# Chapter 3. Infringement of Swedish IP in world trade

## Scope and volume of infringement of Swedish IP worldwide

### *Where do fakes that infringe Swedish IP come from?*

The highest number of counterfeit shipments infringing Swedish intellectual property (IP) originated from China and Hong Kong (China), representing 92.4% and 6.1% of total seized value respectively. In terms of customs seizures, China and Hong Kong (China) are also the two main provenance economies, followed by Singapore, Turkey and Malaysia.

**Figure 3.1. Top provenance economies of fake goods infringing Swedish IP, 2014-16**

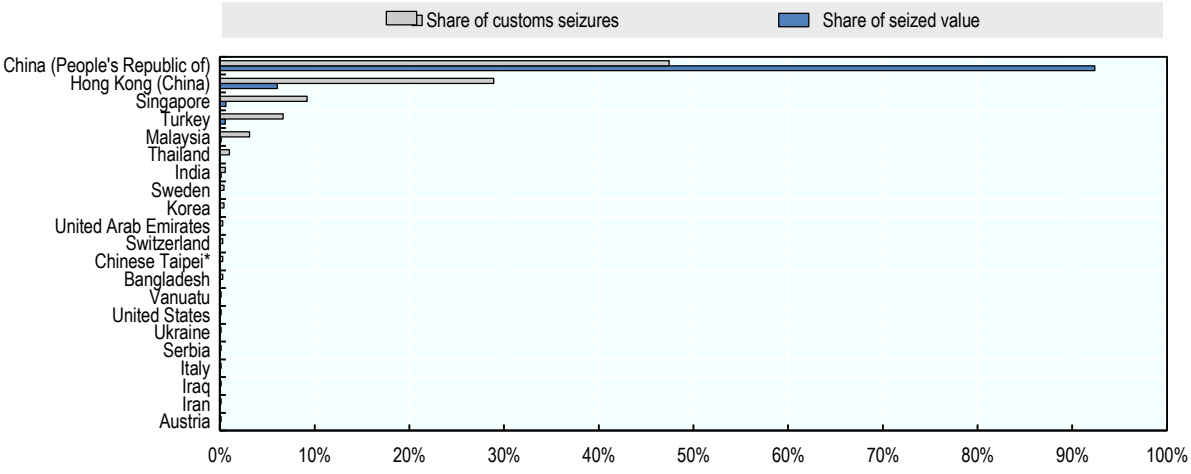
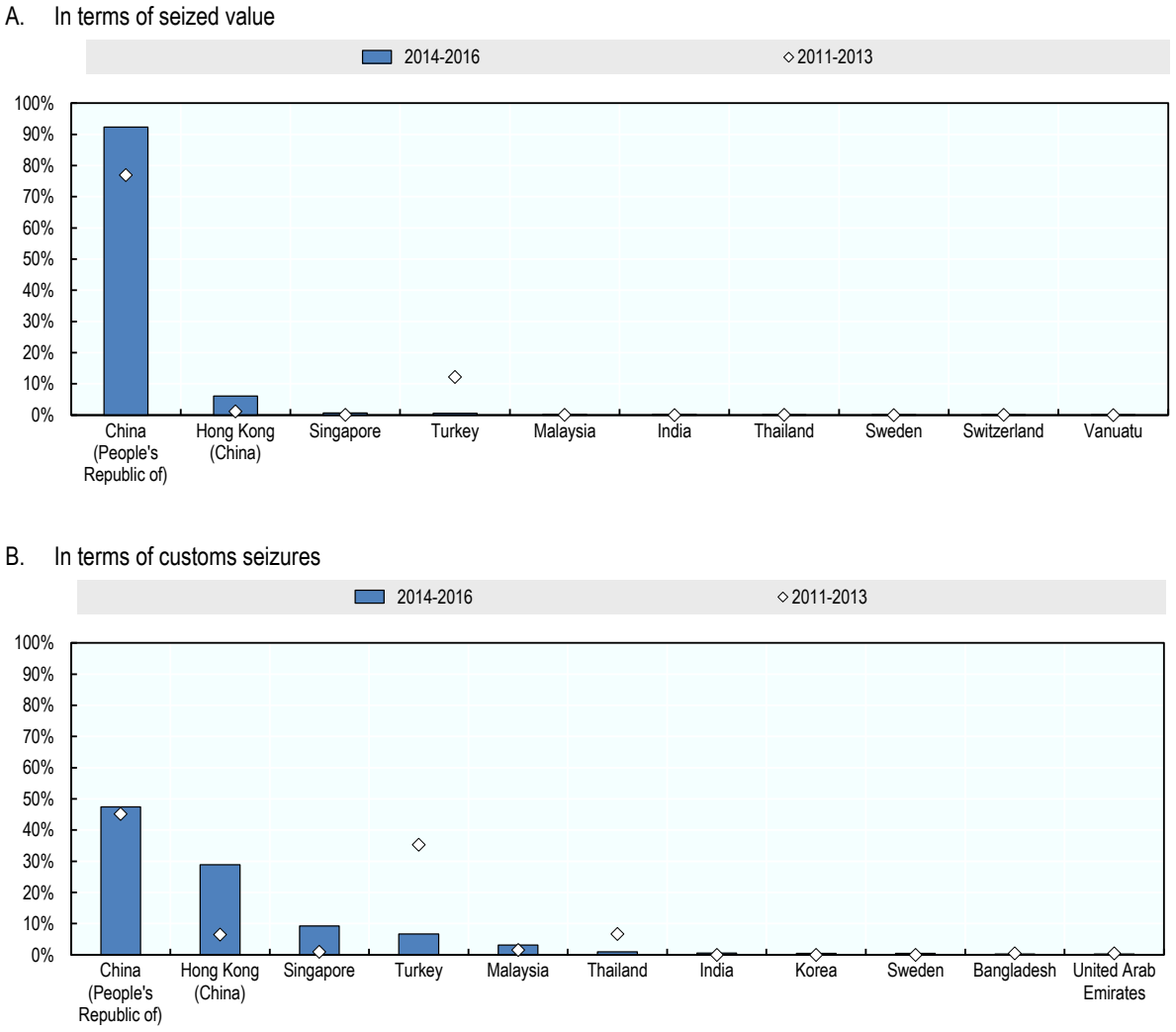



