RETAIL SECURITY IN ITALY

A study on thefts, robberies and new security solutions

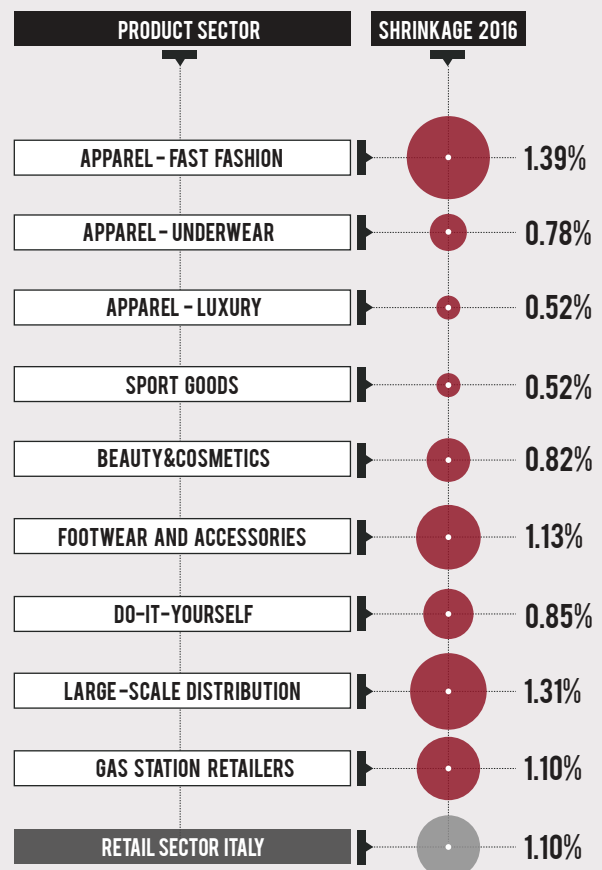# EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Aim and methodology

► This study has been carried out by **Crime&tech**, spin-off company of Transcrime – Università Cattolica del Sacro Cuore, with the collaboration of *Laboratorio per la Sicurezza* and the support of **Checkpoint Systems**.

► It focuses on the analysis of thefts, robberies and security solutions in the retail industry in Italy. The study analyses:

- **Shrinkage** as a percentage of the turnover;
- Differences among **regions**, **sectors** and **location** (shopping malls vs commercial streets);
- **Socio-demographic**, **economic** and **criminal** contextual factors related with shrinkage:
- The most recurrent *modi operandi* and **offenders** involved in **external thefts**:
- The most common types of **internal thefts** (i.e. committed by dishonest employees);
- **Prevented thefts** by area and store location;
- **Security solutions** adopted among the different sectors.

► The study combines **two different** but complementary **sources of information** and two methods of **data collection**.

- **Method 1**: quantitative and qualitative information at company level collected through an online questionnaire (coverage: 30 companies, 8,140 estimated stores, 11.5% of total turnover of the Italian retail sector);
- **Method 2**: quantitative and qualitative information at a single point of sale level, shared directly by companies (coverage: 12 companies, 1.088 stores, 2.9% of total turnover of the Italian retail sector).

The results

Shrinkage, *modi operandi* and most stolen items

► In 2016, shrinkage accounted for **1.1% of turnover** for retail companies in Italy on average. A figure that is worth about **2.3 billion euros**.

► A few product sectors (e.g. Apparel – Fast fashion, Large-scale distribution, Footwear and accessories) recorded figures higher than the mean; whereas other sectors lower figures (e.g. Apparel – Underwear, Do-it-yourself, Sport goods) (Figure A).

Figure A – Shrinkage by product sector, mean % of turnover. Year 2016

PRODUCT SECTOR	SHRINKAGE 2016
APPAREL – FAST FASHION	1.39%
APPAREL – UNDERWEAR	0.78%
APPAREL – LUXURY	0.52%
SPORT GOODS	0.52%
BEAUTY&COSMETICS	0.82%
FOOTWEAR AND ACCESSORIES	1.13%
DO-IT-YOURSELF	0.85%
LARGE-SCALE DISTRIBUTION	1.31%
GAS STATION RETAILERS	1.10%
RETAIL SECTOR ITALY	1.10%

▶ The results generally indicate a **decrease of shrinkage** in recent years. However, for some sectors shrinkage is increasing for the years 2014-2016 (i.e. Luxury, Footwear, Beauty&Cosmetics).

