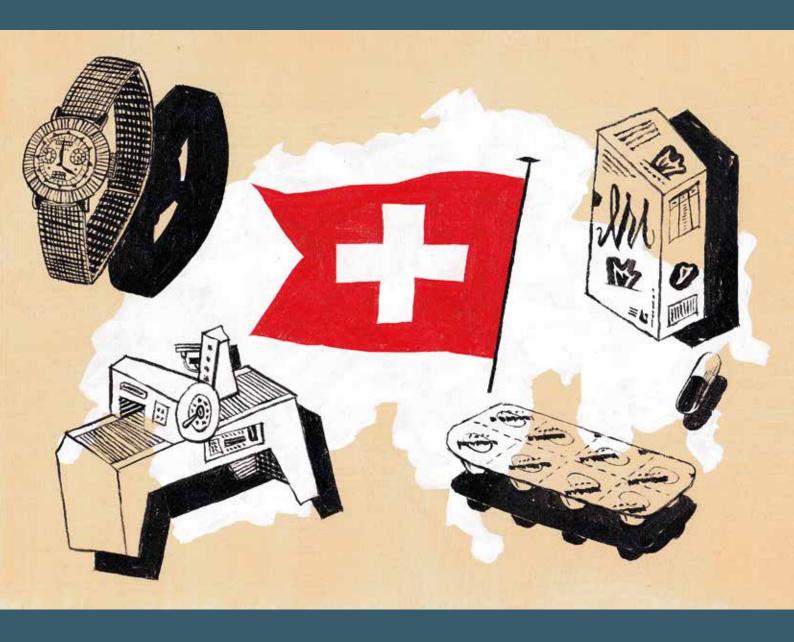
Counterfeiting, Piracy and the Swiss Economy











Foreword

Why do counterfeits target "Swiss made"* products?

Switzerland's innovation performance is among the best in the world, driven by strong research-intensive institutions in both the private and public research sector. Switzerland's advanced and knowledge-based economy produces highly valued products and services that benefit significantly from intellectual property (IP). Its open economy is well integrated into the world economy through its active participation in global value chains. While these features have led to dynamic economic growth and high living standards, they also make Switzerland vulnerable to the global risks of counterfeiting and piracy.

Illicit trade in counterfeit goods is a critical threat, damaging Swiss rights holders, the Swiss government and society as a whole. To provide policy makers with solid empirical evidence for taking action to address this risk, this OECD report measures the impact of the global trade in fake "Swiss made" products on the Swiss government and Swiss industry, including in-depth analysis in four sectors: watchmaking, mechanical and electrical engineering industries, the fast-moving consumer goods industry and pharmaceuticals.

The results are significant. In 2018, world trade in counterfeit and pirated goods infringing Swiss IP rights reduced Swiss rights holder's legitimate sales by at least CHF 4.47 billion (USD 4.5 billion), or 1.5% of Swiss genuine exports, and lowered the tax revenue to the Swiss Government by about CHF 157.1 million (USD 158 million), equivalent to almost 0.2% of the collected tax revenue. It also led to the loss of more than 10,000 jobs, representing 1.7% of all Swiss manufacturing jobs. These results highlight the need for co-ordinated international action against IP crime in general, and trade in counterfeits in particular.

This report is designed to deepen our understanding of the vital risk that counterfeiting poses for the global economy, and should help support policy makers as they design effective solutions to counter this threat.

^{*} In this study, we understand a "Swiss" or "Swiss Made" product to be a product that bears the trademark or other intellectual property right of a Swiss company.