Figure 3.2 displays the changes that occurred between 2011-13 and 2014-16 in terms of provenance economies for fake goods infringing Swedish intellectual property rights (IPR).

In terms of seized value, one can see that Turkey has stepped back while China and Hong Kong (China) moved up. In 2011-13, Turkey represented around 10% of the seized value of fake imports while it represented almost 0% in 2014-16. As a result, provenance economies of fake Swedish imports were very much concentrated around China and Hong Kong (China) in 2014-16.

In terms of customs seizures, more changes have to be noted. The two most noticeable are the sharp fall of Turkey and the high growth of Hong Kong (China) and Singapore. China and Malaysia also grew during the two periods but to a lesser extent.

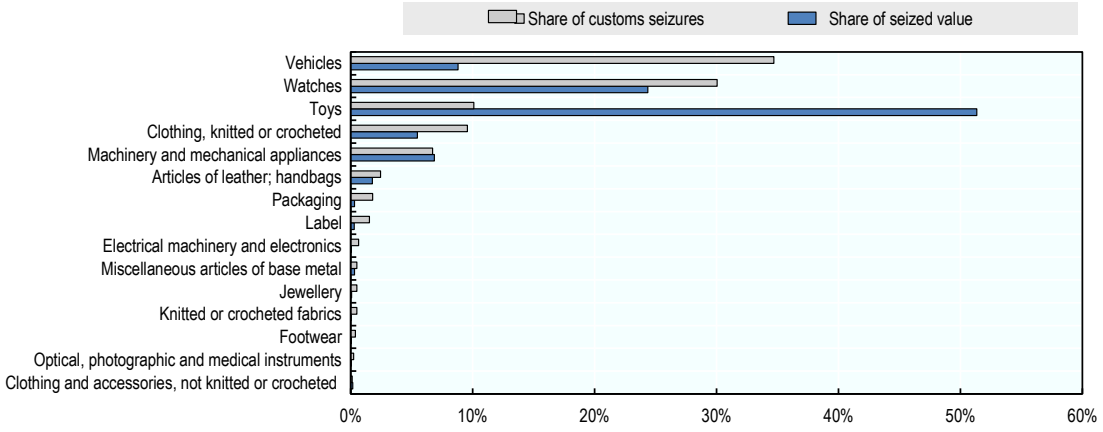
**Figure 3.2. Top provenance economies of fake goods infringing Swedish IP, change between 2011-13 and 2014-16**




