The economic impact of modern retail on choice and innovation in the EU food sector

Key findings
2nd October 2014
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2. Evolution of choice, innovation and their key drivers
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1. Scope and methodology
A comprehensive study, requiring outstanding resources

► A very broad scope to meet high expectations
  ► Wide scope in the EU
  ► Long period including pre-crisis
  ► Quantitative (including econometrics) and qualitative analyses

► Outstanding resources
  ► 2004 to 2012 (2 time periods per year)
  ► Data purchase / consolidation from 6 different data sources
  ► Focus on local data: 343 shops, 9 Member states, 105 consumer shopping area
  ► 23 product categories with a full set of information for each product
  ► A database of 11 million data records
  ► 6 case studies
  ► Contribution of academic experts
  ► 40 people in the consortium, 18 months work
A collaborative multifaceted team for a unique study

Scope and methodology

Multidisciplinary audit & consulting firm

Specialist economic modelling consultancy

International network of food experts
Objective of the study

- Assess the economic impact of modern retail on choice and innovation in the EU food sector
- Analyse the evolution of choice and innovation
- Identify the main potential drivers of choice and innovation (e.g., concentration) and measure their evolution
- Determine the impact of drivers on choice and innovation
The economic impact of modern retail on choice and innovation in the EU food sector –
Key Findings - October 2, 2014
Scope and methodology

Tasks

- Expert workshops and literature review
- Database construction
- Descriptive analyses
- Econometric analyses
- Case studies
## Scope and methodology

### Expert workshops and literature review

#### Validation of definitions: work process

<table>
<thead>
<tr>
<th>1&lt;sup&gt;st&lt;/sup&gt; survey round</th>
<th>Online focus group</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; survey round</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of initial thoughts about choice and innovation</td>
<td>Validation of the first round</td>
<td>Validation of conclusions providing a joint definition and operationalisation of key concepts</td>
</tr>
<tr>
<td>Emphasis on drivers and operationalisation</td>
<td>Generation of consensus around choice and innovation</td>
<td>Emphasis on differences encountered throughout the study</td>
</tr>
<tr>
<td></td>
<td>Free discussion on each topic focusing on reactions and conclusions</td>
<td></td>
</tr>
</tbody>
</table>
Components of choice

► Food choice
  ► Variety of products available in shops
  ► Variety of packaging sizes
  ► Variety of prices
  ► Variety of suppliers

► Shop choice
  ► Variety of shops to which a typical consumer has access within a normal distance (consumer shopping area)
1 Scope and methodology

Expert workshops and literature review

Measurement of innovation

- Number of new SKUs (excluding promotions)

- Innovation types
  - New product
  - Range extension
  - New packaging
  - New formulation
  - Relaunch
Innovation types (Mintel – GNPD)

► **New product**: assigned when a new range, line, or family of products is encountered. This launch type is also used if a brand that already exists on GNPD, in one country, crosses over to a new sub-category

► **New variety/range extension**: used to document an extension to an existing range of products on the GNPD

► **New packaging**: determined by visually inspecting the product for changes, and also when terms like New Look, New Packaging, or New Size are written on pack.

► **New formulation**: determined by visually looking for key terms on pack like New Formula, Even Better, Tastier, Now Lower in Fat, New and Improved, Great New Taste..

► **Relaunch**: some wording indicating that the product has been relaunched on the packaging or the product does not exist on the database but there is secondary source information (such as from a press release, magazine, trade show, website or a shop display) that the product has been relaunched
Identification and definition of potential drivers at local and national levels:

► Concentration of retailers
► Concentration of suppliers
► Measure of imbalance: in the market between retailers and suppliers
► Private label share
► Product category turnover
► Shop type
► Shop size
► New shop opening
► Socio-economic characteristics: GDP per capita, population size and density, unemployment, food consumption, retailers’ business expectations
1 Scope and methodology

Database construction

- Identification of data sources for choice and innovation
  - Nielsen – Opus
  - Nielsen – Trade dimensions
  - GNPD – Mintel
  - Eurostat

- Concentration at national level
  - Planet Retail
  - Euromonitor
Selection of shops and consumer shopping area at local level

- Identification of consumer shopping areas thanks to geolocalisation
- Consumer point of view

Geographical perimeter of each consumer shopping area (CSA)

Travel time between the central point (city hall) and outer limit of the area

- 15 min travel time for large cities
- 20 min travel time for medium and small cities
- 25 min for a rural zone
The economic impact of modern retail on choice and innovation in the EU food sector

Key Findings

October 2, 2014

► 343 shops in 105 consumer shopping areas

<table>
<thead>
<tr>
<th>GDP/Capita</th>
<th>Low</th>
<th>Medium -</th>
<th>Medium +</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of living</td>
<td>Number of CSA</td>
<td>Number of CSA</td>
<td>Number of CSA</td>
<td>Number of CSA</td>
<td>Number of CSA</td>
</tr>
<tr>
<td>Predominantly Rural (PR)</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>23</td>
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<tr>
<td>Intermediate (INT)</td>
<td>13</td>
<td>9</td>
<td>13</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td>Predominantly Urban (PU)</td>
<td>5</td>
<td>8</td>
<td>15</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>26</strong></td>
<td><strong>25</strong></td>
<td><strong>31</strong></td>
<td><strong>23</strong></td>
<td><strong>105</strong></td>
</tr>
</tbody>
</table>

Representativeness of sample vs EU27 population by standard and type of living categories

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014

Sources: Eurostat, EY analysis
Scope and methodology

Database construction

- Identification of catchment areas for each shop in the sample to assess local concentration
  - The area includes, for a given shop, all modern retail shops in the area
  - Shop point of view

Geographical perimeter of each catchment areas

Travel time between the central point (shop) and outer limit of the area
- **10 to 20 min** for hypermarkets
- **5 to 10 min** for supermarkets and discounters depending on area type

Figure 2: Example: Consumer shopping area and catchment area - Clichy-sous-Bois (FR)
Scope and methodology

Database construction

- List of shops
  - Nielsen
  - Trade Dimensions

- List of new products
  - Mintel
  - GNPD

- Socio-demographic statistics
  - National and NUTS3 levels
  - Eurostat

- List of EAN present on shelves for each 343 shops of the sample
  - Nielsen
  - Opus

- Supplier characteristics
  - Euromonitor International

- Retails characteristics
  - Planet Retail

- Output tables for descriptive statistics

- Shop level database

Database of 11 millions data records processed

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
### Database of 11 millions data records processed