Executive summary

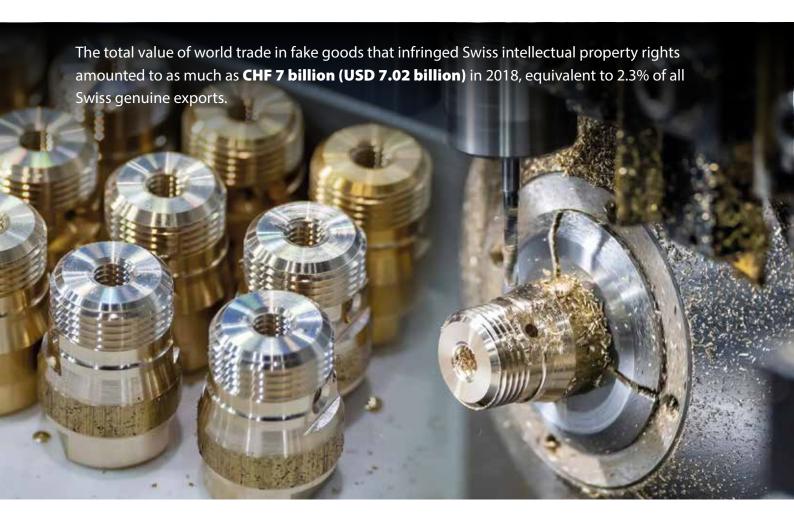
This report illustrates how trade in counterfeit and pirated goods affects Swiss economy. It studies the magnitude and impacts of global trade in counterfeit Swiss goods. It also explores the impact on four Swiss industries: watchmaking, mechanical and electrical engineering industries, the fast-moving consumer goods industry (FMCG) and pharmaceutical industry.

The analysis in this report relies primarily on a quantitative assessment using the tailored statistical methodologies developed by the OECD, drawing on data from a large dataset on customs seizures of intellectual property-infringing goods. The data refer to the pre-COVID-19 period, and to reflect the additional dynamics introduced by the COVID-crisis, in-depth dialogues with enforcement, trade community and industry were carried out.

The COVID-19 pandemic has affected trade in fake goods that infringe Swiss companies' IP rights. In most cases, the crisis has aggravated the existing trends, but in terms of absolute volumes, the impact seems to be rather moderate. The key trend has been the very intense

abuse of the online environment, as, under confinement, consumers turn to online markets to fulfill their needs. This resulted in a massive growth in the online supply of all sorts of counterfeits, including those infringing Swiss IP. This sharp increase in fakes concerned not only medicines and personal protective equipment (PPE), but also many other goods, including watches, fast moving consumer goods, and products of the mechanical and electrical engineering industries.

The findings can help both public and private sector decision-makers better understand the nature and scale of the Swiss economy's problem and develop appropriate, evidence-based policy responses.





KEY FINDINGS

Scale and magnitude of the threat

- The total value of world trade in fake goods that infringed Swiss intellectual property rights amounted to as much as CHF 7 billion (USD 7.02 billion) in 2018, equivalent to 2.3% of all Swiss genuine exports.
- In terms of industry-specific analysis, the global trade in fake "Swiss" watches amounted to as much as CHF 3.35 billion (USD 3.37 billion) which represented 48% of the total value of Swiss counterfeit goods. For the Swiss mechanical and electrical engineering products this value amounted to CHF 1.88 billion (USD 1.89 billion) or 27% of the total value of fake Swiss goods. The global trade in counterfeit and pirated Swiss FMCGs represented 3.3% of the total value of trade infringing Swiss IPRs with a value of trade in fakes amounting to CHF 229.7 million (USD 231.1 million).
- Among Swiss counterfeit products, watches are by far the most targeted. Other Swiss products commonly faked include clothing, leather products and footwear.
- Counterfeit and pirated goods that infringe the intellectual property rights of Swiss IP rights holders come mainly from China, Hong Kong (China), Singapore and Turkey. China, and Hong Kong (China) were also top provenances for fakes in the four analysed industries. Other, specific sources included Turkey and UAE for FMCGs, India for pharmaceuticals.

- Over 2017-2019, about 54% of fake goods that infringe Swiss IP were sold to consumers who knew they were buying fake goods. The share of consumers who knowingly demand fake Swiss goods grows steadily; in the previous period, between 2011-2016, it amounted to 52.3%.
- Those consumers that demand genuine "Swiss made" goods, but get sub-quality fakes, clearly suffer a damage.
 In 2018 this detriment was equal to CHF 2.056 billion (USD 2.068 billion).