## *What are the impacted industries?*

Seizures statistics reported in Figure 3.3 indicate that worldwide Swedish-related IPR infringements are especially concentrated in a limited number of industries. Relating to both the number of customs seizures and the seized value, these include vehicles, watches, toys, clothing, machinery and mechanical appliances. It is worth noting that the toys category concentrated almost 50% of the seized value while it concentrates 10% of the customs seizures.

**Figure 3.3. Top product categories of fake goods infringing Swedish IP, 2014-16**

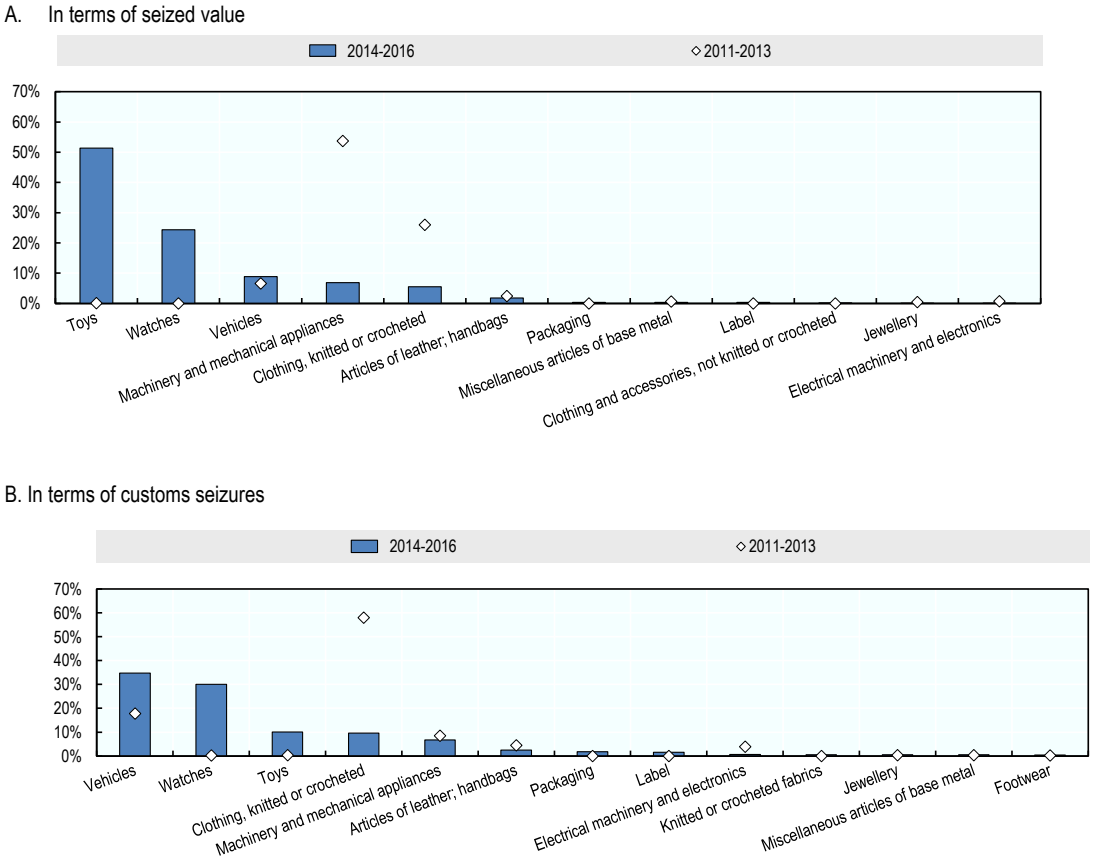



With respect to the seized value, the main changes that occurred between 2011-13 and 2014-16 are the increase in toys and watches and the decrease of machinery and clothing.