▶ **Campania** is the region with the highest value (1.4%), followed by **Apulia** (1.4%) and **Emilia Romagna** (1.3%).

▶ Some territorial clusters have been identified: for instance, the **lower Padana road** between Alessandria and Bologna, **Bari** and **Brindisi** provinces and the area between **Naples** and **Cosenza**. These are large-scale interregional areas crossed by important roads and motorways (Figure B).

▶ On average, **shrinkage is higher** in stores located in less densely populated areas, in smaller municipalities with lower GDP per capita and a higher unemployment rate and incidence of young people aged between 11 and 20 years.

▶ Shrinkage tends to be higher in **stores within shopping malls**. This emerging pattern may depend on certain characteristics of shopping malls, for instance: greater crowding, lower customers/visitors conversion rate, and more complex surveillance activities.

▶ The main cause of shrinkage is **external theft**, followed by internal theft by dishonest employees and supplier fraud along the supply chain. The least relevant cause was administrative/accounting errors.

▶ Organised thefts committed by micro-gangs of 2-3 persons and by more organised criminal groups are increasing (especially for night-time intrusions).

▶ The majority of external thefts are committed by **men aged 18-25** and **26-40** (especially for Gas station retailers and those specialised in DIY, Sport goods and Apparel – Luxury) and **women aged 26-40** (especially for Beauty&Cosmetics, Footwear and Apparel in general). Concerning nationality, offenders are mainly from Eastern European countries.

▶ Shoplifting committed with **booster bags** (crafted with aluminium foil or similar to circumvent anti-shoplifting barriers) seems to be the most recurrent *modus operandi*.

▶ The **most stolen items** vary according to the product sectors. The most desirable are those **small** products with a **high value** per volume, which have a **single size** and **greater popularity** among consumers (Figure C, p.14).

Figure B – Shrinkage by province, mean % of turnover. Top 10 provinces. Year 2016

Shrinkage Mean

- ○ < 0.9
- ○ 0.9 - 1.1
- ○ 1.1 - 1.3
- ○ > 1.3
- ○ No info

	PROVINCE	SHRINKAGE 2016
1°	AGRIGENTO	2.84%
2°	PARMA	2.43%
3°	COMO	2.33%
4°	SIENA	1.82%
5°	BRINDISI	1.80%
6°	LA SPEZIA	1.77%
7°	COSENZA	1.77%
8°	ANCONA	1.71%
9°	GORIZIA	1.65%
10°	BERGAMO	1.61%
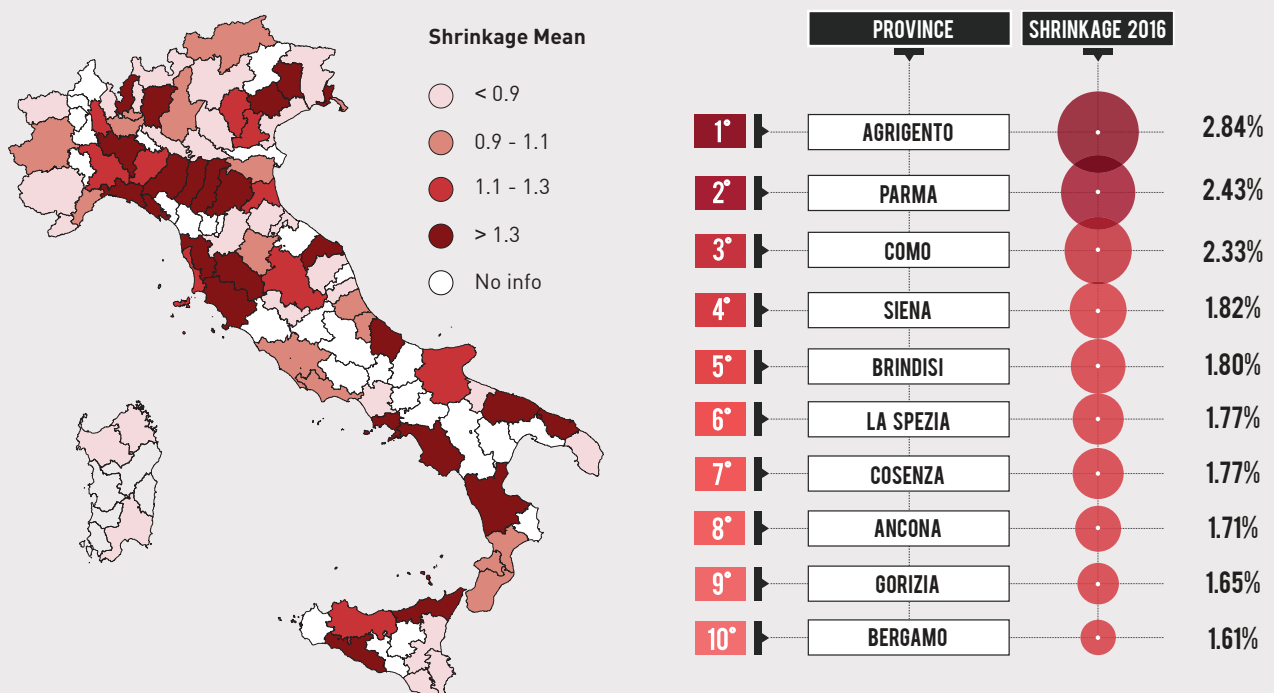
Figure C – Top 3 most stolen items by incidence on the economic value of shrinkage. Year 2016

