Measuring cross-border e-commerce. Eurostat, OECD and Finland

Aarno Airaksinen 22.4.2016
UNCTAD e-commerce week - Measuring e-commerce day
ICT use and e-commerce survey history

- Project and compilation publications on information society in Finland mid 1990’s
- ICT survey pilot 1999 Finland and Denmark
- 2000 survey in Nordic countries
- 2001 onwards annually Eurostat survey
- 2001 first OECD model questionnaire
- **2001 first OECD statistical definition of e-commerce**
- 2005 second OECD model questionnaire
- 2005 onwards Eurostat survey under regulation (Law)
- **2010 update to OECD statistical definition of e-commerce**
E-commerce data collected in sample survey

- Stratified random sample by size and industry
- Includes all enterprises in scope
- Eurostat approach for comparable figures:
  - 10+ size
  - NACE: C (Manufacturing); D, E (Electricity, gas, water, waste etc); F (construction); G (trade); H (Transportation and storage); I (Accommodation and food service); J (information and communication); L Real estate activities; From M 69-74 (Professional, scientific and technical activities); N (Administrative and support service); Group 95.1 (Repair of computers and communication equipment)
- Results raised up for total figures to represent all enterprises and all e-commerce.
OECD E-commerce definition

- An **e-commerce transaction** is 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.

- The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online.

- An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations.

- **GUIDELINE FOR INTERPRETATION**
  - **Include**: orders made in Web pages, extranet or EDI. The type is defined by the method of making the order.
  - **Exclude**: orders made by telephone calls, facsimile, or manually typed e-mail.
OECD Framework for measurement

- WEB e-commerce
  - Orders made at an online store (webshop) or via web forms on the Internet or extranet regardless of how the web is accessed (computer, laptop, mobile phone etc.)

- EDI e-commerce
  - Orders initiated with EDI.
  - EDI (electronic data interchange) is here used as a generic term for sending or receiving business information in an agreed format which allows its automatic processing (e.g. EDIFACT, XML, etc.) and without the individual message being manually typed. EDI is an e-business tool for exchanging different kinds of business messages.
  - EDI e-commerce is limiting the scope to order messages only and not to exchange of just any business information.
Eurostat questionnaire

- Important to have definitions and explanations in the questionnaire and as close to questions as possible
- Important to separate WEB and EDI for two reasons:
  - 1) possible to analyze separately, depending on interest
  - 2) methodologically good. Clarity for respondents.
- Follows OECD definition
Module I: e-Commerce
(Scope: enterprises with computers)

**e-Commerce** is 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.

The payment and the delivery of the goods or services do not have to be conducted online.

e-Commerce transactions **exclude** orders made by manually typed e-mail messages.

**e-Commerce Sales**
*In the following questions please report separately for web sales and EDI-type sales.*

**Web sales**
*Web sales* are sales made via an online store (web shop, e-commerce marketplace), via web forms on a website or extranet, or via “apps”.

<table>
<thead>
<tr>
<th>I1. During 2016, did your enterprise receive orders for goods or services placed via a website or “apps”? (excluding manually typed e-mails) (Filter question)</th>
<th>Yes □</th>
<th>No □</th>
</tr>
</thead>
</table>

- Yes □
- No □
- □ □ □
- go to I9

| I2. Please state the value of the turnover resulting from orders received that were placed via a website or “apps” (in monetary terms, excluding VAT), in 2016. (National currency) | ____________ |

- If you can't provide this value,

- **Please indicate an estimate of the percentage of the total turnover resulting from orders received that were placed via a website or “apps”, in 2016.**

- ____ ____ ____ %
**Eurostat questionnaire 2017, EDI-sales**

**EDI-type sales**

EDI-type sales are sales made via EDI-type messages (EDI: Electronic Data interchange) meaning:
- in an agreed or standard format suitable for automated processing (e.g. (EDI (e.g. EDIFACT), XML (e.g. UBL), [please add national examples])
- without the individual messages being typed manually

<table>
<thead>
<tr>
<th>I9. During 2016, did your enterprise receive orders for goods or services placed via EDI-type messages?</th>
<th>Yes □</th>
<th>No □</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>-&gt; go to I12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I10. Please state the value of the turnover resulting from orders received that were placed via EDI-type messages (in monetary terms, excluding VAT), in 2016.</th>
<th>(National currency)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>____________</td>
</tr>
</tbody>
</table>

If you can't provide this value,

Please indicate an estimate of the percentage of the total turnover resulting from orders received that were placed via EDI-type messages, in 2016.

___   ___   ___  %
Results on WEB and EDI-sales

Turnover from e-sales 2014, % total turnover

Source: Eurostat, Statistics Explained, E-commerce statistics
Results on WEB-sales by customer
Turnover from WEB-sales B2BG and B2C 2014, % total turnover

Source: Eurostat, Statistics Explained, E-commerce statistics
### Eurostat questionnaire 2017, Cross border web-sales

#### I6. During 2016, did your enterprise receive orders placed via a website or “apps” by customers located in the following geographic areas?

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own country</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other EU countries</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

The following question (I7) should only be answered if at least two of the above possible responses in question I6, a), b) or c) are answered with "Yes", otherwise check next filter instruction before question I8.

#### I7. What was the percentage breakdown of the turnover from orders received that were placed via a website or “apps” in 2016 by customers located in the following geographic areas?

(estimates in percentage of the monetary values, excluding VAT)

If you cannot provide the exact percentages an approximation will suffice.

-Optional

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own country</td>
<td>☐</td>
</tr>
<tr>
<td>Other EU countries</td>
<td>☐</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>☐</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
</tr>
</tbody>
</table>

22 April 2016  
Aarno Airaksinen
Results on Cross border e-commerce
E-sales to own country and other EU 2014, % of enterprises

Source: Eurostat, Statistics Explained, E-commerce statistics
Results on cross border e-commerce
E-sales total, own country, other EU and rest of the world 2010-2014, % enterprises

Source: Eurostat
Results on cross border e-commerce, ICT households survey
National and cross-border purchases, % individuals who made e-purchases during 12 month

Source: Eurostat, Statistics Explained, E-commerce statistics for individuals
## Eurostat questionnaire 2017, Difficulties in cross border e-commerce (inside EU)

### Q8. During 2016, did your enterprise experience any of the following difficulties when selling to other EU countries via a website or “apps”?

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) High costs of delivering or returning products when selling to other EU countries</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Difficulties related to resolving complaints and disputes when selling to other EU countries</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Adapting product labelling for sales to other EU countries</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) Lack of knowledge of foreign languages for communicating with customers in other EU countries</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) Restrictions from your business partners to sell to certain EU countries</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Conclusions on e-com measurement

- NSI approach (OECD, Eurostat) is sample survey.
- Figures are estimates, roughly giving size of e-com
- Internationally comparable
- Most of e-sales is EDI
- Most of e-sales is B2BG
- Cross border sales measured by % enterprises (or individuals), but 2017 new trial to give values
- Most of e-sales is inside own country, but cross-border increasing slowly
Ongoing discussions and challenges for future

- Continuous orders
- E-mediaries
- Sharing economy
- Globalization, e.g. multinationals --- cross border?
- Different ways to buy electronically? Definition…
- HH: e-com comes too ordinary thing?