In terms of the number of seizures, the categories pertaining to vehicles, watches and toys increased strongly between 2011-13 and 2014-2016 while clothing and electrical machinery categories decreased.

Changes concerning toys and watches are quite significant since these industries represented almost 0% of both seized value and customs seizures in 2011-13.

**Figure 3.4. Top product categories of fake goods infringing Swedish IP, change between 2011-13 and 2014-16**




Concerning specific Swedish products target, the analysis shows a wide range of goods counterfeited worldwide. For example, in the clothing category, counterfeit products infringing a Swedish IP included cardigans, coats, sweaters and sportswear. Bearings are the main counterfeit product for the machinery and mechanical appliances category. For the vehicles category, fake goods are also diversified and include seat covers, mats for cars, disc brakes and brake pads.

Importantly, some fake goods pose health and safety threats. This refers mostly to goods sold on primary markets to unaware consumers. This includes not only such fake goods as bearings, chainsaws and spare parts, but also cosmetics and outdoor clothing (see Box 3.1).

**Box 3.1. Fjällräven products targeted by counterfeiters**

Representatives from the Swedish clothing producer Fjällräven provided knowledge about their counterfeiting experience during an interview. The Swedish brand suffers from counterfeiting; their backpacks are particularly affected.

Production of fakes takes place in Asia (mainly in China) but also in Turkey. Different channels are used to distribute fake goods but online distribution seems to be preeminent. E-commerce via website platforms is one of them. Distribution can also be made via social media or real market places.

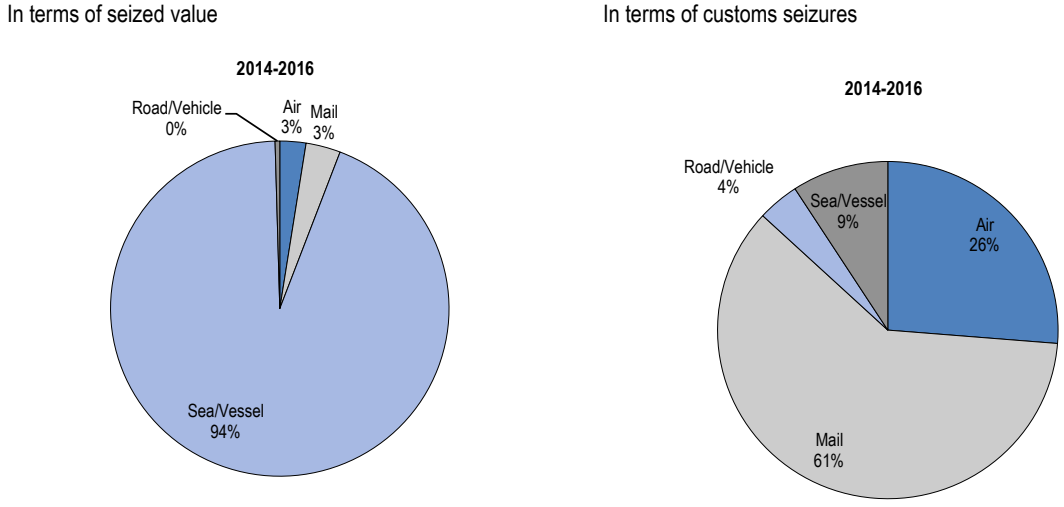
Regarding the quality of fake products, the tests made on some fake jackets revealed that they were filled with bloody feathers. This anecdote is a good illustration of low-quality material used by counterfeiters. Water resistant-products are also a source of concerns. Cheapest products used by counterfeiters are neither health nor environmentally friendly. In addition to low-quality material concerns, the methods of production have been raised. Indeed, counterfeiters are driven by profits and are not engaged in a sustainable approach with respect to the use of resources for example.