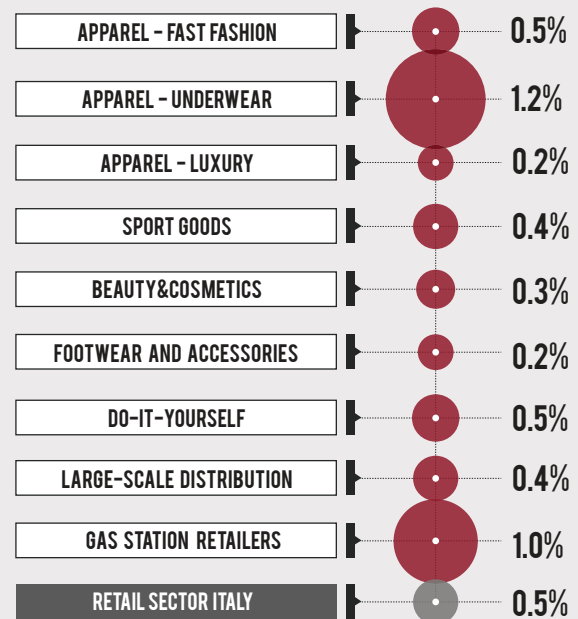|	APPAREL FAST FASHION	APPAREL LUXURY	APPAREL UNDERWEAR	BEAUTY& COSMETICS	SPORT GOODS	FOOTWEAR AND ACCESSORIES	LARGE-SCALE DISTRIBUTION	GAS STATION RETAILERS	DO IT YOURSELF
1°	LEATHER GOODS	JACKETS	EASY WEAR	PERFUMES	SNEAKERS	CLOTHING	LIQUOR	MOBILE PHONE ACCESSORIES	ELECTRICAL TOOLS
2°	DENIM AND JACKETS	ACCESSORIES	UNDERWEAR	COSMETICS / MAKE-UP PRODUCTS	CLOTHING	SNEAKERS	SWEETS	CAR ACCESSORIES	LIGHT BULBS
3°	COSMETICS	EYEWEAR	STOCKINGS	SPORTS MATERIAL	SPORTS MATERIAL	MEN'S SHOES	PERFUMES / MEAT/CHEESE	BEVERAGES	ELECTRICAL SWITCHES

Counter measures and loss prevention system

▶ In 2016 Italian retail companies scored **83 prevented thefts per shop on average**.

▶ The North-West of Italy scored the highest mean of prevented thefts. Among regions, **Lombardy** is at the first place (134 prevented thefts per shop) and among provinces **Milan** registered the highest figure (183) (Figure D).