<table>
<thead>
<tr>
<th>Shop coverage</th>
<th>CSA coverage</th>
<th>Country coverage</th>
<th>Product coverage</th>
<th>Time coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>343 shops</td>
<td>105 CSAs</td>
<td>Belgium</td>
<td>23 categories</td>
<td>2004-2012</td>
</tr>
<tr>
<td>&amp; Hypermarkets</td>
<td></td>
<td>Czech Rep.</td>
<td>Frozen pizzas/starter, frozen ready cooked meals, frozen vegetables</td>
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<tr>
<td>&amp; Supermarkets</td>
<td></td>
<td>Denmark</td>
<td>Ice cream</td>
<td></td>
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<tr>
<td>&amp; Discounters</td>
<td></td>
<td>France</td>
<td>Milk, cheese, yoghurt, butter/margarine, desserts</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Hungary</td>
<td>Bread, ham / delicatessen</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Italy</td>
<td>Baby food, canned vegetables, edible oil, savoury snacks</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Poland</td>
<td>Coffee, tea, Biscuits, cereals, chocolate</td>
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<tr>
<td></td>
<td></td>
<td>Portugal</td>
<td>Fruit juices, mineral water, soft drinks</td>
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<td></td>
<td></td>
<td>Spain</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>51% of EU pop</td>
<td></td>
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<tr>
<td>All main retail groups and banners in Europe</td>
<td>Country coverage</td>
<td>Product coverage</td>
<td>Time coverage</td>
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</table>
1. Scope and methodology

Descriptive analyses

► Aimed to distill the richness of the database into meaningful statistics
► Produced a consistent reporting pack covering choice, innovation and all potential drivers for each member state and at consolidated level, for short and long periods
► Approach allowed comparison between CSA, countries, CSA types, shop types, identifying wider trends as well as those unique to particular markets
► Informs the econometric analysis and provides hypotheses for testing
Approach

- Analyse the historical evidence for the impact of potential drivers on various measures of choice and innovation, controlling for local and national influences
- Model the behaviour of each shop and the selection of products that it offers, with reference to various national and local drivers and shop characteristics

Econometric analyses measuring the impact of drivers on choice and innovation

Scope and methodology
Econometric analyses measuring the impact of drivers on choice and innovation

\[ \text{choice or innovation}_{s,p,t} = f \{ \]

- shop type\(_{s,t}\)
- shop size\(_{s,t}\)
- private label share\(_{n,s,p,t}\)
- retailers' concentration\(_{n,s,t}\)
- suppliers' concentration\(_{n,s,p,t}\)
- [or imbalance (retailer vs supplier concentration)\(_{n,s,p,t}\)]
- socio-demographic indicators\(_{c,t}\)
- rural/urban category\(_c\) or population density\(_c\)
- product category turnover\(_{n,p,t}\)
- economic prosperity/macroeconomic conditions\(_{c/n,t}\)
- Member State\(_n\)
- product category\(_p\)
- year\(_y\)
- season\(_m\)
- new competitor shop opening\(_{s,t}\)

\}
Scope and methodology

Econometric analyses measuring the impact of drivers on choice and innovation

► Two data sets to maximize both the length of time period and the number of Member States covered

► Econometric analysis requires data to be available for all drivers in all periods for all shops

► The analysis was applied to the following two data sets:

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>296 shops</td>
<td>337 shops</td>
</tr>
<tr>
<td>France</td>
<td>France</td>
</tr>
<tr>
<td>Italy</td>
<td>Italy</td>
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<tr>
<td>Poland</td>
<td>Poland</td>
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<tr>
<td>Portugal</td>
<td>Portugal</td>
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<td>Spain</td>
<td>Spain</td>
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<td></td>
<td>Hungary</td>
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<tr>
<td></td>
<td>Belgium</td>
</tr>
</tbody>
</table>
Case studies complementing the analysis and serving as illustrative examples

Three EAN barcode product categories
- in Finland
- in the Netherlands
- in Spain

Three non-EAN barcode product categories
- in France
- in Belgium
- in Germany
QUESTIONS
2. Evolution of choice, innovation and their key drivers
Evolution of choice
Choice in shops, alternative products and brand suppliers has increased in the majority of sampled MS

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<tbody>
<tr>
<td></td>
<td>Food Choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choice in alternative products**</td>
<td>7,9%</td>
<td>2,4%</td>
<td>5,1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choice in packaging sizes</td>
<td>5,0%</td>
<td>2,0%</td>
<td>3,5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choice in alternative suppliers**</td>
<td>5,6%</td>
<td>1,5%</td>
<td>3,5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choice in prices per product category¹</td>
<td>+</td>
<td>--</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shop Choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choice in shops*</td>
<td>1,8%</td>
<td>1,3%</td>
<td>1,6%</td>
<td></td>
</tr>
</tbody>
</table>

+ Positive CAGR; - Negative CAGR; ++ CAGR is twice as much as average growth value; -- CAGR is twice as less as average growth value

¹: Results need to be considered with caution because of inconsistency found in data
Choice in alternative products

Per CSA - Type of living

Annual growth of total number of EAN by CSA type

Source: EY analysis based on © Nielsen Opus - FR-IT-PT-SP-HU-BE, 23 product categories

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Choice in alternative products

Per CSA – GDP per capita

Annual growth of total number of EAN by GDP

Source: EY analysis based on © Nielsen Opus - FR-IT-PT-SP-HU-BE, 23 product categories

The economic impact of modern retail on choice and innovation in the EU food sector –
Key Findings - October 2, 2014
Choice in alternative products

Per shop type

Annual growth of total number of EAN by shop type

- **Hypermarkets**: 8.8% CAGR(04 - 08), 5.2% CAGR(08 - 12), 4.7% CAGR(04 - 12)
- **Supermarkets**: 2.2% CAGR(04 - 08), 2.6% CAGR(08 - 12), 3.6% CAGR(04 - 12)
- **Discount Stores**: 9.3% CAGR(04 - 08), 6.8% CAGR(08 - 12), 8.0% CAGR(04 - 12)

Source: EY analysis based on © Nielsen Opus - FR-IT-PT-SP-HU-BE, 23 product categories

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014

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Choice in alternative products

### Annual growth of total number of EAN by product category 2004-2012

- Ham/delicatessen: 8%
- Cereals: 7%
- Starters/pizzas: 7%
- Ready-cooked meals: 7%
- Ice cream: 6%
- Baby food (ambient): 6%
- Tea: 6%
- Chocolate (Bar + Candies): 6%
- TOTAL: 5%
- Mineral water: 5%
- Dessert: 5%
- Savoury snacks: 5%
- Milk: 5%
- Frozen vegetables: 5%
- Soft-drinks: 5%
- Yoghurt: 5%
- Biscuits: 4%
- Edible oil: 4%
- Canned vegetables: 3%
- Fruit juices (ambient): 3%
- Coffee: 3%
- Butter/margarine: 2%