### *What are the conveyance methods used to ship fakes infringing Swedish IP?*

As can be seen in Figure 3.5, postal parcels (61%) are the most popular way of shipping counterfeit and pirated products infringing Swedish IP. Air and sea transport followed with 26% and 9% of seizures respectively.

In terms of value, the sea is the main mode of transport for counterfeit goods infringing Swedish IP. Almost 95% of the seized value of fake goods infringing Sweden IP concerned shipments by sea.

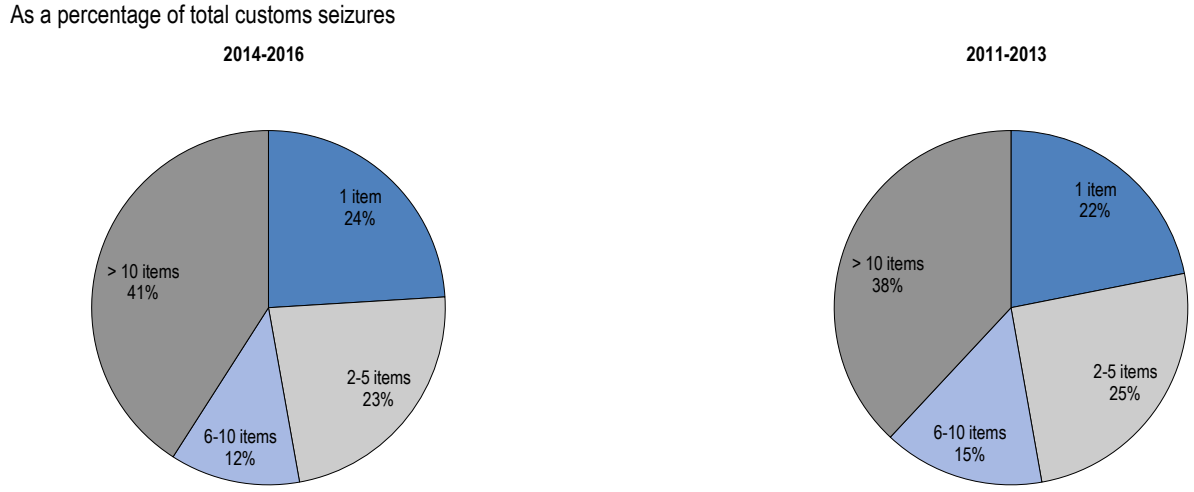
**Figure 3.5. Counterfeit goods infringing Swedish IP by transport modes, 2014-16**




Small shipments (i.e. less than six items) of fake goods infringing Swedish IP tend to predominate whereas the share of large parcels including at least 10 items represented 41% of customs seizures. In 2011-13, the structure of the size of shipments was comparable (see

Figure 3.6). As previously mentioned, the prominence of small parcels can be partly Explained by the fast growth of e-commerce as highlighted in the OECD/EUIPO joint report on small parcels (OECD/EUIPO, 2018).

**Figure 3.6. Size of shipment of goods infringing Swedish IP, 2014-16 and 2011-13**




### *What is the value of global trade in counterfeit products that infringe Swedish IPRs?*

As explained in Annex A, applying the GTRIC-e and GTRIC-p indices to data on Swedish exports and domestic sales allows the absolute values to be gauged for trade in counterfeit and pirated goods infringing the IPR owned by Swedish residents. These absolute values are expressed as upper limits of trade counterfeit and pirated goods, in percentage of exports and sales.

To calculate the ceiling values (upper limits of trade counterfeit and pirated goods, in percentage of exports and sales), and to translate the results from relative values to absolute ones (e.g. in monetary terms), a "fixed point" must first be established. This "fixed point" is the percentage of counterfeit goods in total imports in a selected product category from a given trade partner, for which reliable data are available.

