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Products dangerous for consumers imported from China in RAPEX notifications

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Summary. The legal basis and principles of functioning of the Rapid Alert System for dangerous non-food products (RAPEX) were presented. The research included the notifications submitted in the RAPEX system for products from China in the period 2005–2016. The dependences between product categories and year, level of risk, product user, submitting country, risk type and the entity taking measures were examined. The cluster analysis, scatterplots and pivot tables were applied. The most important problems were identified as well as the need for further cooperation between the European Commission and China.

Introduction

The legal basis for Rapid Alert System for dangerous non-food products (RAPEX) is General Product Safety Directive (2001/95/EC) (European Commission, 2017b, 2017c). Within the RAPEX 31 European countries, i.e. 28 European Union (EU) countries (member states) and also Iceland, Liechtenstein and Norway and European Commission can exchange information (through contact points) on dangerous non-food products posing a risk to health and safety of consumers. The national authorities can act quickly to keep consumers safe by recalling, withdrawing, stopping at the border or issuing warnings. The European Commission publishes weekly RAPEX reports (European Commission, 2017b), see also Orford et al. (2014). The RAPEX does not apply to food, pharmaceuticals and medical devices (Orford et. al., 2014).

Zandén Kjellén (2009) pointed out that member states never communicate their notifications to each other directly within the RAPEX but through the European Commission. The notification entered into the RAPEX is displayed to the European Commission and it validates the completeness and correctness of this notification and sees if there has been previous warning regarding the same product notified by other member state. The European Commission wishes to avoid duplication and publishes only one information for a product regardless of the number of notifications. After examining a information about notification it is published within three days at the latest.

However, as Herzmann (2015) noted, the European Commission completely relies on the member states' risk assessment. Furthermore, in contrast to similar the Rapid Alert System for Food and Feed (RASFF), where anonymous notifications are made, in case of the RAPEX products can be easily identified (based on brand, name, number of model or batch number/bar code and picture). Therefore, Miehle et al. (2015) even stated that company finding its product in the RAPEX will suffer from substantial monetary losses and reputation damage. For governments the RAPEX is, however, the tool to force companies to make efforts to ensure compliance.

The number of the RAPEX notifications to products from China is about or above 50% of all notifications each year, however, it decreased last years (European Commission, 2017c), see also Zandén Kjellén (2009). A large number of notifications on products from China has also been noticed by Klaschka (2017), Tse and Tan (2012) and Wang et al. (2012). The categories, which were most often notified in the last years were: toys, clothing, textiles and fashion items and electrical appliances and equipment (European Commission, 2017c). Importantly, as much as 85% of all toys on the European market come from China (European Commission, 2017a).

Already in 2006 the Directorate General for Health and Consumers (DG SANCO) of the European Union and the Administration for Quality Supervision, Inspection and Quarantine from People's Republic of China (AQSIQ) have signed Memorandum of Understanding. It aimed to establish a framework for better communication and collaboration within general product safety to support Chinese authorities to ensure product safety. The DG SANCO started providing the AQSIQ with information on consumer products from China that have been identified as dangerous within so-called RAPEX-China system. Thanks to this system the AQSIQ can adopt appropriate measures which prevent or restrict export of dangerous products to the EU (European Commission, 2017a), see also Zandén Kjellén (2009).

Therefore, the goal of the study was to examine the dependences of the product categories and year, risk level, product user, submitting country, risk type and entity taking measures within RAPEX notifications.

1. Data and methods

The data originated from the RAPEX database and concerned period from 2005 (from this year data was accessible) to 2016. It was ordered in Excel and then transferred to Statistica 12. The data concerned 11116 notifications, including 14 notifications on products from China and other country (e.g. India, Japan, Taiwan, Vietnam). The data table consisted of seven variables: product category (in database – category), year, risk level, product user, submitting country (alert submitted by), risk type and entity taking measures (measures adopted by notifying country).

It was necessary to adopt some simplifications for statistical calculations. In case of risk type only first risk among mentioned was adopted. In case of variable entity taking measures there were only two values adopted (it was the type of entity that has taken the action). In order to appropriate presentation in figures some values of variable product category were shortened to: „childcare articles...” (name in database: childcare articles and children’s equipment), “clothing, textiles ...” (clothing, textiles and fashion items), “communication... equipment” (communication and media equipment), “electrical appliances...” (electrical appliances and equipment), “gas appliances...” (gas appliances and components), “kitchen... accessories” (kitchen/cooking accessories). There was also shortened risk type “elec... disturbance” (electromagnetic disturbance).