Impact on the Swiss economy

- In 2018, the total lost sales of Swiss IP rights holders due to trade in fake goods infringing their rights amounted to more than CHF 4.45 billion (USD 4.48 billion). The clothing, footwear, leather and related products sector experienced the highest losses (12.5% of sector's exports) followed by watches and jewellery sector (6.1% of sector's exports).
- In 2018, the total job losses due to trade in counterfeit goods infringing Swiss IPRs amounted to more than 10 000 Swiss employees. These losses were the highest in the watch and jewellery sector, followed by clothing; footwear; leather and related products, and the textiles and other intermediate products.
- Lower sales due to counterfeiting mean lower revenues for the Swiss Government from corporate income tax, personal income tax and social security contributions.
 Altogether, trade in counterfeit and pirated goods resulted in a reduction of Swiss public revenues equal to almost CHF 157.4 million (USD 158.4 million) in 2018.

Swiss Made? Infringement of Swiss IP rights in world trade

What is the value of global trade in counterfeit products that infringe Swiss IP Rights?

Global trade in counterfeit products infringing Swiss intellectual property rights is increasing and amounted to CHF 7 billion in 2018. It is equivalent to 2.3% of total Swiss genuine exports. Trade in fake "Swiss made" products has been growing; in 2016 it amounted to CHF 5.3 billion.

In absolute terms, the following Swiss industries were especially targeted by counterfeiters: i) watches and jewellery, ii) electrical household appliances, electronic and telecommunications equipment, iii) machinery, industrial equipment, computers and peripheral equipment and ships and aircraft, and iv) clothing, handbags, footwear and related products.

Fake "Swiss made" products - where do they come from?

The vast majority of fake goods that infringe Swiss IP rights is coming from China and Hong Kong (China). Hong Kong is a big transit hub for fake Swiss products, and its role keeps growing. A rising number of fake "Swiss made" goods has been recently coming from Turkey and Singapore.

... and how are they shipped?

Counterfeiters misuse all sort of modes of international trade in their operations, including containerized maritime transport, air cargo and fast parcels. In terms of value, sea

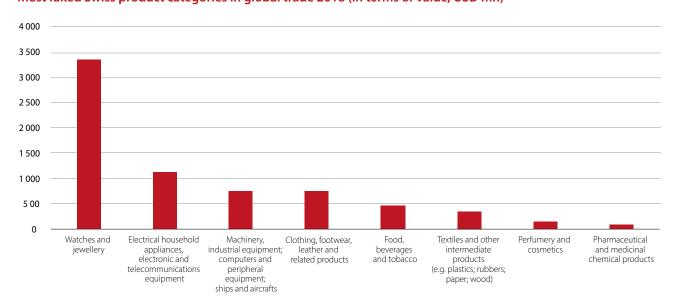
containers and express / courier cargo are the main modes of transport for counterfeit goods infringing Swiss IP rights.

In terms of number of shipments with fake "Swiss made" goods, small parcels sent by mail (67%) dominate. In addition, almost 70% of customs seizures registered report only one item per shipment; 84% of shipments contained fewer than six items. This poses a huge challenge to the enforcement authorities.

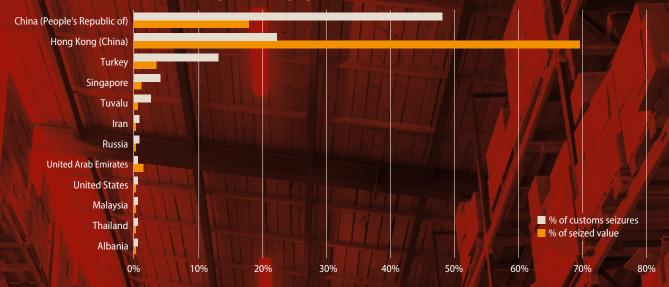
Do people knowingly buy fake "Swiss made" goods?

Between 2017 and 2019, more than the half of the goods that infringed Swiss IP rights were sold on so called "secondary markets", i.e. to consumers who knowingly demanded fakes. Of course, this share varies among product categories; only 26.5% of buyers of fake "Swiss made" perfumery and cosmetics products are aware that knowingly they buy counterfeits. However, 55% of buyers of fake Swiss watches knowingly demand cheap fakes and "replicas".

Most faked Swiss product categories in global trade 2018 (in terms of value, USD mn)



Top provenance economies of fake goods infringing Swiss IP, 2017 – 2019



Note: Tuvalu is a seasonal transit point, misused by traffickers in their operations.