The fixed point has been established with certain credibility through interviews with enforcement officials for the pairs "product category–destination economy" that are the most intense in terms of trade in counterfeit and pirated goods (for more discussion see OECD/EUIPO, 2016 and OECD/EUIPO, 2019). In these studies, the fixed point corresponds to the imports of shoes from China.

Unfortunately, this value of fixed point cannot be directly applied to infringements of Swedish IP, as shoes are not among the most intensely counterfeit Swedish product. Instead, a lower value of 20% gauged during interviews with industry representatives and enforcement official is chosen. In addition, to verify if values of the "fixed point" determined during the interviews with customs officials and experts result in robust results, some additional checks are carried out. To do so, the empirical application is based on three scenarios, with selected values of 10%, 15% and 20%. Note that all of these scenarios take much more conservative values of fixed points than the actual fixed points applied to imports in OECD/EUIPO (2016) and (2019).

Table 3.1 below reports the estimated value of global trade in counterfeit products infringing Swedish trademarks and patents for 2014, 2015 and 2016, for these three alternative ceiling values.

**Table 3.1. Estimated value of global trade in counterfeit products infringing Swedish IPR, 2014-16**

| Year | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|
| Unit | Value in USD billion | Share of sales (%) | Value in USD billion | Share of sales (%) | Value in USD billion | Share of sales (%) |
| **Ceiling value 20%** | **1.5** | **0.88** | **2.4** | **1.30** | **3.4** | **1.80** |
| *Ceiling value 15%* | *1.1* | *0.66* | *1.8* | *0.97* | *2.5* | *1.35* |
| *Ceiling value 10%* | *0.8* | *0.44* | *1.2* | *0.65* | *1.7* | *0.90* |

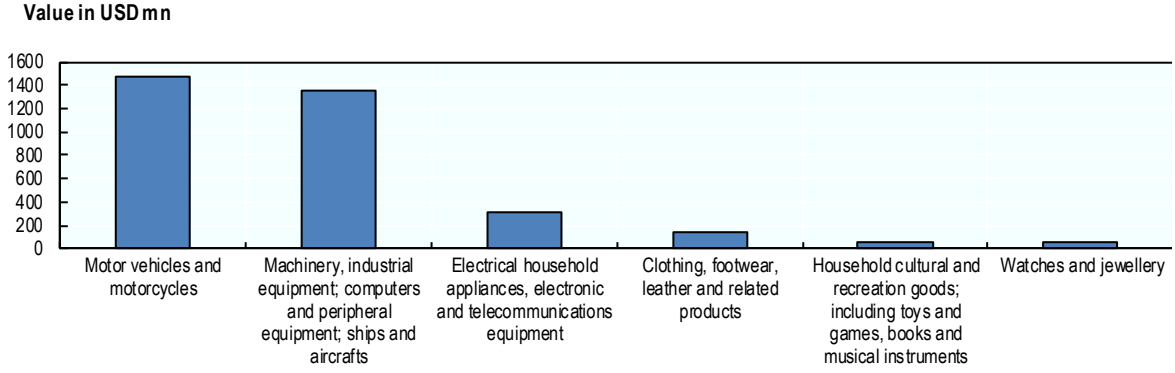
The best estimates based on the data provided by customs authorities worldwide, and on the GTRIC methodology, indicate that global trade in counterfeit and pirated products infringing Swedish trademarks and patents amounted to as much as SEK 28.3 billion (USD 3.4 billion) in 2016, equivalent to 1.8% of total sales (domestic plus exports) of Swedish manufacturing sectors affected by counterfeiting. This means that around 0.7% of global trade in counterfeit and pirated goods is related to goods infringing Swedish IPR (USD 3.4 billion over the USD 509 billion estimated in the OECD/EUIPO 2019 report).

Figure 3.7 breaks down the amount of estimated value of global trade in counterfeit products infringing Swedish trademarks and patents by product category in absolute terms (i.e. in millions of USD). This means that Swedish trademarks and patents related to motor vehicles and motorcycles; machinery, industrial equipment; computers and peripheral equipment were particularly targeted by counterfeiters in global trade.