In order to find the dependences between variable product category and other variables (year, risk level, product user, submitting country, risk type and entity taking measures) bubble scatterplots were used. There were also pivot tables used (not presented).

2. Results and discussion

The dependences between product category and other variables were presented in subsequent figures: year (Fig. 1), risk level (Fig. 2), product user (Fig. 3), submitting country (Fig. 4), risk type (Fig. 5) and entity taking measures (Fig. 6).

The largest number of RAPEX notifications on products from China related to toys (38% of cases), clothing, textiles and fashion items (18%), electrical appliances and equipment (13%) and also lighting equipment (5%), lighting chains (3%) and childcare articles and children’s equipment (3%). The number of notifications increased in 2005-2010, in 2011 decreased, then increased again to 2014 and decreased in 2015 and 2016 (variable year in Fig. 1). The risk level was indicated as serious (variable risk level in Fig. 2) in 98% of cases. The notified products were intended mainly for consumers (variable product user in Fig. 3).

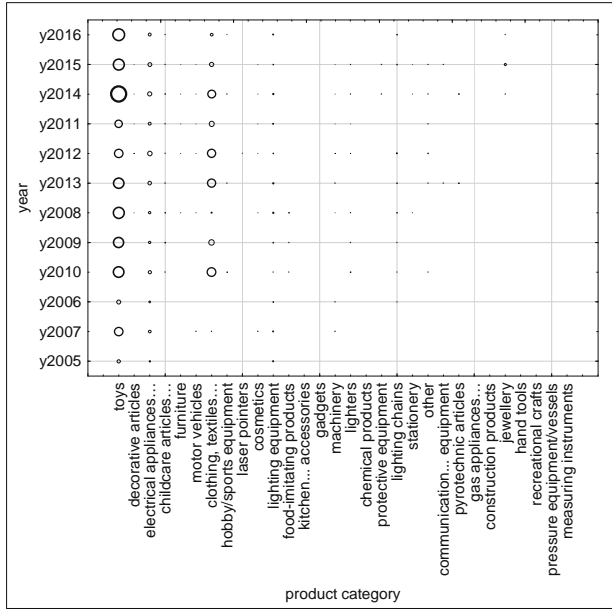


Figure 1. The dependence between product category and year

Source: own study based on calculations in Statistica 12.

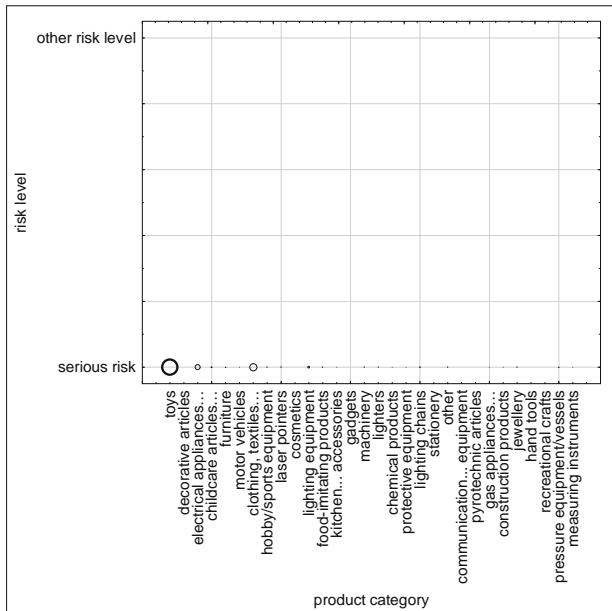


Figure 2. The dependence between product category and risk level

Source: own study based on calculations in Statistica 12.

