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Identification losses in the FMCG1 sector in the light of the European and global researches

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Abstract: The main aim of the article is to present a very high level of the shrinkage in the FMCG sector on the European and global markets. It implies directly to reducing level of customer service and a significant reducing in the level of company profits. Results come from the European and global research on identification and cost of losses in the FMCG sector. An author was involved in the losses research in 2004 align with ECR Europe organization. The ECR Report (2004) is presented together with the latest losses report- Global Theft Retail Barometer - prepared by The Centre for Retail Research.

Keywords: losses, shrinkage, FMCG sector, retail, manufacturer, losses research, supply chain

1 Results of losses identification research between 2000 and 2011

1.1 General results of different surveys

Opinions vary on a definition for shrinkage. Some take a very narrow perspective and limit it to the loss of stock only, choosing to exclude the loss of cash from an organization, or consider it to relate only to the losses that cannot be explained – 'unknown losses' as they are usually referred to. At the other end of the spectrum, some argue for a much more inclusive, broad ranging definition which encompasses both stock and cash, as well as the losses that result from shrinkage events – 'indirect losses' – such as out of stocks caused by shop theft, the sale of stolen goods on the 'nonretail' market or the production of counterfeit products. In addition, some feel that the expenditure incurred responding to stock loss should also be included in the overall cost of shrinkage.

1 FMCG sector – Fast Moving Consumer Goods sector

In the concept of Efficient Consumer Response[2] takes on another meaning, shrinkage is defined[3] as the deficiencies resulting from procedural errors, fraud and theft of external and the interior. In the year 2000, the organization of the European ECR decided to undergo the level of losses in the FMCG sector supply chains in Europe.

The FMCG sector is highly complex with many manufacturers having logistical webs covering all of Europe, while many retailers have product ranges between 40,000-250,000 stock keeping units (SKU). Research shows that all points of the logistic chain are vulnerable to loss not just the retail store. In 2000, €6.1 billion of stock was lost even before it made it to stores.

The first study was conducted in 21 countries. It appeared then that in principle is difficult to assess the level of losses in the FMCG sector due to the different definition of this concept and the lack of data in both paper and electronic, for each element of loss in the ECR. Many respondents, however, has taken the trouble of ranking of available information, which allowed for drawing up the final report on the level of losses in Europe in the year 2000. Overall, the estimated result for the FMCG sector in Europe has reached a very high level of 18 billion euro per year, which gave the 1.75% circulation trade and 0.56% of market vendors.[4] It turned out that the losses of companies in the supply chain can be one the main threats to the effectiveness and efficiency of the sector. Estimated that the level of profit achieved in the case of loss reduction by 50% of the increase. 30%.[5] The survey was repeated in 2004.[6]
It was carried out in 25 countries (including Poland), it has an even higher level of losses than 4 years earlier, tab 1.[7]

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2 A. Mitchell: Efficient Consumer Response. Financial Times Report, London, 1997, pp. 9
Effective Consumer Response is defined as a set of methods and instruments aimed at increasing the efficiency of the supply chain. Its purpose is to better respond to the needs of the consumer, while making the most of opportunities to reduce costs throughout the supply chain through collaboration partners.

3 The losses created by ECR Europe. Members of the group are:
Commercial networks : Auchan, Coop Italia, B & Q, Rewe, Superquinn, Sainsbury, macro, Menzies Distribution, Metro, Royal Ahold, Tesco), Wickes-class destroyer, Carrefour, Gestiretalho, Asda, Boots.
Producers : Allied Domecq Spirits & Wine, Bacardi-Martini, Colgate-Palmolive, Diageo, Danone, Gillette, Procter & Gamble, Sara Lee/De, Schwarzkopf & Henkel, Coca-Cola.
Others : Aecoc, Aim, Ccg-Ecr Germany, Cranfield School Of Management, Pira International, Icts Global, SAS Institute, The Scarman Centre.

4 the turnover FMCG sector in Europe is estimated at 820 billion euro, Planet Retail Date, 2000

5 Shrinkage: A collaborative Approach to reducing stock loss in the supply chain.ECR Europe, University of Leicester, Cranfield University, 2003, s. 5.

6 study commissioned by ECR Europe, conducted by the University of Leicester in countries such as Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, Greece, Spain, Netherlands, Ireland, Lithuania, Luxembourg, Latvia, Germany, Norway, Poland, Portugal, Slovakia, Slovenia, Sweden, Switzerland, Hungary, United Kingdom, Italy.
The author of this article had carried out these studies on the Polish market.

7 26 countries, 250 commercial network and 44 suppliers contacted in the FMCG.
Overall turnover FMCG sector in Europe wyniosły1, 004 billion € in 2003.