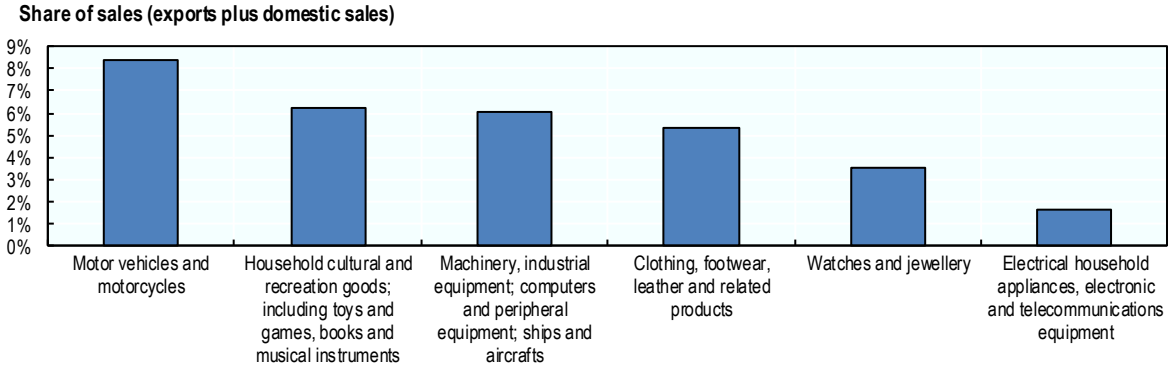
In relative terms, motor vehicles were the most often counterfeited type of products worldwide, with fakes representing more than 8% of all goods within the category. It was followed by toys and games and machinery, industrial equipment with fakes making up around 6% of all goods of each category.

**Figure 3.7. Top product categories subject to infringements of Swedish IPR in global trade, 2016**

A. In terms of seized value




B. In terms of customs seizures




## The secondary market

Regarding consumer deception, the analysis shows that around 40% of Swedish IPR infringing fakes traded worldwide were sold on primary market, i.e. they were sold to consumers who actually did not know they were buying fake products (see Table 3.2). The share of fakes destined for secondary markets varies significantly by sector, ranging from 9% for games and toys to 64.2% for vehicles.

Fake machinery products that could potentially have huge effects on security and consequently on health are rarely bought knowing they are not genuine. This is partly due to the purchase decision of these products is driven by demand while clothing or watches are supply-driven products (see Box 3.2).

**Box 3.2. SKF ball bearings, a demand-driven business model**

An interview with representatives from SKF gave some interesting insights on business models employed by suppliers of fake ball bearings.

Fake ball bearing production follows a specific business model driven by demand. Distributors, which are the key element of fake ball bearing production, gather customers' requests. They then place orders on online websites that sell fake ball bearings by imitating SKF's genuine websites. Once ordered, ball bearings are produced in legitimate factories. In most cases production of fake ball bearings takes place in Shandong Province of China. Once the "no name" ball bearings are produced, the next step is to label them in a dedicated branding workshop. Importantly, production and branding of fake ball bearings are two completely separate activities. Once labelled, fake ball bearings are ready to be distributed to consumers.

The quality of fake ball bearings is absolutely unpredictable and unstable. Customers who mostly buy fakes unknowingly can be often disappointed because they will not enjoy the high and stable quality offered by genuine goods. Technical diagnostics show that genuine goods can last 10 to 20 time longer than the fake ones. In some cases fake ball bearings were just old and used ball bearings that have been cleaned, polished and rebranded.

**Table 3.2. Share of secondary markets for counterfeit products infringing Swedish IP**

| Sector | Share of secondary market (%) |
|---|---|
| Motor vehicles and motorcycles | 64.2 |
| Clothing, footwear and leather related products | 36.6 |
| Watches and jewellery | 12.7 |
| Household cultural and recreation goods; including toys and games, books and musical instruments | 9.1 |
| Machinery, industrial equipment; computers and peripheral equipment; ships and aircrafts | 6.0 |
| Total | 59.8 |

## The effect of counterfeiting on sales by Swedish IPR owners

The total volume of foregone sales by Swedish companies due to infringement of their IP rights amounted SEK 16.7 billion (USD 2 billion) in 2016, equivalent to 2.4% of their total sales (domestic sales plus exports). The manufacturing industries of motor vehicles; machinery, industrial equipment, computers and peripheral equipment experienced the highest losses in absolute terms (respectively SEK 6.9 billion or USD 830 million and SEK 6.8 billion or USD 818 million).