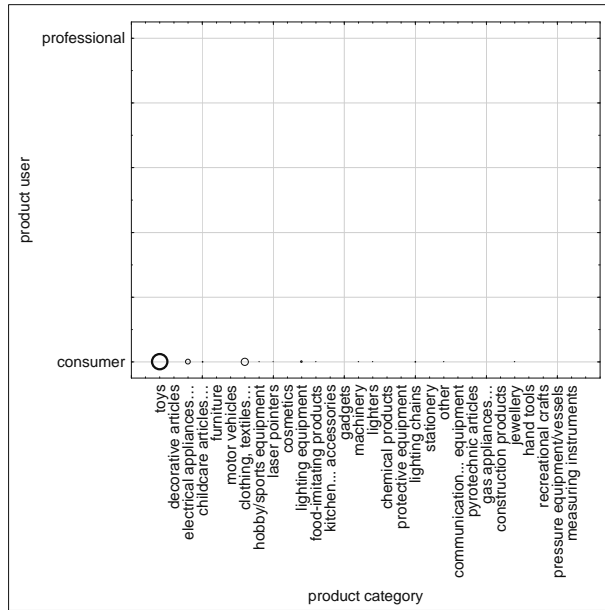


Figure 3. The dependence between product category and product user

Source: own study based on calculations in Statistica 12.

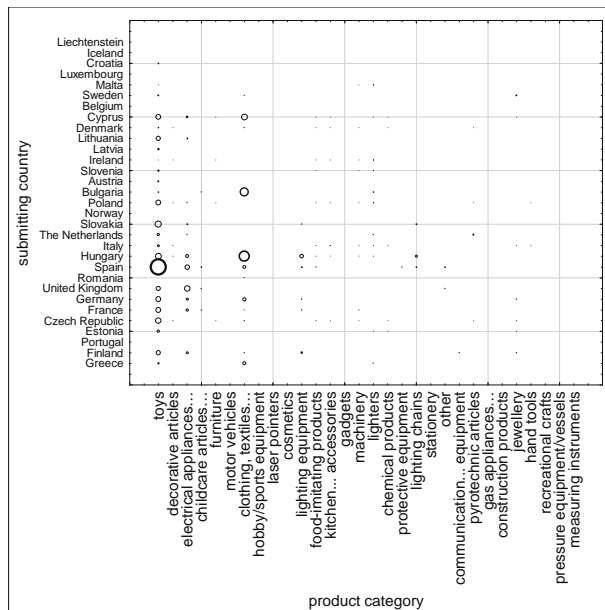


Figure 4. The dependence between product category and submitting country

Source: own study based on calculations in Statistica 12.

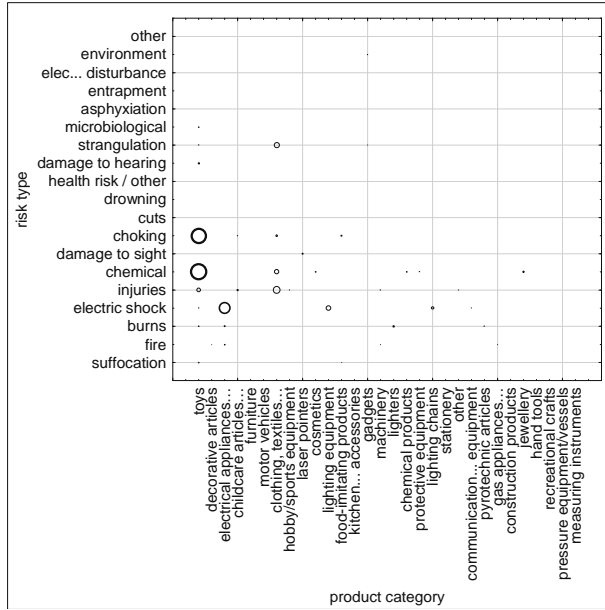


Figure 5. The dependence between product category and risk type

Source: own study based on calculations in Statistica 12.

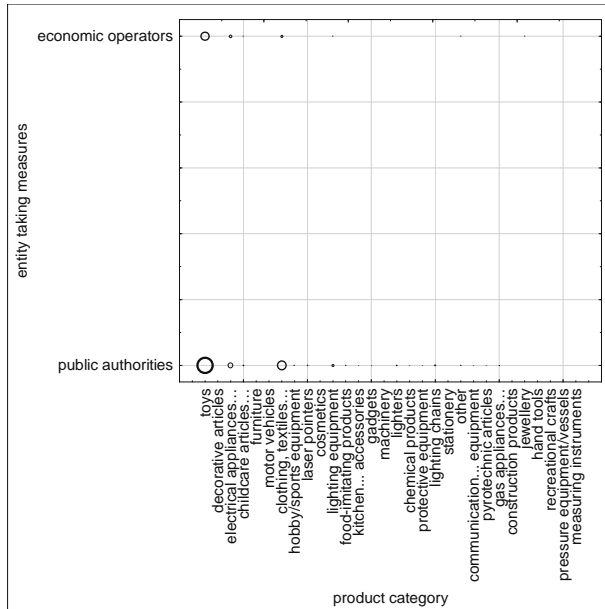


Figure 6. The dependence between product category and entity taking measures

Source: own study based on calculations in Statistica 12.