**Source:** EY analysis based on © Nielsen Opus, at local level - FR-IT-PT-SP-HU-BE, 2004-2012

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Choice in packaging sizes

Per CSA - Type of living

Annual growth of total number of pack sizes by CSA

Source: EY analysis based on © Nielsen Opus - FR-IT-PT-SP-HU-BE, 23 product categories
Choice in packaging sizes

Per CSA – GDP per capita

Annual growth of total number of pack sizes by GDP

Source: EY analysis based on © Nielsen Opus - FR-IT-PT-SP-HU-BE, 23 product categories
Choice in packaging sizes

Per shop type

Annual growth of total number of pack sizes by shop type

- **Hypermarkets**
  - CAGR(04 - 08): 5.0%
  - CAGR(08 - 12): 3.2%
  - CAGR(04 - 12): 1.5%

- **Supermarkets**
  - CAGR(04 - 08): 2.7%
  - CAGR(08 - 12): 2.7%
  - CAGR(04 - 12): 2.7%

- **Hard Discounters**
  - CAGR(04 - 08): 5.7%
  - CAGR(08 - 12): 3.9%
  - CAGR(04 - 12): 4.8%

**Source**: EY analysis based on © Nielsen Opus - FR-IT-PT-SP-HU-BE, 23 product categories
Choice in alternative suppliers

Per product category

Annual growth in number of suppliers by product category 2004-2012

Choice in alternative suppliers

Per Member State

Annual growth in number of suppliers by MS

Source: EY analysis based on © Nielsen Opus - 23 product categories,
Choice in shops

Annual growth in number of shops by CSA type

Per CSA - Type of living

- Predominantly urban: CAGR(04-08) 1.7%, CAGR(08-12) 1.6%, CAGR(04-12) 1.6%
- Intermediate: CAGR(04-08) 1.8%, CAGR(08-12) 0.76%, CAGR(04-12) 1.26%
- Predominantly rural: CAGR(04-08) 3.6%, CAGR(08-12) 3.76%, CAGR(04-12) 3.76%
- TOTAL: CAGR(04-08) 1.9%, CAGR(08-12) 1.3%, CAGR(04-12) 1.6%

Source: EY analysis based on © Nielsen Trade Dimensions – FR-IT-SP-PT
2 Evolution of choice, innovation and their key drivers

Choice in shops

Per CSA – GDP per capita

Annual growth in number of shops by GDP

Source: EY analysis based on © Nielsen Trade Dimensions – FR-IT-SP-PT

The economic impact of modern retail on choice and innovation in the EU food sector –
Key Findings - October 2, 2014
Choice in shops

Per shop type

Annual growth in number of shops across CSAs by shop type

Source: EY analysis based on © Nielsen Trade Dimensions – FR-IT-SP-PT

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Evolution of innovation
Innovation: decline since 2008

Evolution of innovations

Evolution of the number of new EANs

CAGR(06-08): 3.8%
CAGR(08-10): -1.2%
CAGR(10-12): -5.3%

Source: EY analysis based on © Nielsen Opus – BE-FR-IT-PO-PT-SP

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Innovation: decline since 2008

Number of innovations by CSA type

Annual growth in number of new products by CSA type

Source: EY analysis based on © Nielsen Opus – BE-FR-IT-PO-PT-SP
Evolution of choice, innovation and their key drivers

Product innovation: decline over almost all product categories

Per product category

Annual growth in number of new EAN codes by product category 2004-2012

Source: EY analysis based on © Nielsen Opus – BE-FR-IT-PO-PT-SP
## Evolution of choice, innovation and their key drivers

### Innovation: development of new packaging

**Per type of innovation across product categories**

**Proportion of innovation types by product category**

![Proportion of innovation types by product category](image)

Source: EY analysis based on © Mintel GNPD and © Nielsen Opus – 2004-2012

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Innovation: development of new packaging

Per type of innovation across MS

Proportion of types of innovations by MS (local level)

Source: EY analysis based on © Mintel GNPD and © Nielsen Opus – 2004-2012
Innovation: development of new packaging

Per type of innovation and product category

Proportion of types of innovations: Dairy

Source: EY analysis based on © Mintel GNPD and © Nielsen Opus – 2004-2012
Innovation: development of new packaging

Per type of innovation and product category

Proportion of types of innovations: Fresh non dairy

- Relaunch
- Range extension
- Formula
- Packaging
- Product

Source: EY analysis based on © Mintel GNPD and © Nielsen Opus – 2004-2012
Evolution of choice, innovation and their key drivers

Innovation: development of new packaging

Per type of innovation and product category

Proportion of innovation types by category: Frozen

Source: EY analysis based on © Mintel GNPD and © Nielsen Opus – 2004-2012
Innovation: development of new packaging

Per type of innovation and product category

Proportion of types of innovations: Savoury grocery

Source: EY analysis based on © Mintel GNPD and © Nielsen Opus – 2004-2012
Innovation: development of new packaging

Per type of innovation and product category

Proportion of types of innovations: Sweet grocery

Source: EY analysis based on © Mintel GNPD and © Nielsen Opus – BE-FR-IT-PO-PT-SP
Evolution of choice, innovation and their key drivers

Innovation: development of new packaging

Per type of innovation and product category

Proportion of types of innovations: Beverage

Source: EY analysis based on © Mintel GNPD and © Nielsen Opus – 2004-2012

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Evolution of a selection of potential key drivers
Potential drivers of choice and innovation

Definition of potential drivers at local and national levels:

► Concentration of retailers
► Concentration of suppliers
► Measure of imbalance: in the market between retailers and suppliers
► Private label share
► Product category turnover
► Shop type
► Shop size
► New shop opening
► Socio-economic characteristics: GDP per capita, population size and density, unemployment, food consumption, retailers’ business expectations

Source EY analysis based on © Planet Retail, with PHILCARTO, HHI 2004-2012
Mixed evolution of retailer concentration at national level

Modern retail concentration (HHI) has evolved between 2004 and 2012:
- Decrease in 16 EU MS
- Increase in the other 10 MS

Source EY analysis based on © Planet Retail, PHILCAR TO, HHI 2004-2012
The economic impact of modern retail on choice and innovation in the EU food sector –
Key Findings - October 2, 2014

Prevalence of modern retail across Europe

Per Member State

Share of modern retail in total edible grocery market in the EU

Source: EY analysis based on © Planet Retail

Evolution of choice, innovation and their key drivers
Results of the study

Growth of modern retail shops

Evolution of the number of modern retail shops: 2% annual increase

Annual growth in modern retail shops in the EU 27 (%) 2004-2012

Source EY analysis based on © Planet Retail
Decrease of retailer concentration at local level

Retail concentration by consumer shopping area decreased slightly between 2004 and 2012

No significant general conclusions for types of living areas

CAGR - retail concentration by CSA and GDP range

Source: EY analysis based on © Nielsen Trade Dimensions., HHI - FR-IT-PT-SP
PU: Predominantly Urban
IN: Intermediate
PR: Predominantly Rural
The total floorspace of modern retail shops increased by 44% over the last decade in the EU.

