



Central Bank of Armenia
Statistics Department

Regional Seminar on
International Trade Statistics:
Edge of Tomorrow

COMPILATION OF E-COMMERCE DATA FOR BALANCE OF PAYMENTS STATISTICS

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WHAT IS ELECTRONIC COMMERCE?

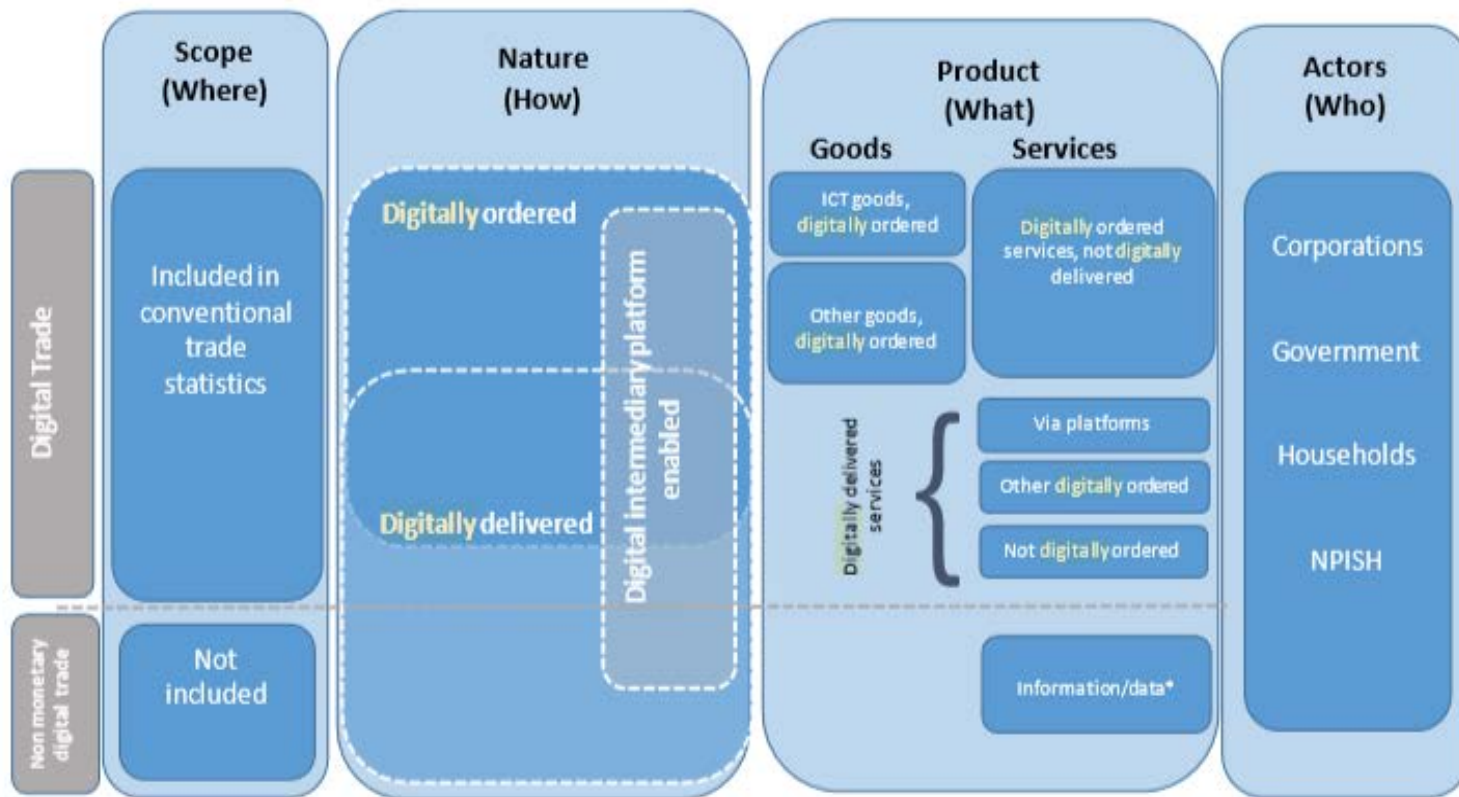
- OECD* definition of an e-commerce transaction:
 - “...the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders”.
 - Payment and delivery do not have to be conducted online.
 - Orders made by telephone calls, fax or manually typed e-mail excluded.
- E-commerce transaction is basically a digitally ordered transaction,
- OECD-WTO-IMF** definition of digital trade:
 - digital trade as trade that is digitally ordered and/or digitally delivered.