Modes of transport of fake Swiss products, 2017-2019



Table 1: Share of secondary markets for counterfeit Swiss products, 2017-2019

Sector	Share of secondary market (%)
Machinery, industrial equipment; computers and peripheral equipment; ships and aircrafts	64.9
Watches and jewellery	55.0
Electrical household appliances, electronic and telecommunications equipment	49.5
Clothing, footwear, leather and related products	42.7
Household cultural and recreation goods; including toys and games, books and musical instruments	37.5
Textiles and other intermediate products (e.g. plastics; rubbers; paper; wood)	34.2
Food, beverages and tobacco	32.7
Perfumery and cosmetics	26.5
Furniture, lighting equipment, carpets and other manufacturing n.e.c.	16.7
Total	54.1

^{*} The share of employees are based on employees in full time equivalent from the annual detailed enterprise statistics for industry dataset (Eurostat) that may suffer from data shortage at the detailed level.



Fake "Swiss made" products and their effects on the Swiss economy

The infringement of Swiss IP in world trade has damaging impact on Swiss firms and consequently on the Swiss economy. Firms in Switzerland lose sales and profits, Swiss employees lose jobs; the Swiss government loses tax revenues. These losses keep growing, as the volume of fake "Swiss made" products increases.

Lost sales of Swiss companies

In 2018, the total volume of forgone sales of Swiss firms due to theft of their IP worldwide amounted to CHF 4.45 billion (USD 4.48 billion), or 1.4% of total exports of these companies in that year.

The following Swiss industries experienced the highest sales losses: watches and jewellery as well as electrical

household appliances, electronic and telecommunications equipment. In 2018, they lost CHF 2 billion and CHF 0.746 billion in foregone sales, respectively. In relative terms the clothing and watchmaking industries suffered from the highest losses; over 12.5% and 6.1% of their exports were foregone due to theft of their IP worldwide.

Table 2: Estimated lost sales for Swiss manufacturing industries, 2018

Sector	Sales losses CHF mn	Share of genuine exports
Food, beverages and tobacco	353.3	3.69%
Perfumery and cosmetics	108.3	2.94%
Textiles and other intermediate products (e.g. plastics; rubbers; paper; wood)	274.6	3.10%
Clothing, footwear, leather and related products	538.5	12.49%
Watches and jewellery	2 002.2	6.12%
Electrical household appliances, electronic and telecommunications equipment	746.7	2.50%
Machinery, industrial equipment; computers and peripheral equipment; ships and aircrafts	415.0	1.53%
Household cultural and recreation goods; including toys and games, books and musical instruments	16.0	2.57%
Total	4 454.4	1.4%

Jobs lost in Switzerland

The total number of jobs lost in Switzerland due to the global infringement of their IP amounted to over ten thousand in 2018 (seven thousand in 2016), equivalent to 1.7% of the total number of employees in the Swiss manufacturing sector¹ (1.2% in 2016). These would have been offered in the absence of counterfeiting.

In absolute terms, the watchmaking and clothing industry were hit the strongest, losing about five thousand employees, or about 8.5% of all employees. In relative terms, the clothing industry was the most affected, incurring 22.7% of jobs lost in 2018.

Table 3: Estimated jobs losses for Swiss manufacturing industries, 2018

Sector	Jobs losses	Share of employees*
Food, beverages and tobacco	1 054	1.2%
Textiles and other intermediate products (e.g. plastics; rubbers; paper; wood)	1 452	1.5%
Clothing, footwear, leather and related products	1 661	22.7%
Watches and jewellery	3 786	6.7%
Electrical household appliances, electronic and telecommunications equipment	1 477	2.0%
Machinery, industrial equipment; computers and peripheral equipment; ships and aircrafts	1 210	1.1%
Household cultural and recreation goods; including toys and games, books and musical instruments	18	1.0%
Total	10 659	1.7%

^{*}The share of employees are based on employees in full time equivalent from the annual detailed enterprise statistics for industry dataset (Eurostat) that may suffer from data shortage at the detailed level.