### Total sales area per shop type

- **Hypermarkets (>= 2,500 m²)**
- **Supermarkets (400 to 2,499 m²)**
  - Growth in all shop types over the past decade
  - Higher growth during the pre-crisis period than the crisis period

### Average sales area per shop type

On average for each modern retail outlet:

- **Discount stores have grown by 2% over the last decade**
- **Supermarkets have grown by 1.1%**
- **Hypermarkets have decreased by -0.5% over the last decade**
Increase of supplier concentration at national level

Supplier concentration at national level: 1.3% annual increase

- Growth of 1.9% during the pre-crisis period and 0.6% over the crisis period
- Everywhere in the 14 MS except Finland
- Frozen ready-cooked meals, baby food, cereals and coffee have the highest concentration levels over the last decade

Source: EY analysis based on © Euromonitor International with PHILCARITO
Evolution of choice, innovation and their key drivers

Evolution of supplier concentration at local level

Supplier concentration at local level: 0.9% annual decrease

- Decrease of -1.3% for the pre-crisis period compared to -0.4% during the crisis period
- Link to the increase in choice in suppliers

Source: EY analysis based on © Nielsen Opus, 2004-2012, BE-FR-IT-PO-PT-SP
Private label share: 5% annual increase

At national and local levels

- At procurement level, private label share ranges from 4.5% on average in Romania to 32.9% on average in Germany in 2012
- At national level, increase of private label share in the 14 MS sample
- At local level, higher proportion of private label products on shop shelves

Source: EY analysis based on © Euromonitor International – 23 product categories
Product category turnover: 2.9% annual increase

Variation across the sample MS

- Annual growth during the pre-crisis period (4.5%) greater than after 2008 (1.4%)
- Increase for 20 of the 23 product categories except for mineral water, butter/margarine and edible oil

Source: EY analysis based on © Euromonitor International – 23 product categories
Evolution of socio-economic characteristics in CSAs

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<tbody>
<tr>
<td>Unemployment rate</td>
<td>+3.2%</td>
<td>-5.4%</td>
<td>+13.2%</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>+2.0%</td>
<td>+3.2%</td>
<td>+0.8%</td>
</tr>
</tbody>
</table>

Evolution of choice, innovation and their key drivers
Econometrics results

Choice

Innovation
Positive impacts on choice

- Product category turnover
- Economic prosperity
- Shop size
- Shop type
- New shop opening in the local area

No or low economic impact on choice

- Concentration drivers
- Private labels (+)
- Unemployment (+)
- Population density (-)
### Econometrics results

**Product category turnover, economic prosperity, shop size and shop type are the most important drivers for choice**

<table>
<thead>
<tr>
<th>Drivers for choice</th>
<th>Product variety</th>
<th>Product size variety</th>
<th>Product supplier variety</th>
<th>Product price variety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>impact</td>
<td>Signif.</td>
<td>Import.</td>
<td>impact</td>
</tr>
<tr>
<td>Product category turnover</td>
<td>▲</td>
<td>✓✓</td>
<td>●●</td>
<td>✓</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>▲</td>
<td>✓✓</td>
<td>●●</td>
<td>✓</td>
</tr>
<tr>
<td>Shop floor space</td>
<td>▲</td>
<td>✓✓</td>
<td>●●</td>
<td>✓</td>
</tr>
<tr>
<td>Shop type</td>
<td>▲</td>
<td>✓✓</td>
<td>N.A.</td>
<td>✓</td>
</tr>
<tr>
<td>New shop opening in the local area</td>
<td>▲</td>
<td>✓✓</td>
<td>●</td>
<td>✓</td>
</tr>
</tbody>
</table>

- ▲: Positive impact
- ▼: Negative impact
- ?: Where the sign varies according to whether the parameter is estimated over the long or short data sets
- ✓✓: Significant at 1% level
- ●: Impact of more than 5%
- ●●: Impact of more than 10%
- --: Not statistically significant or economically important according to these thresholds

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Product category turnover, economic prosperity, shop size and shop type are the most important drivers for choice.

**Product category turnover**

Statistical significance
- 1% level

Direction of impact
- Positive

Economic importance
- Large

Econometrics results

Choice in variety of EANS versus national product category sales turnover in 2010 period 1 in four Member States

Sources: Analysis based on © Nielsen Opus and © Euromonitor International
Econometrics results

Product category turnover, economic prosperity, shop size and shop type are the most important drivers for choice

**GDP per capita**

- **Statistical significance**
  - 1-5% level
- **Direction of impact**
  - Positive
- **Economic importance**
  - Large

**Floorspace**

- **Statistical significance**
  - 1% level
- **Direction of impact**
  - Positive
- **Economic importance**
  - Large

Sources: Analysis based on © Nielsen Opus and Eurostat
Other drivers have no or low economic impact on choice

<table>
<thead>
<tr>
<th>Drivers for choice</th>
<th>Product variety</th>
<th>Product size variety</th>
<th>Product supplier variety</th>
<th>Product price variety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>impact</td>
<td>Signif.</td>
<td>Import</td>
<td>impact</td>
</tr>
<tr>
<td>Retail concentration at national level</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Retail concentration at local level</td>
<td>..</td>
<td>..</td>
<td>▼</td>
<td>✓</td>
</tr>
<tr>
<td>Supplier concentration at national level</td>
<td>..</td>
<td>..</td>
<td>▲</td>
<td>✓✓</td>
</tr>
<tr>
<td>Imbalance between retailers and suppliers at national level</td>
<td>..</td>
<td>..</td>
<td>?</td>
<td>✓✓</td>
</tr>
<tr>
<td>Private labels (local)</td>
<td>▲</td>
<td>✓✓</td>
<td>..</td>
<td>▲</td>
</tr>
<tr>
<td>Unemployment</td>
<td>▲</td>
<td>✓✓</td>
<td>..</td>
<td>▲</td>
</tr>
<tr>
<td>Population density</td>
<td>▼</td>
<td>✓✓</td>
<td>●</td>
<td>▼</td>
</tr>
</tbody>
</table>

Too few observations for conclusions to be drawn with confidence.
Little indication of an impact of national retail concentration on choice

Retail concentration at national level

Very few observations from which to draw conclusions

Statistical significance
► No, except product price variety

Direction of impact
► Negative for product price variety

Economic importance
► Large for product price variety

Sources: Analysis based on © Nielsen Opus and © Planet Retail
Econometrics results

There is no evidence that supplier concentration is an economic driver of choice

Supplier concentration at national level

Statistical significance
► No (except product size variety)

Direction of impact
► Positive for product size variety

Economic importance
► Small

Choice in variety of EAN codes versus national supplier concentration by product category, 2008

Sources: Analysis based on © Nielsen Opus and © Euromonitor International
### Other econometric results regarding factors driving choice

#### Population density
- **Statistical significance**: 1% level
- **Direction of impact**: Negative
- **Economic importance**: Moderate

#### Unemployment
- **Statistical significance**: Various
- **Direction of impact**: Positive; negative for product price variety
- **Economic importance**: Small

#### Private labels
- **Statistical significance**: 1% level
- **Direction of impact**: Positive
- **Economic importance**: Small

#### Measure of imbalance between retailers and suppliers at national level
- **Statistical significance**: Various
- **Direction of impact**: Ambiguous for statistically significant cases
- **Economic importance**: Moderate for product price variety
Econometrics results

But there is some indication from graphical analysis that high shares of private labels may be associated with less choice in hypermarkets and supermarkets.