*OECD Guide on Measuring Information Society, 2011

** OECD-WTO-IMF Handbook on Measuring Digital Trade, 2019



THE CONCEPTUAL FRAMEWORK OF DIGITAL TRADE



REPORTING TEMPLATE FOR DIGITAL TRADE

Goods and services account of the balance of payments: accounting principles for digital trade follow those of BPM6, except Digital Intermediary Platforms (DIP).

	Total	By Exporter/Importer		
		Corporations (by industry)	Government	Households/ NPISH
(i) Digital Trade (ii+iv+vi+ix)				
(ii) Digitally ordered ICT goods				
(iii) <i>of which via DIPs</i>				
(iv) Digitally ordered goods (other)				
(v) <i>of which via DIPs</i>				
(vi) Digitally delivered Services				
(vii) <i>of which via DIPs</i>				
(viii) <i>of which digitally ordered (including via DIPs)</i>				
(ix) Digitally ordered services (not delivered digitally)				
(x) <i>of which via DIPs</i>				
<i>Addendum items</i>				
(xi) Digitally ordered total (ii+iv+viii+ix)				
(xii) ICT goods total (digitally and non-digitally ordered)				
(xiii) Potentially ICT enabled services				
(xiv) Non-monetary transactions in information/data (imputed)				



MAIN TYPES OF E-COMMERCE

- Business-to-Business (B2B), e.g. manufacturers who are selling their product to distributors, and the wholesalers are selling it to retailers,
- Business-to-Consumer (B2C), involves selling products and services to the general public,
- Consumer-to-Business (C2B), when companies bid for consumer project online,
- Consumer-to-Consumer (C2C); e.g. eBay,
- Government-to-business (G2B); e.g. e-procurement,
- Business-to-Employee (B2E), when companies are using internal networks to offer their employees products and services online,
- etc.



MAJOR E-COMMERCE MARKETS: TOP 10

	Economy	Total		B2B		B2C
		\$ billion	% of GDP	\$ billion	% of GDP	\$ billion
1	United States	7,055	39%	6,443	91%	612
2	Japan	2,495	60%	2,382	96%	114
3	China	1,991	18%	1,374	69%	617
4	Korea (Rep.)	1,161	84%	1,113	96%	48
5	Germany (2014)	1,037	27%	944	91%	93
6	United Kingdom	845	30%	645	76%	200
7	France (2014)	661	23%	588	89%	73
8	Canada (2014)	470	26%	422	90%	48
9	Spain	242	20%	217	90%	25
10	Australia	216	16%	188	87%	28
	10 above	16,174	34%	14,317	89%	1,857
	World	25,293		22,389		2,904

Note: Figures in italics are estimates. Missing data were estimated based on average ratios. Converted to \$ using annual average exchange rate.

Source: UNCTAD, adapted from US Census Bureau; Japan Ministry of Economy, Trade and Industry; China Bureau of Statistics; KOSTAT (Republic of Korea); EUROSTAT (for Germany); UK Office of National Statistics; INSEE (France); Statistics Canada; Australian Bureau of Statistics and INE (Spain).

AVAILABLE DATA SOURCES FOR COMPILATION OF E-COMMERCE STATISTICS

- Official statistics on e-commerce
 - Enterprise survey data
 - Consumer survey data
- Private sector data on e-commerce
 - Data from e-commerce companies
 - Other private sector data related to measuring e-commerce
- E-commerce estimates
 - Sellers' survey on the amount of overseas sales



SOURCES OF DATA USED FOR THE CURRENT RESEARCH

- Official statistics:
 - Customs Service external trade database;
 - Reporting form 31 - “Types of payment cards, payment card servicing equipment, as well as transactions with payment cards” provided to the Central Bank of Armenia ;
- Payments data:
 - Armenian Card (ArCa) database;
- Data from e-commerce companies:
 - “Haypost” CJSC (postal service) aggregated data;
 - “Globbing” LLC aggregated data;
 - “Online Express” (ONEX) aggregated data