Foregone tax revenues

Lower sales and lower profits for Swiss rights holders mean they pay lower corporate income tax to the government. In addition, fewer employees mean lower personal income tax revenues and lower social security contributions. In 2018, this forgone tax revenue amounted to CHF 157.4 million, equivalent to 0.2% of total Swiss revenues collected on these two taxes.

IMPORTANT! The effects presented in this study are only the tip of the iceberg

This analysis does not claim to quantify all the impacts of counterfeit and pirated trade on the Swiss economy. It identified and looked at areas where quantification was possible.

There are many effects of counterfeiting and piracy that cannot be quantified, or that will occur in the long term. This includes effects on brand erosion, on consumer health and safety, on the environment, or on long-term innovation and growth.



^{1.} Employees in full time equivalent from the annual detailed enterprise statistics for industry (Eurostat)



Watchmaking industry

The industry

The Swiss watch industry comprises a huge variety of famous and internationally known watch brands and has a unique tradition in watchmaking dating back centuries. Counterfeiting is a very big issue for the watchmaking industry due to the attractive quality and design of Swiss watches. The production of counterfeit watches and the intentional use of misleading geographical indications led Switzerland to protect its rights owners in 1971 by establishing an ordinance regulating the use of the word "Swiss" for watches.

The market for Swiss counterfeit watches is demand-driven. Counterfeiters react very quickly to changes in the demand for fake watches and have the capacity to adapt their offers on an industrial scale. The market for fakes seems to be segmented, with prices and quality varying from one country to another, correlated with the economic situation and income levels. The quality of counterfeit watches can vary enormously, from very bad to relatively good. The poor-quality fakes are mainly distributed on the physical market (such as beaches in tourist areas), while the relatively good-quality ones are offered on the internet, either on dedicated websites, internet sales platforms or social media.

Fake watches are distributed all over the world, often in small parcels via certain national postal services or private delivery companies. The role and responsibility of such intermediaries in the supply chain is sometimes questionable, according to experts at the Federation of the Swiss Watch Industry (FH). Counterfeiters also use specific and strategically situated storage and transit hubs, for example the United Arab Emirates, to ship the watches to end consumers.

The use of the internet for selling fake watches is not a new phenomenon, and is increasing. Many online platforms (Alibaba, Bukalapak and others) and social media (such as Facebook Marketplace and WhatsApp) are used as distribution channels. Even YouTube is involved, since there are videos explaining how to buy fake watches, with links to sales websites. However, some internet sales channels have taken active measures to prevent counterfeiters from easily posting fake products on their platforms.

Most fake "Swiss" watches come from Asia, with China (53.4%) and Hong Kong, China (24%) on top, followed by Singapore (5.1%), and Turkey (5%). Many fake "Swiss" watches arrive at their destinations indirectly, passing through transit points such as Morocco, Kuwait, the United Arab Emirates and Greece.

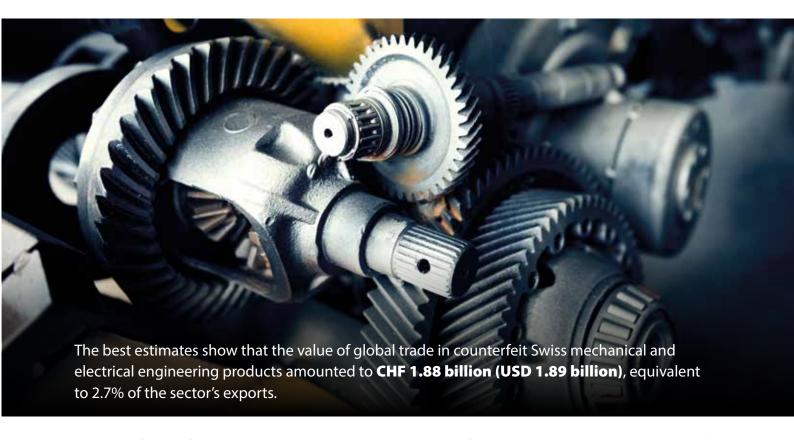
Industry action

The FH gathers more than 450 members from the watchmaking industry. Under the umbrella of its anti-counterfeiting group, the FH organizes seizure operations and awareness-raising campaigns all over the world. As a result, the FH and its partners seize millions of fake watches every year and train hundreds of police and customs officers in the fight against the illegal phenomenon of fake watches. Together with its partners, the FH also intervenes in consultation procedures in order to improve the protection of its members' intellectual property rights and works to raise consumer awareness about both blatant counterfeiting and its hidden labyrinths.