Share of private labels (in each product category) in each shop

Choice in variety of EAN codes versus private labels share, by shop type

Sources: Analysis based on © Nielsen Opus and © Euromonitor International
Measured impacts on innovation

- Product category turnover (+)
- Shop size (+)
- Shop type (+)
- New shop opening in the local area (+)
- Retailers’ business expectations (+)
- Unemployment (-)
- Population density (-)
- Local retailer and supplier concentration (-)

No or low economic impact on innovation

- Private labels
### Econometrics results

Shop size, shop type, retailer business expectations and product category turnover are the most important positive drivers for innovation.

<table>
<thead>
<tr>
<th>Drivers for innovation</th>
<th>Opus innovations</th>
<th>New products</th>
<th>New packaging</th>
<th>New formulations</th>
<th>New line extensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shop size</td>
<td>✓✓</td>
<td>●●</td>
<td></td>
<td>✓✓</td>
<td>●●</td>
</tr>
<tr>
<td>Shop type</td>
<td>✓✓</td>
<td>N.A.</td>
<td></td>
<td>✓✓</td>
<td>N.A.</td>
</tr>
<tr>
<td>Product category turnover</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
</tbody>
</table>

- **▲**: Positive impact
- **▼**: Negative impact
- **?**: Where the sign varies according to whether the parameter is estimated over the long or short data sets
- **✓**: Significant at 5% level
- **✓✓**: Significant at 1% level
- **●●**: Impact of more than 5%
- **●●●**: Impact of more than 10%
- **--**: Not statistically significant or economically important according to these thresholds

Too few observations for conclusions to be drawn with confidence.
Shop size, shop type, retailer business expectations and product category turnover are the most important positive drivers for innovation

### Shop size

- **Statistical significance**: 1% level
- **Direction of impact**: Positive
- **Economic importance**: Large

### Retailer business expectations

- **Very few observations from which to draw conclusions**
- **Statistical significance**: 1% level
- **Direction of impact**: Positive
- **Economic importance**: Large

### Shop type

- **Statistical significance**: 1% level
- **Direction of impact**: Positive (larger formats offer a greater number of innovative products)
- **Economic importance**: Large

### Opus innovations versus retailer business expectations

Sources: Analysis based on © Nielsen Opus and © Eurostat

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The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Shop size, shop type, retailer business expectations and product category turnover are the most important positive drivers for innovation.

**Product category turnover**

- **Statistical significance**
  - 1% level

- **Direction of impact**
  - Generally positive

- **Economic importance**
  - Various

*New EAN codes (innovations) versus national product category sales turnover in 2010 period 1 in four Member States*

Sources: Analysis based on © Nielsen Opus and © Euromonitor International.
## Other drivers have various impacts on innovation

<table>
<thead>
<tr>
<th>Drivers for innovation</th>
<th>Opus innovations</th>
<th>New products</th>
<th>New packaging</th>
<th>New formulations</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>impact</td>
<td>Signif.</td>
<td>Import.</td>
<td>impact</td>
<td>Signif.</td>
</tr>
<tr>
<td>Retail concentration at national level</td>
<td>▲</td>
<td>✓ ✓</td>
<td>● ●</td>
<td>▲</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Retail concentration at local level</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Supplier concentration at national level</td>
<td>▼</td>
<td>✓ ✓</td>
<td>● ●</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Imbalance between retailers and suppliers at national level</td>
<td>▲</td>
<td>✓ ✓</td>
<td>● ●</td>
<td>▲</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Private labels</td>
<td>▲</td>
<td>✓ ✓</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>New shop opening in the local area</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>▲</td>
<td>✓ ✓</td>
</tr>
</tbody>
</table>

Too few observations for conclusions to be drawn with confidence.
Greater concentration among retailers at a local level is associated with less innovation in new packaging

**Retailer concentration at the procurement level**

Very few observations from which to draw conclusions

- Statistical significance
  - 1%
- Direction of impact
  - Positive except for new packaging (negative) and new formulations (ambiguous)
- Economic importance
  - Large (for modern retail measure)

**Retailer concentration at the local level**

- Statistical significance
  - No (except for new packaging)
- Direction of impact
  - Negative
- Economic importance
  - Large for new packaging

**New EAN codes (innovation) versus national retail concentration**

Source: Analysis based on © Nielsen Opus and © Planet Retail

**New EAN codes (innovation) versus local retail concentration in two years**

Sources: Analysis based on © Nielsen Opus and © Nielsen Trade Dimensions
Greater concentration among suppliers at national level is associated with less innovation (some measures)

Supplier concentration at the national level

Statistical significance
► 1% for several innovation indicators

Direction of impact
► Mostly negative

Economic importance
► Moderate to large

Sources: Analysis based on © Nielsen Opus and © Euromonitor International
The finding for supplier concentration is also reflected in the finding for retailer – supplier imbalance

Imbalance between retailers and suppliers at national level

Statistical significance
- 1% for most innovation indicators

Direction of impact
- Positive (i.e. a greater imbalance in favour of suppliers has a negative impact) (except new packaging where ambiguous)
- But remember that the sample does not have cases with high national retail concentration

Economic importance
- Generally large

Sources: Analysis based on © Nielsen Opus and © Euromonitor International
### Econometrics results

Other general economic drivers have low or negative impact on innovation

<table>
<thead>
<tr>
<th>Drivers for innovation</th>
<th>Opus innovations</th>
<th>New products</th>
<th>New packaging</th>
<th>New formulations</th>
<th>New line extensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>impact</td>
<td>Signif.</td>
<td>Import.</td>
<td>impact</td>
<td>Signif.</td>
</tr>
<tr>
<td>Unemployment</td>
<td>▼</td>
<td>✓✓</td>
<td>⬤</td>
<td>▼</td>
<td>✓✓</td>
</tr>
<tr>
<td>Population</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Population density</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
</tbody>
</table>
The rate of unemployment in the region has a generally important negative impact on innovation.