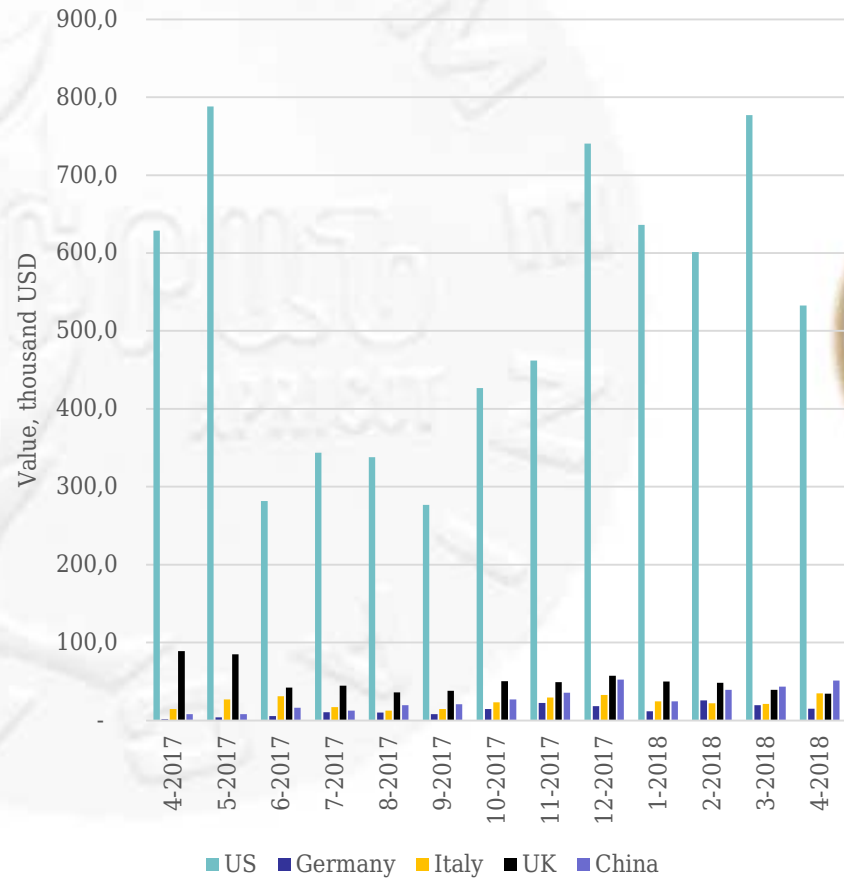
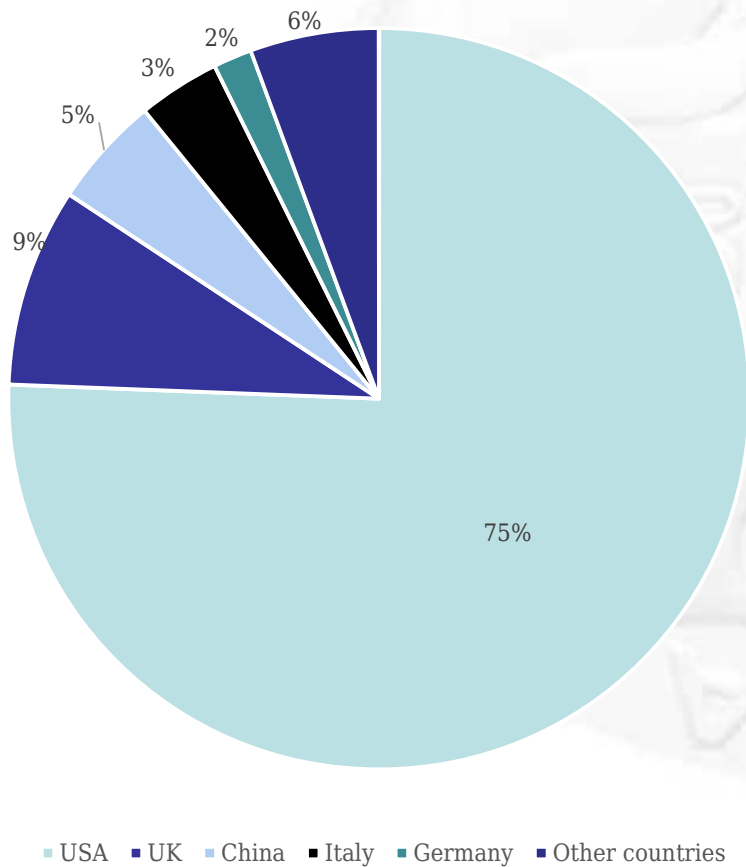
MERCHANDISE TRADE DATA