The products were notified mainly by Spain (13% of cases) and Hungary (12%), but also: United Kingdom (7%), Germany (7%), Cyprus (7%), France (6%) and Bulgaria (6%). Toys were notified mainly by Spain and other Western EU countries and clothing, textiles and fashion items by Hungary, Cyprus and Bulgaria (variable submitting country in Fig. 4). Thus, it can be assumed that the number of notifications did not depend only on the volume of imports from China (large EU countries), but it could also depend on varied quality of imported products or on the activity of control bodies (smaller EU countries). Anyway, there was no correlation between import of consumer goods / durable by EU countries from China (in 100 kg) according to the Broad Economic Categories (BEC) classification and notifications number in the RAPEX in period 2005–2016. The value of calculated (test) statistics t was 2.05 and it didn't exceed the value of critical statistics (2.06).

The risk type, which was mainly notified, was: chemical (24% of cases), electric shock (19%), choking (18%), injuries (15%), but also: burns (5%) and strangulation (6%). Chemical and choking risks were notified in toys, electric shock in electrical appliances and equipment and injuries and strangulation in clothing, textiles and fashion items (variable risk type in Fig. 5). The measures on notified products were taken mainly by public authorities (67% of cases), however, economic operator was taken actions in 33% of cases (see also variable entity taking measures in Fig. 6).

Klaschka (2017) drew attention to chemical risks, which were notified in the RAPEX in toys, clothing and electric appliances, indirectly pointing to the Chinese origin of these products. Wynn et al. (2011) indicated lead paint in toys originated from China and notified in the RAPEX in 2007.

It is worth noting that some of these products are subject to specific legal requirements related to product safety, i.e. toys according to the directive 2009/48/EC (European Parliament and Council, 2009) and electrical appliances according to the directive 2014/35/EU (European Parliament and Council, 2014) and require CE marking. Therefore, further cooperation between the European Commission and China within RAPEX-China is very important to reduce or eliminate dangerous products originating from this country. One might also consider the legal solutions, which aim would be to impose financial penalties on manufactures, importers or distributors of dangerous products or to introduce import ban of these products from which hazards would not be eliminated.

Conclusions

The number of notifications to products from China is about or above 50 % of all notifications each year. These notifications related to toys (above one third), clothing, textiles and fashion items and electrical appliances and equipment, but also lighting equipment, lighting chains and childcare articles and children's equipment.

The number of notifications decreased in 2015 and 2016. The risk level was indicated as serious and product user was consumer. The products were notified mainly by

Spain and Hungary, but also by United Kingdom, Germany, Cyprus, France and Bulgaria. The notified risk type was: chemical, electric shock, choking, injuries, but also burns and strangulation. The measures on notified products were taken usually by public authorities.

There is a need for further cooperation between the European Commission and China within the RAPEX and introducing of legal solutions (financial penalties, import ban) to reduce or eliminate dangerous products originating from this country.

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PRODUKTY NIEBEZPIECZNE DLA KONSUMENTA IMPORTOWANE Z CHIN W NOTYFIKACJACH RAPEX

Słowa kluczowe: niebezpieczne produkty żywnościowe, Unia Europejska, Chiny, RAPEX

Streszczenie. Zaprezentowano podstawy prawne i zasady funkcjonowania Systemu Szybkiego Powiadomiania o niebezpiecznych produktach żywnościowych (RAPEX). Badania obejmowały notyfikacje zgłaszane w systemie RAPEX wobec produktów z Chin w okresie 2005–2016. Zbadano zależności pomiędzy kategoriami produktu a rokiem, poziomem ryzyka, użytkownikiem produktu, krajem zgłaszającym, rodzajem ryzyka i podmiotem podejmującym środki. Zastosowano analizę skupień, wykresy rozrzutu i tabele przestawne. Wskazano najbardziej istotne problemy, a także potrzebę dalszej współpracy między Komisją Europejską i Chinami.

Tłumaczenie Marcin Pięłowski

Cytowanie

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