E-commerce and Parcel Delivery

- Dr. Henrik Ballebye Okholm
Agenda

- Policy context
- E-commerce development
- Consumer demand
- Parcel delivery
- Pricing
- Conclusions
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Policy context

Why political interest?

- E-commerce fits perfectly with the vision of the Internal Market

- Three challenges
  - Lower level of service for cross-border delivery
  - High prices for cross-border delivery
  - Small webshops pay relatively higher prices
Policy context

An evolving policy debate

2011  
FTI study on cross-border parcel prices

Since 2012

Promote cross-border e-commerce within the EU

May 2015

Launch measures to improve price transparency and regulatory oversight of cross-border parcel delivery.

Dec 2015

No price regulation for now, but enhanced transparency and monitoring of price data

- Econometric study
- Pressure in the media

“Cross-border parcel delivery is an important factor in e-shoppers’ and e-retailers’ decisions to buy/sell online”

”Why does it cost €27 to send a parcel from Copenhagen to Malmö, but €42 to send an identical parcel the other way?”

”The big differences between prices for cross-border parcel delivery between various EU countries just do not make sense.”
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E-commerce and Parcel Delivery

E-commerce development

E-commerce landscape is highly dynamic with large cross-country differences in e-commerce development.

15%

2008-2014

+ 60%

+ 150%

Domestic

Cross-border intra-EU
E-commerce development

BUT assessing the true level of cross-border transactions is a challenge

Erroneous consumer perception

15%

Cross-border purchase ≠ Cross-border delivery
### E-commerce development

**What is cross-border e-commerce?**

<table>
<thead>
<tr>
<th>E-shopper location</th>
<th>Website</th>
<th>Warehouse location</th>
<th>Purchase perceived as cross-border by e-shopper?</th>
<th>Actual cross-border delivery?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Thalia.de</td>
<td>Germany</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Germany</td>
<td>Amazon.de</td>
<td>Poland</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Germany</td>
<td>Amazon.fr</td>
<td>Germany</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Germany</td>
<td>esprit.fr</td>
<td>France</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Germany</td>
<td>Venteprivée</td>
<td>France</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>
E-commerce development

Large differences in the number of online buyers per country

Source: CIVIC
### E-commerce development

**Many drivers of cross-border e-commerce**

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Demand side factors</th>
<th>Supply side factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experience/Trust</strong></td>
<td>• E-shopping experience</td>
<td>• Possibility of branding</td>
</tr>
<tr>
<td></td>
<td>• Quality of goods and services</td>
<td>• Online selling experience</td>
</tr>
<tr>
<td></td>
<td>• Consumer awareness of cross-border consumer rights</td>
<td></td>
</tr>
<tr>
<td><strong>Regulation</strong></td>
<td>• VAT differences</td>
<td>• Regulatory compliance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• VAT differences</td>
</tr>
<tr>
<td><strong>Geographic/Cultural</strong></td>
<td>• Home market size</td>
<td>• Home market size</td>
</tr>
<tr>
<td></td>
<td>• Language</td>
<td>• Language</td>
</tr>
<tr>
<td></td>
<td>• Home bias</td>
<td></td>
</tr>
<tr>
<td><strong>Technological development</strong></td>
<td>• Broadband/internet penetration</td>
<td>• Broadband/internet penetration</td>
</tr>
<tr>
<td></td>
<td>• Digital skills</td>
<td>• Digital skills</td>
</tr>
<tr>
<td><strong>Operational</strong></td>
<td>• Delivery times</td>
<td>• Delivery logistics</td>
</tr>
</tbody>
</table>
The European e-commerce landscape is **highly dynamic**, and the development of e-commerce is influenced by many factors.
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- **Consumer demand**
- Parcel delivery
- Pricing
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Consumer demand Choice

- 1980: 1 type of salt
- 2016: 5,170 types of salt
Consumer demand
Cheap, fast and convenient

What is most important for you?

- 28: Speed of delivery (e.g. same-day)
- 28: Alternative delivery destination (e.g. parcel locker)
- 15: Flexibility of delivery time (e.g. Scheduled)
- 11: Price of delivery
- 18: Other

Note: Included countries are Austria, Belgium, Denmark, Finland, France, Germany, Netherlands, Norway, Sweden, Switzerland, UK.
Source: McKinsey & Company
Consumer demand

Choice: Cheap, traceable, time certain

<table>
<thead>
<tr>
<th>Time of delivery</th>
<th>Express delivery</th>
<th>Next day delivery</th>
<th>Delivery within 2-4 days</th>
<th>Delivery at agreed time slot</th>
<th>Evening delivery</th>
<th>Saturday delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Value added</td>
<td>Delivery to the home adress</td>
<td>Delivery to work adress</td>
<td>Delivery to post office</td>
<td>Delivery to relay point (shop)</td>
<td>Delivery to parcel kiosk (automated locker)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Track’n’Trace</td>
<td>Electronic notification of delivery (e-mail or SMS)</td>
<td>Insurance related to delivery</td>
<td>Cash on delivery</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free delivery</td>
<td>Standard delivery</td>
<td>Faster but more expensive delivery than standard delivery</td>
<td>More convenient but more expensive delivery than standard delivery</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Returns</td>
<td>Take return parcel to a post office/collection point</td>
<td>Organise a specific pick up with the delivery operator</td>
<td>Track’n’tace of return parcel</td>
<td>Return product immediately at the moment of delivery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Consumer demand

Control

● Consumers want to be able to decide
   ○ Who, where, when and how

● But 40% of all consumers did not have access to important delivery services with their latest online purchase

● Largest gap
   ○ Return options (55-65%)
   ○ Flexible delivery point (~50%)
   ○ Information (45-50%)
Consumer demand

