANT	https://www.exportimportstatistics.com/hs-code/84779000.aspx
Moulds; for rubber or plastics, injection or compression types	848071	BLOW MOULDING MACHINE	https://www.exportimportstatistics.com/hs-code/84807100.aspx
Moulds; for rubber or plastics, other than injection or compression types	848079		https://www.exportimportstatistics.com/HS-Codes/Other-Hs-Codes-84807900.aspx
Bearings; cylindrical roller bearings n.e.c. in heading no. 8482	848250	MAINBEARING SEAL , AIR HOSE, Thrust roller bearings, FAG ROLLER BEARINGS	https://www.exportimportstatistics.com/HS-Codes/Other-cylindrical-roller-bearings-Hs-Codes-848250.aspx
Transmission shafts (including cam shafts and crank shafts) and cranks	848310	CRANK SHAFT FOR FOUR WHEELERS, FORGED CRANKSHAFT FULLY MACHINED, Crank shafts for sewing machines and engines	https://www.exportimportstatistics.com/HS-Codes/Transmission-shafts-including-cam-shafts-and-crank-shafts-and-cranks-Hs-Codes-848310.aspx
Pulleys and flywheels, including pulley blocks	848350	SPARES FOR CUMMINS IC DIESEL ENGINES, DIFFERENT TYPES OF SPARES FOR GRAPHITE PUMP, CONNECTOR ASSY.	https://www.exportimportstatistics.com/HS-Codes/Flywheels-and-pulleys-Hs-Codes-848350.aspx

Clutches and shaft couplings (including universal joints)	848360	Flexible coupling, Fluid coupling	https://www.exportimportstatistics.com/HS-Codes/Clutches-and-shaft-coupling-including-universal-joints-Hs-Codes-848360.aspx
Electrical transformers; liquid dielectric, having a power handling capacity not exceeding 650kVA	850421	SINGLE PHASE TRANSFORMERS	https://www.exportimportstatistics.com/HS-Codes/Having-a-power-handling-capacity-not-exceeding-650-kVA-Hs-Codes-85042100.aspx
Welding machines and apparatus; for resistance welding of metal, fully or partly automatic, whether or not capable of cutting	851521	Automatic spot and butt welding machinery	https://www.exportimportstatistics.com/HS-Codes/Fully-or-partly-automatic-Hs-Codes-851521.aspx
Reception and transmission apparatus; aerials and aerial reflectors of all kinds and parts suitable for use therewith	852910	Electric motors and generators (excluding generating sets) - For communication (INDOOR TV AERIAL BOXED, TELESCOPIA ANTENNA, SOLAR LANTERN)	https://www.exportimportstatistics.com/HS-Codes/Aerials-and-aerial-reflectors-of-all-kinds-Hs-Codes-852910.aspx
Tractors; track-laying	870130	Track-laying tractors	https://www.exportimportstatistics.com/HS-Codes/Track-laying-tractors-Hs-Codes-870130.aspx
Vehicles; bodies (including cabs) for the motor vehicles of heading no. 8701, 8702, 8704 or 8705	870790	Bodies of tractors, passagers and goods motor vehicles	https://www.exportimportstatistics.com/HS-Codes/Other-Hs-Codes-870790.aspx
Vehicles; bumpers and parts thereof, for the vehicles of heading no. 8701 to 8705	870810	Bumpers of tractors, passagers and goods motor vehicles	https://www.exportimportstatistics.com/HS-Codes/Bumpers-and-parts-thereof-Hs-Codes-870810.aspx
Vehicles; parts and accessories, of bodies, other than safety seat belts	870829	Replacement parts of tractors: ALUMINIUM PISTONS, AUTO SPARES, ALLOY, STEEL FORGINGS, GEAR RING	https://www.exportimportstatistics.com/hs-code/87082900.aspx
Vehicle parts; suspension systems and parts thereof (including shock-absorbers)	870880	Suspension shock-absorbers of tractors	https://www.exportimportstatistics.com/HS-Codes/Suspension-shock-absorbers-Hs-Codes-87088000.aspx
Vehicle parts; clutches and parts thereof	870893	Clutches of tractors	https://www.exportimportstatistics.com/HS-Codes/Clutches-and-parts-thereof-Hs-Codes-87089300.aspx
Tanker trailers and tanker semi-trailers	871631	Tanker trailers and tanker semi-trailers	https://www.exportimportstatistics.com/HS-Codes/Tanker-trailers-and-tanker-semi-trailers-Hs-Codes-87163100.aspx
Vehicles; n.e.c. in heading no. 8716	871680	Hand propelled vehicles (e.g. hand carts, rickshaws and the like)	https://www.exportimportstatistics.com/HS-Codes/Other-vehicles-Hs-Codes-871680.aspx
Aircraft and spacecraft; under-carriages and parts thereof	880320	ROTOR ASSY (AEROPLANE PARTS), UNLOCK BOX, RESISTOR, CONTROL (Aero), WHEEL & TYRE ASSEMBLY NLG(FOR AIRCRAFT USE ONLY), YAW DAMPER (FOR AEROPLANE)	https://www.exportimportstatistics.com/HS-Codes/Under-carriages-and-parts-thereof-Hs-Codes-88032000.aspx

Surveying equipment; articles n.e.c. in heading no. 9015, including hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances (excluding compasses)	901580	Hydrographic, Meteorological and Geophysical instruments: SCANNING MOBILITY PARTICLE SIZER, GEOPHYSICAL RECORDER, METEOROLOGICAL BALLOONS, GEOPHYSICAL STATIONS	https://www.exportimportstatistics.com/HS-Codes/Other-instruments-and-appliances-Hs-Codes-901580.aspx
Surveying equipment; parts and accessories for articles of heading no. 9015	901590	Parts of optical equipment: LENSES, SHEETS AND PLATES OF POLARISING MATERIAL	https://www.exportimportstatistics.com/HS-Codes/Parts-and-accessories-Hs-Codes-90159000.aspx
Mechano-therapy appliances; massage apparatus and psychological aptitude-testing apparatus	901910	Mechano-therapy appliances, Massage apparatus	https://www.exportimportstatistics.com/HS-Codes/Parts-and-accessories-Hs-Codes-90159000.aspx
Optical instruments and appliances; for measuring or checking, n.e.c. in chapter 90	903149		https://www.exportimportstatistics.com/HS-Codes/Other-Hs-Codes-90314900.aspx
Chandeliers and other electric ceiling or wall light fittings; excluding those used for lighting public open spaces or thoroughfares	940510	Hanging lamps	https://www.exportimportstatistics.com/HS-Codes/LAMPS-AND-LIGHTING-FITTINGS-INCLUDING-SEARCHLIGHTS-AND-SPOTLIGHTS-AND-PARTS-THEREOF-Heading-9405.aspx
Equipment for outdoor games and recreation n.e.c. in heading no. 9506	950699	SPORTS GOODS: INFLATABLE SYNTHETIC BALLS, SOCCERBALLS, CRICKET, HOCKEY, BOWLING, FOOTBALL AND OTHER SPORTS GLOVES, GENERAL EXERCISE & PHYSICAL FITNESS EQUIP	https://www.exportimportstatistics.com/HS-Codes/LAMPS-AND-LIGHTING-FITTINGS-INCLUDING-SEARCHLIGHTS-AND-SPOTLIGHTS-AND-PARTS-THEREOF-Heading-9405.aspx