Sector	% of sales	Value (€ billion)
Producers	0.57	5.7
Retail	1.84	18.5
Total Europe	**2.41**	**24.2**
Poland	**1.37**	**375 million**

Table. 1
The level of losses depending on the test links in the supply chain
* the data in sales prices

Source: own survey; A. Beck "ECR Report Shrinkage In Europe-2004

It's hard to unambiguously compare second survey to the first due to the greater range of data.

In 2003, the cost of losses in retail stores totaled 18.5 billion euro, what was the 1.84% of their turnover, while the producers for losses incurred costs amounting to 5.7 billion euro, representing 0.57% of turnover. In Poland, according to the estimates of losses amounted to 375 million euros-1.37% trade (study were only commercial enterprises). The level of losses in the European trade, and on the Polish market is like a high share in the turnover of the sector. FMCG sector losses generally in Europe amounted to EUR 24,2 billion euro. This sector is characterized by the high complexity of the movement of products. Seal so mass flow (commercial networks offer 40 000-250 000 products unit) between producers, distribution centers and commercial networks is very difficult, and also constitutes a huge challenge for all links in the supply chain.

During last 10 years an authoritative and expert research and analysis of the losses in Europe have been provided by The Centre for Retail Research. Results of 2011[8] in retail sector shows, that after a dip in shrinkage in 2009-10, shrinkage has risen in the 12-months ending June 2011 as a result of increased shoplifting, higher employee fraud, and organized retail crime. Total global shrink in 2011 cost retailers $119.092 billion, an average of 1.45% of global retail sales. The shrinkage rate was an average of 6.6% higher than 2010. Last year shrinkage was $108.092 billion (1.36% of sales), adjusted for the inclusion of South Korea and exchange rate changes.

Sample represented 13.7% of European trade with turnover of 137.2 billion €

In Poland the data represent 13% of the market otherwise 3.5 billion euro from the market at 27.5 billion

8 Global Retail Theft Barometer 2011 The GRTB 2011 survey of major retailers in all business sectors in 43 countries provided 1,187 useable responses, 25%., with combined sales of $984 billion.

Global Retail Shrinkage by Country 2011				
Country	**Total Shrinkage (U.S.$ billion)**	**Shrinkage 2011 (as % of sales)**	**Shrinkage 2010 (as % of sales)**	**Percentage Change in Shrink Rate 2010-2011**
Canada	$3.630	1.49%	1.42%	4.9%
U.S.A	$41.691	1.59%	1.50%	6.0%
North America	**$45.321**	**1.58%**	**1.49%**	**6.0%**
Argentina	$0.748	1.55%	1.48%	4.7%
Brazil	$2.384	1.69%	1.64%	3.0%
Mexico	$2.921	1.68%	1.61%	4.3%
Latin America	**$6.053**	**1.67%**	**1.60%**	**4.4%**
Morocco	$0.042	1.72%	1.64%	4.9%
South Africa	$0.773	1.71%	1.62%	5.6%
Middle East/Africa	**$0.815**	**1.71%**	**1.62%**	**5.6%**
Australia	$2.066	1.43%	1.39%	2.9%
China *	$1.141	1.11%	1.04%	6.7%
Hong Kong SAR	$0.304	0.95%	0.91%	4.4%
India *	$0.778	2.38%	2.72%	-12.5%
Japan	$9.644	1.04%	1.00%	4.0%
Malaysia	$0.271	1.62%	1.53%	5.9%
Singapore	$0.174	1.21%	1.17%	3.4%
South Korea	$2.270	1.30%	1.24%	4.8%
Taiwan	$0.590	0.91%	0.87%	4.6%
Thailand	$1.050	1.64%	1.57%	4.5%
Asia-Pacific	**$18.288**	**1.22%**	**1.21%**	**0.8%**
Austria	$0.653	1.04%	0.97%	7.2%
Baltic States	$0.297	1.50%	1.40%	7.1%
Belgium/Luxemburg	$1.225	1.47%	1.38%	6.5%
Czech Republic	$0.532	1.53%	1.40%	9.3%
Denmark	$0.540	1.29%	1.21%	6.6%
Finland	$0.579	1.34%	1.28%	4.7%
France	$6.636	1.40%	1.36%	2.9%
Germany	$7.303	1.20%	1.12%	7.1%
Greece	$0.735	1.40%	1.30%	7.7%
Hungary	$0.500	1.48%	1.38%	7.2%
Ireland	$0.644	1.43%	1.32%	8.3%
Italy	$4.688	1.37%	1.28%	7.0%
The Netherlands	$1.688	1.30%	1.22%	6.6%
Norway	$0.631	1.35%	1.26%	7.1%
Poland	$1.684	1.41%	1.35%	4.4%
Portugal	$0.499	1.33%	1.24%	7.3%
Russia	$4.001	1.74%	1.61%	8.1%
Slovakia	$0.200	1.46%	1.37%	6.6%
Spain	$3.947	1.40%	1.30%	7.7%
Sweden	$0.917	1.40%	1.34%	4.5%
Switzerland	$0.868	1.04%	1.00%	4.0%
Turkey	$2.020	1.63%	1.52%	7.2%
United Kingdom	$7.828	1.37%	1.29%	6.2%
Europe	**$48.615**	**1.39%**	**1.29%**	**7.8%**
Grand Totals	**$119.092**	**1.45%**	**1.36%**	**6.6%**