**Dynamic e-commerce spills over into the delivery sector**

### E-retailer diversity

- Industry specific solutions
- SME offers
- E-commerce value chain
- Interactive delivery
- Parcel lockers/PUDOs
- Real-time tracking

### Predictable delivery

- Track & trace

### Alternative delivery locations
# Consumer demand

## User-driven innovations

<table>
<thead>
<tr>
<th>Innovation in various aspects</th>
<th>Delivery aspect</th>
<th>E-shopper demands</th>
<th>Market response</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time and speed</td>
<td>More <strong>predictable</strong> parcel delivery</td>
<td>New tracking features for better predicting parcel delivery times</td>
<td>DPD predict interactive delivery service GLS Flexdelivery</td>
</tr>
<tr>
<td></td>
<td>Delivery point</td>
<td>25% of consumers prefer delivery to <strong>alternative delivery locations</strong></td>
<td>Roll-out of alternative points to home delivery</td>
<td>Parcel lockers and parcel shops</td>
</tr>
<tr>
<td></td>
<td>Value added features and return options</td>
<td><strong>Track and trace</strong> and electronic notifications are important</td>
<td>Development of real-time tracking and mobile returns</td>
<td>DHL real-time eTracking</td>
</tr>
</tbody>
</table>
Consumer demand

Innovation promoting convenience

Cooperation between e-retailer Mat.se, Volvo and PostNord

Four Steps

1. Order food and grocery online
2. PostNord locates the car, wherever it is (in Gothenburg)
3. Digical key gives PostNord access to the car trunk
4. IFoodbag system secures cooling and freezing 24 hours
Consumers want choice and control.

The dynamic nature of the e-commerce sector has a positive spillover into the delivery sector.
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Parcel delivery

Delivery decisions by e-retailers play a pivotal role in consumers’ delivery choices and prices

1. Choice of delivery method

Variety of delivery options

- Direct cooperation
- Consolidator
- Direct injection
- Self supply

- Size of the e-retailer
- Products sold
- Stage of development of the e-retailer
- Complexity vs. customer needs
E-commerce and Parcel Delivery

Paracl delivery

**E-retailers of all sizes are well-aware of alternative delivery operators for cross-border delivery**

- DHL parcel
- Relais colis
- DHL
- Amazon
- DPD
- Local couriers
- Ebay
- Hermes
- Fedex
- GLS
- Uber
- UPS
- Colis privé
- bpost
- Posta Slovenije
- Bring
- DB Schenker
- NRA awareness
- E-retailer awareness

LaPoste
Parcel delivery

Who are the main players?

Global

- DHL
- UPS
- GLS

Regional

- bring
- Kiala
- postnl

National postal operators

Volumes of shipments (all operators)

- NPO-under the USO
- NPO-outside the USO
- Not NPO

17%
51%
32%
Parcel delivery

Direct injection

1. E-shoppers buys product
2. Product shipped from warehouse
3. Product transported cross-border
4. Parcel injected in postal network as domestic parcel
5. Parcel delivered to e-shopper
E-retailers have ample choice in delivery operators, delivery modes and delivery routes
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DG Growth: “You’re shopping online. You’ve found the perfect gift. You're at the checkout, and then... Delivery charges are how much? Forget it!”
Pricing

Delivery decisions by e-retailers play a pivotal role in consumers’ delivery choices and prices

1. Choice of delivery method
   - Variety of delivery options
     - Direct cooperation
     - Consolidator
     - Direct injection
     - Self supply
   - Size of the e-retailer
   - Products sold
   - Stage of development of the e-retailer
   - Complexity vs. customer needs

2. Choice of pricing
   - Many pricing options
     - Free delivery
     - Pass-through
     - Mark up
   - Commercial decision based on cost & demand factors
Pricing

Mystery shopping experiment design

*How much does the price charged by the delivery operator to the e-retailer for delivery influence the price charged by the e-retailer towards the e-shopper?*

- 20 trade flows
- Low/high weight goods
- Small/large e-retailers
- Comparable delivery prices
Pricing

Low correlation between prices charged by e-retailers and the public list prices

E-retailer price, €

Public list price, €

Correlation coefficient \(0.45\)
Prices for cross-border parcel delivery paid by e-shoppers generally do not reflect the prices charged by delivery operators, due to the decisions of e-retailers.
Pricing

Delivery prices are determined by a multitude of different cost factors

- **Economies of scale**
  - Delivery volumes
  - Population density in the destination area
  - Value added delivery features of delivery services
  - Interoperability of postal networks

- **Product characteristics**
  - Degree of preparation of parcels by the e-retailer
  - Characteristics of the goods delivered
  - Choice of a value added service

- **Business model of the delivery operator**
- **Labour costs**
- **Geography**
- **Exogenous factors (oil prices, currency risks, and traffic congestion ...)**
Pricing

Delivery pricing is a commercial decision

**Uniform pricing**

- For simplicity reasons

**Market-based pricing**

- Typical for industries with large fixed/common costs
- Consumer price sensitivity depends on various factors

**Missing link between cross-border prices and cost levels in destination countries**

**Public list prices seldom apply**
Pricing

Why is the price of sending a parcel 132 km from Cologne (DE) to Liége (BE) almost three times more expensive than sending an identical parcel 579 km from Cologne (DE) to Berlin (DE)?

Look at the right kind of distance and other factors
Pricing

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As in any other sector, pricing is a commercial decision in the delivery sector, driven by a number of cost- and demand factors, such as willingness to pay and volume flows.
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**European e-commerce landscape** is highly dynamic and has a **positive spillover** into the delivery sector.

E-retailers have **ample choice** in delivery operators, delivery modes and delivery routes.

Prices for cross-border parcel delivery paid by e-shoppers generally do not reflect the prices charged by delivery operators, due to the **decisions of e-retailers**

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