Mechanical and electrical engineering industries

The industry

The mechanical and electrical engineering industries is Switzerland's largest sector, with the highest share of sales. This industry gathers sectors specializing in manufacturing of various goods, including: basic metals, fabricated metal products, computers, electronic and optical products (except watches), electrical equipment, motor vehicles, transport equipment, medical and dental instruments etc. This is represented by the association Swissmem, which gathers around 1,200 companies, mostly small and medium-sized enterprises.



The range of counterfeits that hit the industry is very wide and includes electricity meters, power switches, semiconductors, pressure cookers, kitchen appliances, and even IP-infringing escalators.

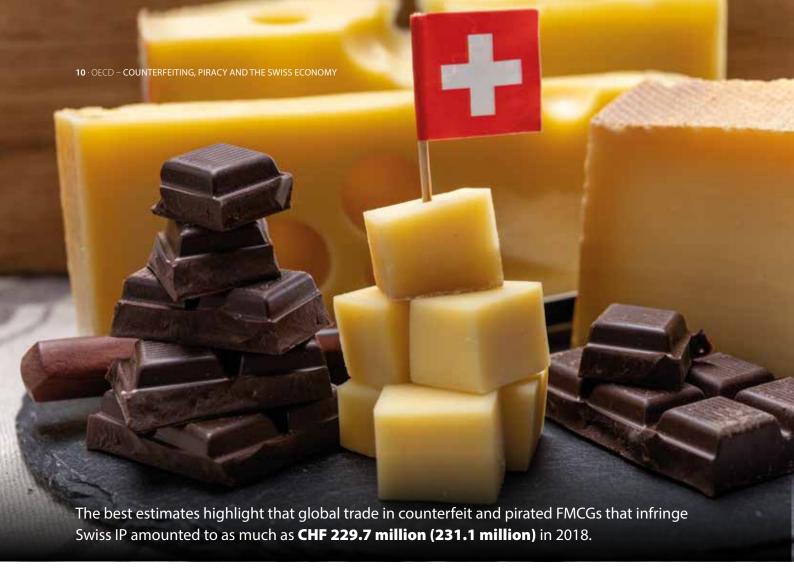
Most of these fakes are sold as genuine. In fact most customers of fakes are unaware they are buying counterfeits and are consequently deceived as they are paying the genuine prices. This consumer deception is sometimes additionally reinforced by counterfeit safety certificates.

The consumer deception raises health and safety concerns since the quality of counterfeit goods is lower than genuine items and is often dangerous.

China is by far the most important provenance country of counterfeit Swiss mechanical and electrical engineering products gathering almost 97% of total seized value.

Industry action

The little or no structured co-operation in this industry, as each company deals with this issue individually, leads to a two-tier system regarding the protection of IP infringement. While big companies have their own legal department or work with international law firms, SMEs face the cost barrier and cannot afford legal assistance to counter their IP rights infringement.



Fast-moving consumer goods industry

The industry

Fake fast-moving consumer goods (FMCGs) that infringe Swiss IP rights, are mostly common consumer products such as foodstuff (coffee, chocolate, powdered milk), perfumes and cosmetics (body care items and deodorants). For all these products, legitimate suppliers must comply with strict health, safety or environmental regulation to make sure their products will cause no harm or damage. In addition, transport and storage of legitimate products must also observe certain quality standards in order to preserve high quality of these goods.

Counterfeiters do not observe any of the quality and safety norms, neither for production nor for transport and storage. Consequently, fake FMCGs are often of very low quality and can pose significant health, safety risks to consumers. Importantly, these health and safety risks also result in additional reputational risks for the industry, in addition to the direct damaging effect of counterfeiting due to reduced demand for legitimate goods.

China and Turkey are the main provenance economies of fake Swiss FMCGs, representing respectively 36% and 30% of customs seizures. They are followed by two big transit points -- the United Arab Emirates and Hong Kong (China).