- Data format
 - Collection of data on goods (customs due over 2 kilos and/or 200 000 AMD (approximately 352 EUR) only exceeding part)
 - **5.7 million USD** in 2017
- Shortcomings
 - E-commerce data classification based on Customs specialists' expert opinion
 - Data by countries show the countries from where goods have been imported to Armenia (difficulty to identify countries where goods were bought)
 - No data on small envelopes



E-commerce by countries in 2017 (Merchandise trade data)

Share in 2017 total e-commerce

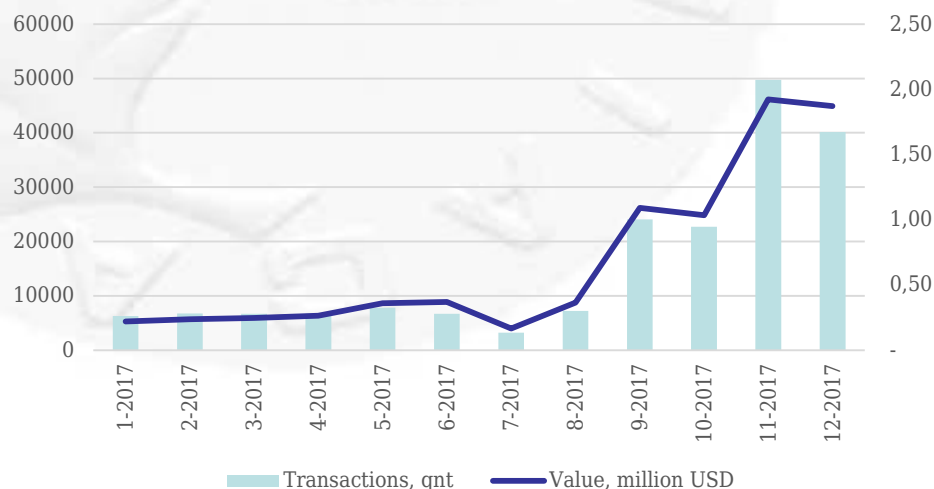


REPORTING FORM 31

- Data format
 - Acquiring goods and services abroad via virtual E-POS
 - Information received from ArCa
 - Possibility to see online acquirement of goods and services abroad
- Shortcomings
 - Classification by country starting from 2017
 - No possibility to distinguish goods and services

- Overseas e-commerce total transactions in 2017 – **8.1 million USD**

Dynamics of e-commerce transactions for 2017, monthly



ArCa DATABASE

- **Data format**

- Detailed identification of transactions (by country, type of POS terminal, etc.)
- Include almost all online transactions in Armenia and from Armenia (except transactions that were done through processing centers of 3 banks)
- 99% accuracy in distinguishing e-commerce transactions abroad

- **Shortcomings**

- Identification of e-commerce is based on expert opinion
- No possibility to see transactions out of ArCa system
- No possibility to distinguish non-residents' transactions in Armenia
- No possibility to assess all e-commerce market in Armenia



E-commerce by countries in 2015-2017 (ArCa database)

- Overseas e-commerce (goods and services) volume in Armenia in 2017 was 39.1 million USD, increased by 39% compared to 2016
- For 3 years in average 29% of transactions concerned buying goods and 71% - buying services
- E-commerce (goods) volume was 12.9 million USD in 2017, increased by 63% compared to 2016
- Average price of one transaction increased by 16% compared to 2016
- 30.3% of transactions were through Paypal (2017)
- 22% of transactions were from Amazon (2017)



E-COMMERCE COMPANIES

- **Data format**

- Presents to Customs Service only goods that exceed 2 kilos and/or 200 000 AMD (approximately 352 EUR)
- Information on all parcels except small envelopes
- Market in 5 countries – US, Russia, Germany, China, UK