'U.S. $1 billion' is equivalent to U.S. $1.000 millions.

Table 2
Global Retail Theft Barometer 2011 Tab. 2 Shrinkage by Country (percentage of sales)
Source: Global Retail Theft Barometer 2011

During 2004 survey respondents indicated the reasons for the emergence of losses. By far the most important reason for the formation of the losses in the European FMCG sector, external theft (38%), internal theft (28%), as well as procedural errors (27%), 7% loss is the result of collusion between corporate, fig. 1.

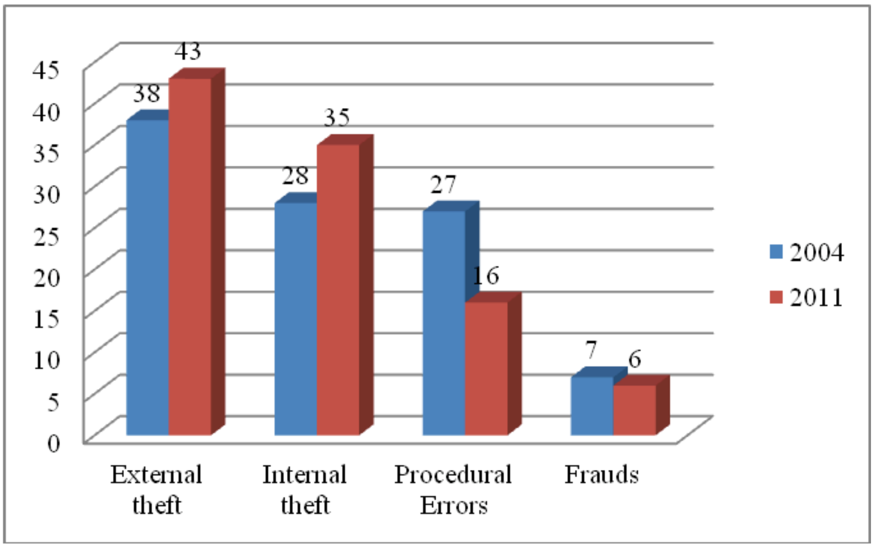

Fig. 1
The structure of losses in Europe in the FMCG sector in 2004 and 2011
Source: own elaboration based on A. Beck ,ECR Report Shrinkage In Europe-2004 and GRTB 2011

In terms of valuable internal imperfections companies in the form of procedural errors as well as theft by employees (total of 55% of all losses) is estimated at more than 13 billion euro, which certainly comes across as extremely significant problem internal. Note, however, that presenting data arise more from conjecture workers than the actual data. The results are grossed up to be equivalent the size of every national retail market surveyed in 2011. The causes of shrinkage reflect retailer perceptions of the causes of shrinkage in their own businesses. Internal error including mispricing, invoicing errors and administrative failure cost $19.4 billion, representing 16.2% of total shrinkage. Dishonest employees were thought to cause $41.7 billion (35.0% of shrinkage) of losses and customer theft, including shoplifting and organized retail crime, cost retailers $51.5 billion in 2011 (43.2% of total shrinkage) compared to $45.4 billion in 2010. This was a year-on-year increase of 13.4% in customer theft.

One of the main problems in the study was an attempt to estimate the losses as a result of the loss of known and the unknown tab 3.