In terms of shares of sales, the highest losses were recorded by the manufacturing industries for clothing, footwear, leather and related products, and watches and jewellery which lost 19.5% and 17% of their sales respectively.

**Table 3.3. Estimated lost sales for Swedish manufacturing industries, 2016**

| Sector | Value in USD million | Share of sales (%) |
|---|---|---|
| Clothing, footwear, leather and related products | 83.84 | 19.5 |
| Watches and jewellery | 22.94 | 16.9 |
| Household cultural and recreation goods; including toys and games, books and musical instruments | 35.18 | 15.3 |
| Electrical household appliances, electronic and telecommunications equipment | 241.39 | 4.0 |
| Machinery, industrial equipment; computers and peripheral equipment; ships and aircrafts | 818.31 | 2.3 |
| Motor vehicles and motorcycles | 830.10 | 1.9 |
| Total | 2031.76 | 2.4 |

## The effect of counterfeiting on jobs in the Swedish manufacturing industry

Lower sales of genuine Swedish patented and trademarked products imply fewer jobs in the Swedish manufacturing sectors affected. In order to estimate the number of jobs lost due to the infringement of Swedish trademarks and patents in global trade, the basic econometric model presented in Annex A.3 was used. This drew on estimates of the transmission rates (elasticities) between lost sales and lost jobs (Table 1.3).

Table 3.4 displays the total number of job losses in the Swedish manufacturing industry. The total loss due to infringement of Swedish IPR amounted to more than 4 500, equivalent to 2.2% of the total employment of employees in these branches.

**Table 3.4. Estimated lost jobs in Swedish manufacturing industries, 2016**

| Sector | Number of employees | Share of employees (%) |
|---|---|---|
| Clothing, footwear, leather and related products | About 300 | 12.5 |
| Watches and jewellery | Less than 100 | 10.3 |
| Household cultural and recreation goods; including toys and games, books and musical instruments | About 100 | 8.7 |
| Electrical household appliances, electronic and telecommunications equipment | About 600 | 3.3 |
| Machinery, industrial equipment; computers and peripheral equipment; ships and aircrafts | About 2 000 | 1.9 |
| Motor vehicles and motorcycles | About 1 000 | 1.8 |
| Total | About 4 000 | 2.2 |

## The effect of Swedish IPR infringement on government revenues

Lower sales and lower profits for Swedish rights holders mean they pay lower corporate income tax to the government. Moreover, fewer employees led to low personal income tax revenues and lower social security contributions. Finally, lost sales on the Swedish domestic market reduce the value-added taxes on consumption. Overall, the foregone tax revenue amounted to SEK 5.7 billion (USD 682 million) in 2016. The highest loss concerned the value-added tax, amounting to more than SEK 4 billion (USD 508 million)

**Table 3.5. Public revenue losses due to Swedish IPR infringements in global trade, 2016**

| Tax type | Value in USD million |
|---|---|
| Value-added | 507.9 |
| Personal income tax and social security contributions | 134.2 |
| Corporate taxes | 40.3 |
| Total | 682.5 |

## References

OECD/EUIPO (2019), *Illicit Trade Trends in Trade in Counterfeit and Pirated Goods*, OECD Publishing, Paris, https://doi.org/10.1787/g2g9f533-en.

OECD/EUIPO (2018), *Misuse of Small Parcels for Trade in Counterfeit Goods: Facts and Trends, Illicit Trade*, OECD Publishing, Paris, https://doi.org/10.1787/9789264307858-en.

OECD/EUIPO (2016), *Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264252653-en.