Figure D – Prevented thefts in the retail sector by province. Mean value per store. Year 2016

	PROVINCE	PREVENTED THEFTS 2016
1°	MILANO	183
2°	MESSINA	181
3°	MONZA BRIANZA	148
4°	NAPOLI	133
5°	FIRENZE	118
6°	CASERTA	96
7°	REGGIO DI CALABRIA	95
8°	ROMA	94
9°	LA SPEZIA	92
10°	PISA	91
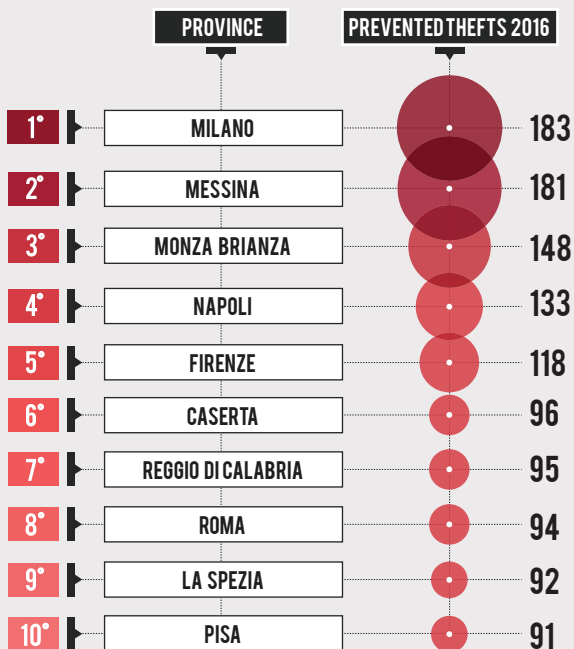
▶ Different from the pattern observed for shrinkage, prevented thefts are more numerous in shops located in larger and richer municipalities **close to bigger urban areas**: it seems that those shops concentrate the majority of investments for security and loss prevention solutions.

▶ There are **more prevented thefts in shops located in commercial streets of cities** (104 every year on average) than in those located in shopping malls (67).

▶ Italian retail companies spend about the **0.5% of the turnover** on security and loss prevention solutions. There are remarkable differences among product sectors (Figure E).

Figure E – Total expenditure on security and loss prevention by product sector. Mean % of turnover. Year 2016

APPAREL – FAST FASHION	0.5%
APPAREL – UNDERWEAR	1.2%
APPAREL – LUXURY	0.2%
SPORT GOODS	0.4%
BEAUTY&COSMETICS	0.3%
FOOTWEAR AND ACCESSORIES	0.2%
DO-IT-YOURSELF	0.5%
LARGE-SCALE DISTRIBUTION	0.4%
GAS STATION RETAILERS	1.0%
RETAIL SECTOR ITALY	0.5%

▶ According to the responding security managers, only a **combination of different security solutions** in the same shop can provide a more effective protection.

▶ Among the most widely used solutions there are **CCTV** (100% of respondents), followed by **third-party alarm monitoring** (89%), anti-shoplifting **hard tags and labels** – EAS (83%) and unarmed security guards (83%).

▶ If anti-shoplifting solutions favour the deterrence mainly against **occasional thieves** and are quite cheap compared to other solutions, security guards have a higher **deterring effect** but also maintenance costs. CCTV is very useful to trace thefts after the event but entails higher costs and difficulties in terms of privacy and data confidentiality.

▶ New **innovative solutions** are emerging, such as anti-shoplifting devices able to detect booster bags, 'selling guards' and predictive software to detect, in real time, which are the shops most exposed to risk.

The economic impact on companies and citizens

► The total economic cost of losses (obtained as the sum of shrinkage cost and security and loss prevention cost) for the retail sector in Italy is equal to **1.6% of the turnover** (Figure F).

► It can be estimated at **3.4 billion euros**. If this value indicated company revenues, it would rank fifth among those of Italian retail companies.

► This figure corresponds to **26 million euros** per each of the top 50 Italian retail companies considering turnover and **56 euros per capita** for Italian citizens (Figure G).

The implications for research and private and public sector

► This study is only the first step towards a deeper understanding of the **risks** of losses in the Italian retail sector and **countermeasures**.

► In order to improve the analysis, it would be useful to have data with the **highest level of detail** and **better quality** (for instance information on shop characteristics, visitors, staff and security solutions adopted in each store).