	Loss unknown	The Known loss	Total
Europe	49% 11.8 billion E	51% 12.3 billion E	**100%** **24.2 billion**
including Poland	30% 112.5 million	70% 262.2 million	**100%** **375 million**

Table 3
The structure of the known and unknown losses in Poland and Europe in 2004
Source: own survey; A. Beck "ECR Report Shrinkage In Europe-2004

Share of losses of the known and unknown in the overall pattern of losses in Europe is similar, ca. 51% of loss shall be deemed to be known while 49% for unknown. In Poland, this proportion is different, respondents recognized that they can identify 70% of the public arising from losses, which in spite of everything compared to European data may seem too optimistic estimate. Comparing these results to the first survey, the level of losses unknown at European level decreased (59% unknown losses in 2000). However, this does not change the fact that companies do not know the reasons for the loss of 12 billion Euro per year. Unknown losses cannot be locate in the place and time and assign specific persons. The lack of information plays a decisive role in inadequate protection products.[9]

1.2 Loss prevention spending

The studies have shown that commercial networks in Europe have issued 2.92 billion euro on security shops before the losses, which translates to 0.29% of their turnover. In other words, it was close to 3 billion euro to prevent losses worth 18.5 billion euro. In Poland this expenditure amounted to € 216 million, representing 0.79% of the market traders.

By far the largest part of the costs both in Europe (33%/950 million euro) and in Poland (60%/128 million Euro)) have claimed expenses for personnel protection. In second place were the cost of CCTV (23%/49 million Euro), while in Europe the costs associated employment of internal security staff (14%/419 million **€**. By comparing the results with those already presented the reasons for the emergence of losses - 55% of the losses incurred as a result of internal errors and theft, while just internal staff training concerning the loss of the co-operations, both Europe and Poland seem relatively small amounts. Generally the largest expenditure on protection against losses are mainly concentrated on the fight with crime. Certainly less means you would avoid many, often emerging procedural errors.

The GRTB 2011 shows loss prevention spending in 2011, fig 2.

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9 A. Beck: research report entitled Shrinkage In Europe ": A survey of stock loss In the FMCG sector.", 2004

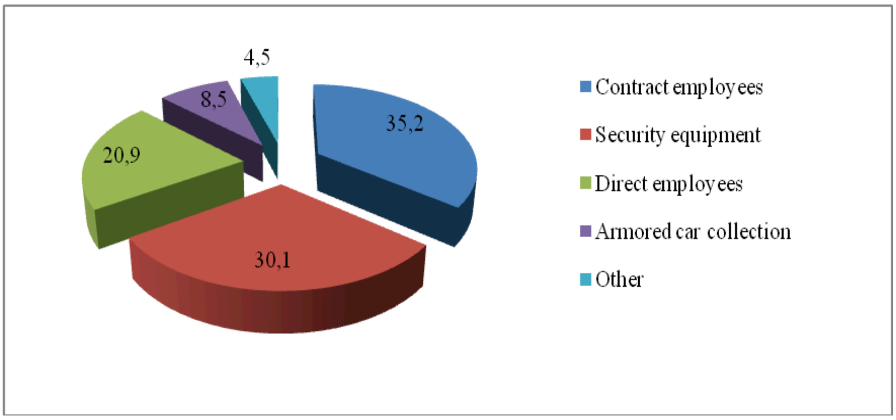

Fig. 2
Loss Prevention Spending In 2011

Although the results are in $, not in €, but the structure is very similar to the 2004 ECR Report. An important factor indicating the sophistication of surveyed companies in the process of reducing the loss is loss reduction strategy. The vast majority of companies do not develop such a strategy. Although part of the enterprises Poland declares, that it has a strategy to reduce losses, perhaps this is related to their quality procedures.

In addition to the policy of reducing the losses of an additional mechanism that more interest cuts losses by employees could be prizes awarded for achieved good results in this regard. Research indicates most companies do not apply in this regard, the policy of rewarding employees.

Another element was research cooperation in reducing losses between departments within the company. All respondents pointed out the large involvement of the security departments and transcribing the boards. Nearly 70% of respondents indicated a strong interest in restricting losses logistics departments and audit. The least involved departments, according to the evaluation of the test, in the process reducing the losses are the financial Department, purchasing, human resources, information technology, Legal Department and Marketing. Without a doubt, each of those departments could fulfill an important role in reducing losses. For example, the Purchasing Department would have greater awareness of the potential problems in terms of procedural errors or theft when buying new products. Similarly, the Marketing Department should take into account the risks associated with exposure of certain products in the store (e.g. the goods under special supervision should be exposed to a range of cameras). Department of computer science should be more involved in reducing process errors that often occur during use of information systems. Legal Department while using his ability could engage more strongly in an ever-growing problem of theft.

Studies have shown a negative correlation between partnering departments and the level of performance losses. In other words, these companies, which show greater commitment to cross-functional within the company in the process of reducing the losses registered a lower their levels.