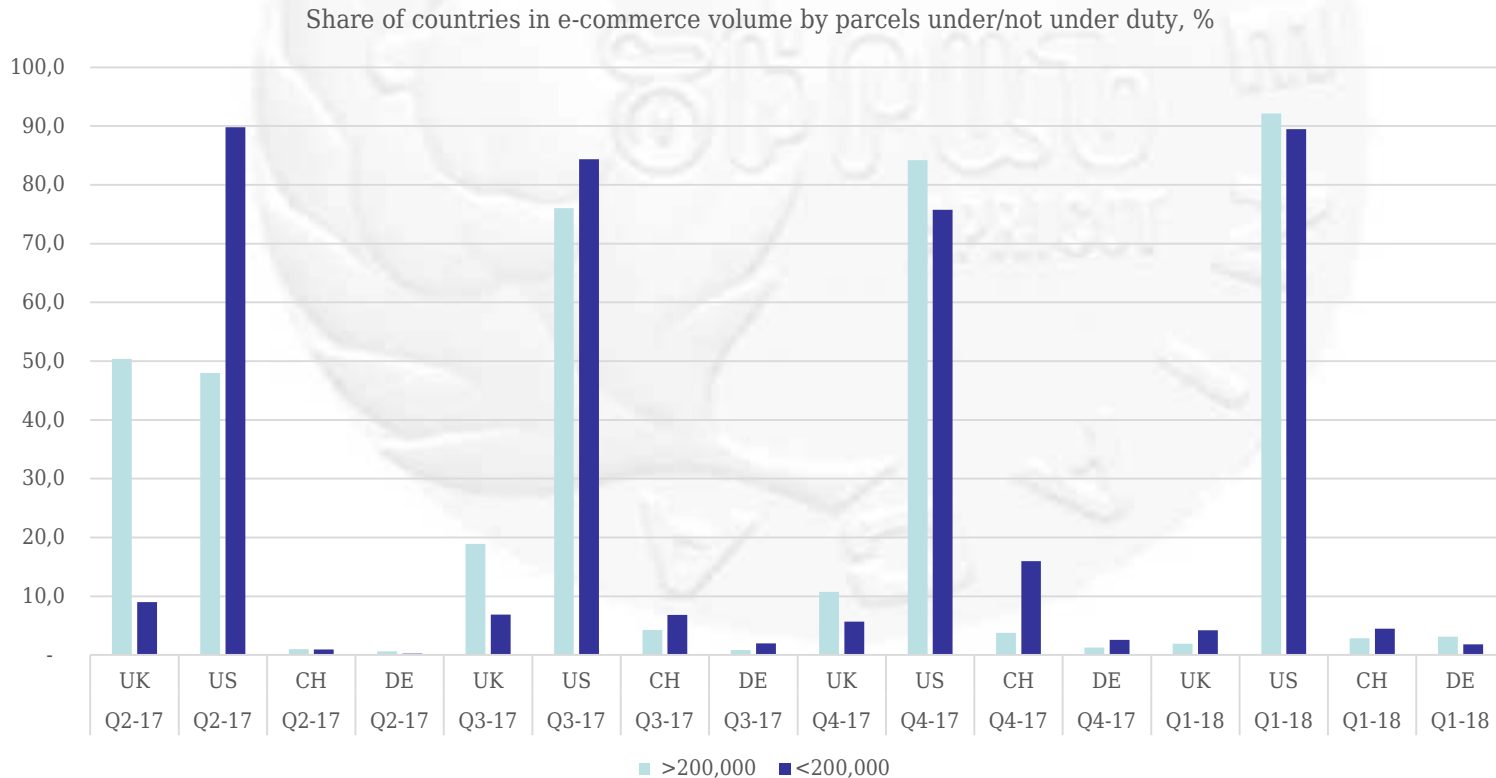
- **Shortcomings**

- Does not cover all overseas e-commerce market of Armenia
- No information in database about parcels from Russia due to different procedure in Customs Service (reason: membership in EEU – Customs Union)
- Shipping to the cargo abroad is included in the price of a good
- Data available from end of March 2017



Figures by e-commerce companies (2017Q2-2018Q1)

- Overseas e-commerce total volume in Armenia for 4 quarters was approximately 8.1 million USD



USE OF E-COMMERCE DATA FOR COMPILATION OF BALANCE OF PAYMENTS STATISTICS

- Possibility to adjust import of goods in current account based on ArCa database
- Use services data to adjust services account, e.g. tourist services, advertising services, etc.

Shortcomings

- Problems with classification by residency
- Difficulties with calculation of transportation expenses to compile current account
- No data on e-commerce transactions of non-residents in Armenia



Conclusions and suggestions

Conclusions

- Only one regular reporting form (form 31) to estimate purchase of goods and services overseas
- Several sources available for compilation of e-commerce data but no regular reporting to public bodies

Suggestions

- Conduct enterprise surveys involved in e-commerce to measure supply side or add few questions on proportion of domestic and overseas e-commerce into existing survey questionnaire
- Additional administrative sources, i.e. reporting forms received on regular basis from Customs Service, ArCa and e-commerce market players in Armenia





Thank you Q&A

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