► On the other hand, it would be necessary to set a **continuous collaboration** among universities, retailers, providers of security solutions and the public sector: a **shared knowledge** about security.

Figure F – Total cost of losses by sector, Mean % of turnover. Year 2016

Sector	Shrinkage	Security and loss prevention expenditure	Total
APPAREL–FAST FASHION	1.39%	0.45%	1.8%
APPAREL–UNDERWEAR	0.78%	1.17%	1,9%
SPORT GOODS	0.52%	0.42%	0.9%
BEAUTY&COSMETICS	0.82%	0.26%	1.1%
FOOTWEAR AND ACCESSORIES	1.13%	0.16%	1.3%
DO–IT–YOURSELF	0.85%	0.50%	1.3%
LARGE–SCALE DISTRIBUTION	1.31%	0.38%	1.7%
GAS STATION RETAILERS	1.10%	1.00%	2.1%
RETAIL SECTOR ITALY	1.08%	0.48%	1.6%

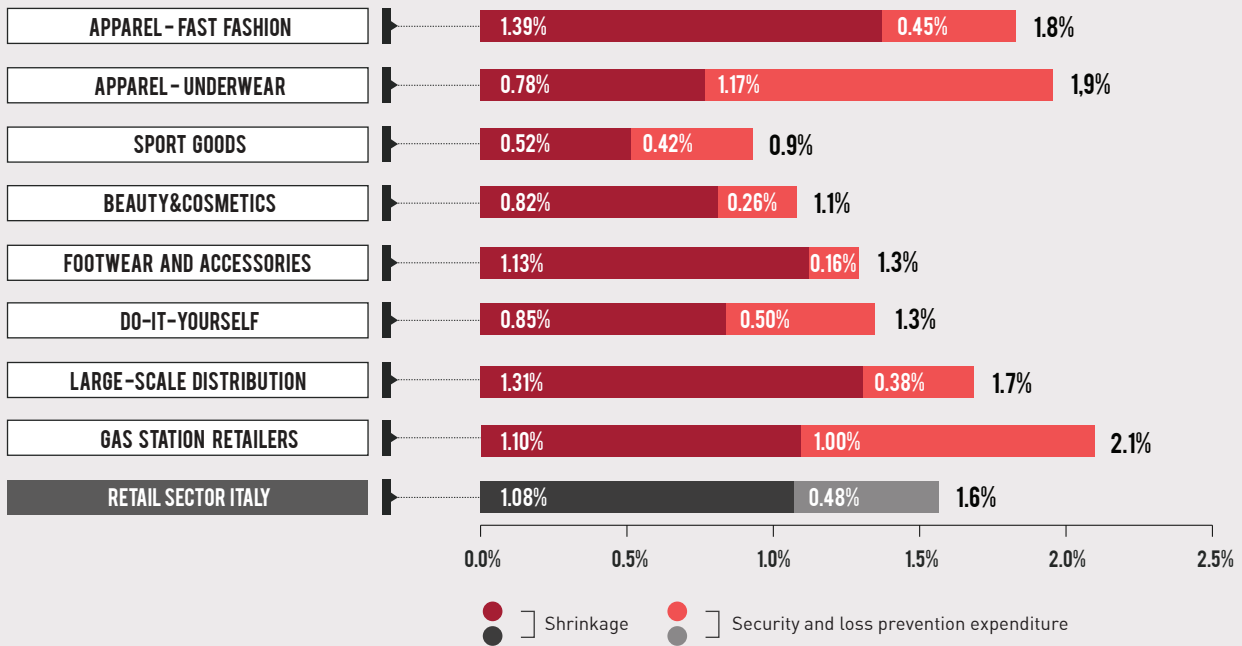●] Shrinkage   ●] Security and loss prevention expenditure

Figure G – Total economic cost of losses in the retail sector in Italy

€ TOTAL MONETARY COST OF LOSSES — **3.4 BLN EURO** — ECONOMIC IMPACT OF LOSSES

PER CAPITA FOR CITIZEN — **56 EUROS**

TOP 50 RETAIL COMPANIES — **26 MLN EUROS PER COMPANY**