**Unemployment**

Statistical significance
- 1% level (in long data set)

Direction of impact
- Negative (in long data set)

Economic importance
- Large

Sources: Analysis based on © Nielsen Opus and © Eurostat
### Other econometric results regarding factors driving innovation

<table>
<thead>
<tr>
<th>Population and population density</th>
<th>Private labels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statistical significance</strong></td>
<td></td>
</tr>
<tr>
<td>► 1% (for population density for new packaging and new formulations)</td>
<td></td>
</tr>
<tr>
<td><strong>Direction of impact</strong></td>
<td></td>
</tr>
<tr>
<td>► <strong>Negative (in those cases)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Economic importance</strong></td>
<td></td>
</tr>
<tr>
<td>► Large (in those cases)</td>
<td></td>
</tr>
</tbody>
</table>

**Private labels**

- **Statistical significance**
  - 1% level for a few cases
- **Direction of impact**
  - No consistent direction found
- **Economic importance**
  - Small
But there is some indication from graphical analysis that high shares of private labels may be associated with less innovation in hypermarkets and supermarkets.

Sources: Analysis based on © Nielsen Opus and © Euromonitor International
QUESTIONS
4. Presentation of the case studies
Objectives of the case studies

A. Broaden the scope of coverage in the study

B. Provide concrete examples of how and why certain drivers impact choice and product innovation

C. Investigate the impact of sector/supply chain characteristics on choice and product innovation
Our approach
Presentation of the case studies

Case study design: combination of product / country

Three EAN barcode product categories

- in Finland
- in the Netherlands
- in Spain

Three non-EAN barcode product categories

- in France
- in Belgium
- in Germany
Case study selection: rationale

► Above average product consumption and production

► Economic significance of the industry
  ► Domestic market / trade

► Diversity in supply chain organisation including
  ► Different levels of upstream concentration
  ► Different levels of vertical integration / coordination across the supply chain

► Include high levels of retail concentration and high levels of supplier concentration

► Closer link to the agricultural level
Key research questions

The supply chain
1. What does the supply chain for each product type look like in each Member State from farm to retail?
2. Who are the main actors that drive choice and innovation for each product type?
3. What are the relations between upstream suppliers throughout the supply chain and retailers?

Choice and innovation
1. What are the characteristics of choice and innovation per product and in each Member State?
2. Which level of the chain is driving innovation?
3. How have choice and innovation evolved over the last decade?
4. What are the key drivers and obstacles to choice and innovation for each product and Member State?
Case study research

1. Describe context and trends
   ▶ Existing market studies
   ▶ Academic work
   ▶ Brief discussions with trade associations

2. Identify specific topics

3. Describe supply chain including route to market for new products

4. Interview main stakeholders
   ▶ 3-5 suppliers
   ▶ 4-5 retailers
   ▶ 1-2 group purchasing organisations
   ▶ Consumer association
   ▶ Other (e.g. authority, researchers where relevant)

5. Analysis

6. Reporting
Key conclusions
Key conclusions

1. Choice has generally increased

2. Innovation has generally been stable or positive

3. Innovation increases due to upstream supply organisation and consolidation

4. Increased choice through innovation, retailer competition and the need for lower consumer prices
Market & supply chain overview
## Overview of key market drivers (1/2)

<table>
<thead>
<tr>
<th>Belgium</th>
<th>France</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fresh tomatoes</strong></td>
<td><strong>Apples</strong></td>
<td><strong>Fresh pork</strong></td>
</tr>
<tr>
<td>► Stable/declining production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Large seasonal import/export volumes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► <strong>Producer organisations</strong>, united under VBT-LAVA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► All tomato farmers in BE must be members of PO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Sale through auction or contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Stable production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► <strong>Third largest producer in the EU</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Organised into <strong>producer organisations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Existence of vertically integrated “clubs” of breeders, producers and traders to promote a single variety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Largest producer and consumer in EU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Large share of domestic production is exported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► <strong>Decline in consumption</strong> of pork meat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Retail driven by <strong>discounters</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Example supply chain: pork in Germany

Presentation of the case studies

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
### Overview of key market drivers (2/2)

<table>
<thead>
<tr>
<th>Spain</th>
<th>Finland</th>
<th>The Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olive oil</td>
<td>Milk</td>
<td>Cheese</td>
</tr>
<tr>
<td>► Largest producer in world</td>
<td>► Very high domestic demand</td>
<td>► One of largest producers in the EU</td>
</tr>
<tr>
<td>◄ &gt;50% of domestic production exported</td>
<td>◄ Growing market size due to higher milk price &amp; premium products</td>
<td>◄ Second largest exporter in EU (more than 60% of production)</td>
</tr>
<tr>
<td>◄ Increasing concentration among cooperatives</td>
<td>◄ Mainly domestic raw milk</td>
<td>◄ High domestic consumption</td>
</tr>
<tr>
<td>◄ Strong pressure on price by retailers</td>
<td>◄ Highly concentrated</td>
<td>◄ High vertical integration &amp; organisation</td>
</tr>
<tr>
<td></td>
<td>◄ Supply chain (Valio)</td>
<td>◄ 7 dairies producing cheese including Friesland Campina</td>
</tr>
<tr>
<td></td>
<td>◄ Retail (most concentrated in Eurozone)</td>
<td>◄ High retail concentration</td>
</tr>
</tbody>
</table>
Example supply chain: milk in Finland

Importance of VALIO in the supply chain
HHI around 5000

C3=88.3% at retail level
Consumer choice
### Choice has generally increased

<table>
<thead>
<tr>
<th>Product category</th>
<th>Level of choice (current)</th>
<th>Evolution of choice over time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk in Finland</td>
<td>High</td>
<td>➔</td>
</tr>
<tr>
<td>Pork in Germany</td>
<td>Low</td>
<td>➔</td>
</tr>
<tr>
<td>Tomato in Belgium</td>
<td>Medium</td>
<td>➔</td>
</tr>
<tr>
<td>Cheese in the Netherlands</td>
<td>High</td>
<td>➔</td>
</tr>
<tr>
<td>Apple in France</td>
<td>Medium</td>
<td>➔</td>
</tr>
<tr>
<td>Olive oil in Spain</td>
<td>High</td>
<td>➔</td>
</tr>
</tbody>
</table>
### Key characteristics of consumer choice (1/2)