1.3 ECR Europe Shrinkage Road Map

Already mentioned group limiting losses running at ECR Europe has developed a practical methodology for the identification and reduction of losses on "ECR Europe Shrinkage Road Map". This is a structural test how cooperation partners in supply chain projects, limiting losses. Owing the methodology the positive results can be achieved in a relatively short time (usually several weeks) even by using the people who are not experts[10].

Commercial network	Manufacturer	You	Results-% reduction in losses
Ahold	Meat and cold cuts	Poland	42%
Feira Nova	Danone	Portugal	45%
Sainsbury's	Spirits	UK	40%
Sonae	Colgate Palmolive	Portugal	29%
Tesco	Gillette	Hungary	74% 288% sales growth
Ulmer	Gillette	Portugal	78% 55% increase in sales
Wickes-Class Destroyer	GET	UK	7% Cap loss

Tab.4
The results achieved by European companies after using ECR Road Map
Source: ECR Europe, Adrian Beck presentation, 2004.

The issue of loss is seen often as the inevitable consequence of doing business, bad results or developments in the company. due to tampering or destruction of products. Often recognized as job losses for people with police powers (protection, police). Very rarely attempt to reduce losses are seen as an opportunity to achieve greater profits.[11]

Conclusions

Studies carried out, clearly indicated on the negligence issue losses and lack of effective control in the FMCG sector.

A key achievement of the research was the observation that the losses are taken into account only in crisis situations, i.e. when extraordinary event takes place or has shown an extraordinary level of losses. The reactions are then taken on an ad hoc basis, without

10 A. Beck presentation, ECR Europe Shrinkage Group Meeting, 2004.
11 A. Beck, P. Chapman: Shrinkage: A collaborative approach to reducing stock loss in the supply chain. ECR Europe, University of Leicester, Cranfield University School of Management, 2003, pp.53

a thorough examination of the problem. Implementation of solutions is usually not preceded by the analysis of their effectiveness. Traditional management losses are therefore often the critical action. [12]

In addition, when considering the problem of losses usually do not take into account their impact on sales, inventory availability, customer satisfaction.

Meanwhile, the management of losses should be fully integrated with the policy of the company, having the same importance as other functions of sales, distribution or marketing or in organizations managed in the process way, e.g.. the process of customer relationship management or customer relationship management vendors. In addition, there is a need to create a corporate policy statement, which will come out outside the framework of the company, including other partners in the supply chain.

In order to raise the rank of reducing losses and highlight their impact on profits the company it is necessary to grant liability for their reduction to the members of the Supreme Board of Directors.

The strategy of each Corporation, the main objective is to profit from the activity. Adaptation of available practices limiting losses gives the possibility of substantial contribution to realize a profit for all links in the supply chain. When considering the costs of incurred losses, the most important element is usually the cost of the lost item. Described earlier, the cost was for the entire FMCG 2,41% of the value of the market. The significance of this cost becomes even greater when you consider its effect on the profits of commercial enterprise.

Examination of the annual reports of 25 European retailers for 2003 showed that the average profit margin amounted to 3%, while the loss riched the level of its 1.75%. If losses were reduced by half, retailers could achieve profit growth of 3% to 3,88% or almost 1/3.[13]

In addition to these costs must be added the cost of installed equipment, employment of security personnel, additional checking procedures.

Formation of losses has a negative impact on customer satisfaction, although this is not always noticeable; consider the two aspects-the deficiencies on the shelves in retail stores and the limited access of customers to products considered by retailers as highly risky. The formation of gaps on the shelves in the application of automated inventory management system is the result of the use by the system, the sales data to determine the date of supplement products. Losses (as a result of theft) cause shortages on the shelves before the planned delivery according to system data. Shelves remain so blank until you generate the manual order or correction in stocks. Lack of availability of the

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12 J. Lewandowska, Doctoral Thesis, “Conditions and instruments shaping supply chain efficiency in the FMCG sector”, University of Economics, Poznan, 2005

13 A. Beck: Research report titled "Shrinkage In Europe": A survey of stock loss In the FMCG sector, pp. 46

product negatively affects relationships: consumer-preferred-retail store. Even the occasional deficiencies reduce consumer loyalty, influencing changing brand or store.

Design throttling losses, like all projects require, diagnosis and the application of the relevant solutions. Given the uniqueness of each business environment where loss arises, one good strategy for all does not exist. Various actions must be matched to existing conditions. The success is due to the continuous, systematic build their own capacity to identify and understand the reasons for the occurrence of loss. Indeed, loss remains significant negligence FMCG in times of high technological advancement and sophisticated organizational solutions in this sector. Demonstrated research potential for improving the efficiency of the supply chain by limiting losses is worth take common, partner efforts by all links in the chain.

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