<table>
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<tr>
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<th>France</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh tomatoes</td>
<td>Apples</td>
<td>Fresh pork</td>
</tr>
<tr>
<td><strong>Medium-high level of choice</strong></td>
<td><strong>Medium level of choice</strong></td>
<td><strong>Relatively low level of choice</strong></td>
</tr>
<tr>
<td>► Legal &amp; commercial categorisations</td>
<td>► Colour, variety, size, packaging, quality, price</td>
<td>► Packaged and non-packaged options,</td>
</tr>
<tr>
<td>► Packaging and presentation</td>
<td>► Origin, cultivation technique, use segmentation</td>
<td>► Availability of different cuts, grades, packaging options, brands, and prices</td>
</tr>
<tr>
<td>► Production method</td>
<td>► <strong>But consumers can only remember an average of 5 variety names</strong></td>
<td>► Private-label domination of the market</td>
</tr>
<tr>
<td>► Variety</td>
<td>►</td>
<td>► <strong>Over the counter seen as necessary to bring in customers, profits lie in pre-packaged</strong></td>
</tr>
<tr>
<td>► Low development of private labels</td>
<td>►</td>
<td></td>
</tr>
<tr>
<td>► <strong>POs consider the number of varieties too high</strong></td>
<td>►</td>
<td></td>
</tr>
</tbody>
</table>

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
4 Presentation of the case studies

Example: Typical number of tomato varieties available in different retail outlets in Belgium

<table>
<thead>
<tr>
<th>RETAILER</th>
<th>CUSTOMER PROFILE</th>
<th>N° VARIETIES ON SHELVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARREFOUR</td>
<td>All consumer segments</td>
<td>+ 30, i.e. all available</td>
</tr>
<tr>
<td>DELHAIZE</td>
<td>Urban, mid-upper income</td>
<td>+ 20, of which 15 specialties</td>
</tr>
<tr>
<td>COLRUYT</td>
<td>Sustainability-minded, price-sensitive consumers</td>
<td>+ 15, of which 11 small ones</td>
</tr>
<tr>
<td>ALDI</td>
<td>Low-mid income</td>
<td>Max 3</td>
</tr>
</tbody>
</table>

Source: VBT + Interviews + Shop visits
Presentation of the case studies

Example: Apple varieties observed on shelves in hypermarkets / supermarket and discount stores in France

Source: SNM, L'offre en pomme au stade détail en 2008
### Key characteristics of consumer choice (2/2)

<table>
<thead>
<tr>
<th>Spain Olive oil</th>
<th>Finland Milk</th>
<th>The Netherlands Cheese</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wide range</strong> of products differentiated by</td>
<td><strong>Wide range</strong> of products including</td>
<td><strong>Wide range</strong> of products including different</td>
</tr>
<tr>
<td>Type of oil</td>
<td>‘Standard’ milk products</td>
<td>Types of cheese</td>
</tr>
<tr>
<td>Variety of olives</td>
<td>Flavoured,</td>
<td>Brands</td>
</tr>
<tr>
<td>Volume and packaging</td>
<td>Nutrients</td>
<td>Traditional / new</td>
</tr>
<tr>
<td>Brand / Private label</td>
<td>functional milk products</td>
<td>Private labels</td>
</tr>
<tr>
<td>Price</td>
<td>Relatively low number of suppliers or price points</td>
<td>Packaging</td>
</tr>
<tr>
<td>Used as a ‘<strong>hook</strong>’ by retailers to get customers though the door</td>
<td>Long <strong>lead times</strong> for new products to enter market</td>
<td>Imported / domestic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prices</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Some retailers consider choice as “too high” / confusing</strong></td>
</tr>
</tbody>
</table>
Evolution of consumer choice

Belgium
Fresh tomatoes
► Significant increase nationally
  ► Evolution in types, packaging & presentation
► Share of specialty tomatoes to increase further

France
Apples
► Increase in varieties and packaging nationally
  ► But at local level choice stable due to shelf space limits
► Cannibalisation between SKUs for end consumers

Germany
Fresh pork
► Increase in choice nationally thanks to
  ► growing popularity of packaged pork
  ► high price sensitivity (70% sold as price promotions)

Spain
Olive oil
► Increase through more variety in quality nationally
  ► Strong premiumisation strategy
  ► Packaging options have increased

Finland
Milk
► Stable level of choice nationally
  ► No new entrants but private labels provide additional price points

The Netherlands
Cheese
► High and stable number of brands/products nationally
  ► About 30% branded, 40% private label, 30% imported
Example: Evolution of apples production by variety, from 2004 to 2013 (estimated data for 2013) in France

Source: ANPP
Determinants of consumer choice

**Belgium**
- Fresh tomatoes
  - Retailer shelf space management
  - CAP regime structures production
  - Consumer interest in specialty tomatoes

**France**
- Apples
  - Producer search for added value and higher profits
  - Dietary habits

**Germany**
- Fresh pork
  - Little differentiation and branding leads to
    - Increase in packaged product
    - Meat counters to differentiate offers

**Spain**
- Olive oil
  - Increasing competition
  - Shop size and shop type
  - Investment in marketing to increase perceived added value
  - High share of private labels (>50%)

**Finland**
- Milk
  - Largest supplier (Valio) operates 10% renewal rate per year
  - 50% of product launches considered successful
  - Rising share of private labels (11%)

**The Netherlands**
- Cheese
  - Increasing share of private labels (32.5%)
  - Limited shelf space
  - Changes in consumer behaviour, preferences and expectations
Example: Brand sale share and evolution for olive oil in Spain

<table>
<thead>
<tr>
<th>[2004]</th>
<th>[2012]</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOS Corp Alimentaria SA/Deoleo SA</td>
<td>SOS Corp Alimentaria SA/Deoleo SA</td>
</tr>
<tr>
<td>Aceites del Sur Coosur SA (Acesur)</td>
<td>Aceites del Sur Coosur SA (Acesur)</td>
</tr>
<tr>
<td>Miguel Gallego SA (MIGASA)</td>
<td>Miguel Gallego SA (MIGASA)</td>
</tr>
<tr>
<td>Hojiblanca, Grupo</td>
<td>Hojiblanca, Grupo</td>
</tr>
<tr>
<td>Grupo Ybarra Alimentacion SL</td>
<td>Grupo Ybarra Alimentacion SL</td>
</tr>
<tr>
<td>Borges SA/ Borges Mediterranean Group</td>
<td>Borges SA/ Borges Mediterranean Group</td>
</tr>
<tr>
<td>Aceites Toledo SA (ACETOSA)</td>
<td>Aceites Toledo SA (ACETOSA)</td>
</tr>
<tr>
<td>Private Label</td>
<td>Private Label</td>
</tr>
</tbody>
</table>

- 2004:
  - 26% for SOS Corp Alimentaria SA/Deoleo SA
  - 7% for Aceites del Sur Coosur SA (Acesur)
  - 4% for Miguel Gallego SA (MIGASA)
  - 2% for Hojiblanca, Grupo
  - 2% for Grupo Ybarra Alimentacion SL
  - 1% for Borges SA/Borges Mediterranean Group
  - 1% for Aceites Toledo SA (ACETOSA)
  - 1% for Private Label

- 2012:
  - 52% for Grupo Ybarra Alimentacion SL
  - 16% for Borges SA/Borges Mediterranean Group
  - 18% for Aceites Toledo SA (ACETOSA)
  - 5% for Private Label
Product innovation
Innovation has generally been stable or positive

<table>
<thead>
<tr>
<th>Product category</th>
<th>Level of innovation (innovation rate)</th>
<th>Evolution of innovation over time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk in Finland</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Pork in Germany</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Tomato in Belgium</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Cheese in the Netherlands</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Apple in France</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Olive oil in Spain</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>
Innovation characteristics

**Belgium  
Fresh tomatoes**
- Packaging
- Marketing
- Product (varieties and types)

**France  
Apples**
- Distinctive variety
- Packaging
- Marketing
- Cultivation techniques

**Germany  
Fresh pork**
- Most product innovations are packaging innovations
- Niche innovations include meat characteristics & cuts

**Spain  
Olive oil**
- New products (57%)
- New variety / range extension (25%)
- Packaging (18%)

**Finland  
Milk**
- New products (e.g. functional products): 49%
- Product extensions, varieties: 38%
- Packaging: 12%

**The Netherlands  
Cheese**
- New products: 44%
- Product varieties and range extensions: 32%
- Packaging: 19%
Example: Pink Lady club apple

Main dates:

- 1973: development of new Cripps Pink variety, by hybridization from Golden Delicious and Lady Williams, by the Australian breeder Apple and Pear Australia Limited and the Department of Agriculture of Western Australia
- 1988-1991: experiments to acclimatize the variety in South of France
- 1992: the breeder Star Fruits® obtains exploitation rights for Cripps Pink variety and for Pink Lady® brand for Western Europe, North Africa and Middle-East
- 1993: first sales of Pink Lady® in France
- 1994: Star Fruits® accredited 3 traders: Cardell, Fruivial and Gerfruit
- 1995: first tree plantations
- 1997: creation of Association Pink Lady® Europe (APLE)
- 2000: Star Fruits® obtains exclusive rights for Europe
- 2003: 15 traders, 2800 producers in France, Spain and Italy
Innovation evolution

**Belgium**
*Fresh tomatoes*
- Variety improvement (genetic product innovation)
- Visual appeal of assortment
- New plastic containers

**France**
*Apples*
- Club apples have marked a turning point: Pink Lady, Jazz, etc.
- Sharing risks and controlling value chain, clubs push innovation to shelves
- Blend of marketing, product & organisational innovation

**Germany**
*Fresh pork*
- Low degree of product innovation (primary process innovation oriented).
- Recent innovations include “convenience” items using cuts or seasoning to reduce preparation time.

**Spain**
*Olive oil*
- Strong innovation in packaging, in sizes, shape and materials used
- Innovation in marketing to accompany the premiumisation strategy

**Finland**
*Milk*
- High overall level of innovation
- No change in rate of innovation
- Focus on premium market

**The Netherlands**
*Cheese*
- Innovation culture in Dutch Food Valley
- Increasing innovation levels

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The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Determinants of innovation

**Belgium**
**Fresh tomatoes**
- Commercial strategies of retail
- Breeding progress by seed companies.
- Greater profitability in new products (especially for retailers)
- Scale economics and competition among farmers

**France**
**Apples**
- Development of apples with better agronomic qualities
- Search for added value and profits at different levels of the value chain
- Share risks

**Germany**
**Fresh pork**
- Price considerations for meat packaging
- Price sensitivity of consumers

**Spain**
**Olive oil**
- Competition amongst producers – need for differentiation
- Price pressure on refined oil
- Easier access to new process technology

**Finland**
**Milk**
- Consumer trends demand, including health / diet
- Regulation around health claims for functional milk products
- High R&D spend by largest processor (Valio)

**The Netherlands**
**Cheese**
- Consumer demand (incl China)
- Competitiveness need & high cost in NL
- Retail concentration and private labels could have negative impact
Where does INNOVATION take place

- PRIMARY PRODUCTION
  - Genetics
  - New breeds

- PROCESSING / MANUFACTURING
  - Slaughtering
  - Storage
  - Juicing
  - Cutting
  - Packing
  - Final product
  - Smoking
  - Convenience
  - Multi-product
  - Ready to eat

- DISTRIBUTION & RETAIL

Tomatoes
Apples
Olive oil
Milk
Pork
Cheese

The economic impact of modern retail on choice and innovation in the EU food sector – Key Findings - October 2, 2014
Key conclusions

1. Choice has generally increased
   - Consistent with econometric results
   - But the level and evolution of choice is very contingent on product / country contexts

2. Innovation has generally been stable or positive
   - Generally consistent with econometric results
   - But the cases offer more in-depth information at a single point in time rather than a precise evolution over time

3. There is evidence in some cases that closer coordination within the supply chain facilitates innovation
   - Suggests that resources and bargaining power in the supply chain can be a determining factor for innovation

4. Increased choice through innovation, retailer competition and the need for lower consumer prices
   - Pricing is a key element in defining choice

5. The case studies emphasise the need to:
   - Analyse the specificities of the supply chain and the national and product context
   - Consider market-level factors in the analysis
QUESTIONS
The study on choice and innovation in local CSAs covers 23 product categories

<table>
<thead>
<tr>
<th>Savoury Grocery</th>
<th>Sweet Grocery</th>
<th>Fresh dairy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Edible oil</td>
<td>• Chocolate</td>
<td>• Yoghurt</td>
</tr>
<tr>
<td>• Savoury snacks</td>
<td>• Coffee</td>
<td>• Desserts</td>
</tr>
<tr>
<td>• Canned vegetables</td>
<td>• Tea</td>
<td>• Cheese</td>
</tr>
<tr>
<td>• Baby food</td>
<td>• Cereals</td>
<td>• Milk</td>
</tr>
<tr>
<td>• Biscuits</td>
<td>• Biscuits</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Savoury Frozen</th>
<th>Beverage</th>
<th>Fresh non dairy</th>
<th>Sweet Frozen</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ready-cooked meals</td>
<td>• Mineral water</td>
<td>• Butter/Margarine</td>
<td>• Ice-cream</td>
</tr>
<tr>
<td>• Starters/Pizzas</td>
<td>• Fruit juice</td>
<td>• Fresh pre-packed bread</td>
<td></td>
</tr>
<tr>
<td>• Frozen Vegetables</td>
<td>• Soft drinks</td>
<td>• Ham/Delicatessen</td>
<td></td>
</tr>
</tbody>
</table>
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