Industry action

To counter the risks of counterfeiting and piracy, the Swiss FMCG industry has been engaged in a number of awareness-raising and educational campaigns, highlighting the problem with consumers and pointing at easy ways of telling the difference between genuine and counterfeit products. Many of these campaigns and actions have been carried out regionally, to respond to local cases of influx of counterfeit goods on local markets.

Globally, seized fakes that infringe Swiss IP represented **2.5% of total seized value of fake pharmaceuticals** in 2016.



Pharmaceutical industry

The industry

The pharmaceutical industry is a sensitive and important one, as risk of counterfeit medicines implies for this sector not only possible economic damages, but also can lead to significant health threats. This is because fake medicines are often not properly formulated and may contain dangerous ingredients, and consumers are not very aware of the problem of counterfeiting and can be easily deceived into thinking that the products they are purchasing are genuine.

World trade in counterfeit pharmaceuticals is attractive for counterfeiters, given the high profit margins, low risks of detection and prosecution, weak penalties, and the ease with which consumers can be deceived into believing that the counterfeit products are genuine. According to recent estimates, in 2016, international trade in counterfeit pharmaceuticals reached USD 4.4 billion. Taking customs perspective, and looking at location of pharma companies that suffer from counterfeiting, Switzerland is the 7th country (ex aequo with France) in the world, after the United States, Germany, United Kingdom, Austria, China and India. Globally, seized fakes that infringe Swiss IP represented 2.5% of total seized value of fake pharmaceuticals in 2016.

Fake medicines that infringe Swiss IP mainly came from China and India. Some European countries, such as the United Kingdom, Germany as well as Singapore are important transit points.

Focus on infringements of Novartis' IP

Novartis is a leading, innovative Swiss pharmaceutical company, offering a wide spectrum of medicines. Additional datasets provided by Novartis' permits to check what diseases the illicit medicines are supposed to cure. The results are alarming. Counterfeiters target such Novartis drugs as ophthalmology products, cardiovascular treatment, hormone growth medication, anti-inflammatory medicines and oncology treatment. It should be highlighted that the absolute majority of these fake medicines does not have any active ingredients, and poses significant risks to patients' health and life.

Table 4: Number of counterfeit Novartis incidents by therapeutic categories (top five), 2018

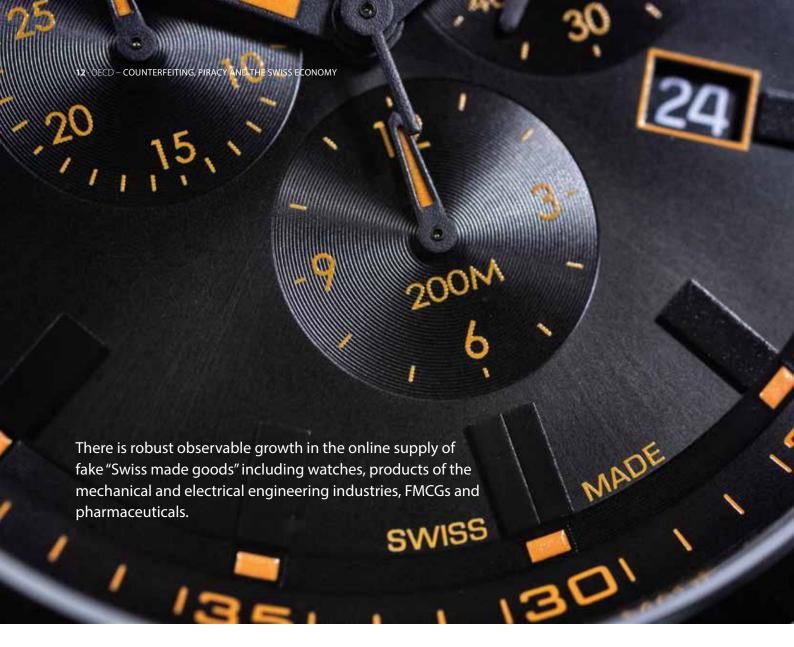
Therapeutic categories	Count of Case Number	Share of total counterfeit incidents
Ophthalmology	117	45%
Cardiovascular	26	10%
Hormone Growth	17	7%
Anti inflammatory	8	3%
Oncology	7	3%

Note: Counterfeit Novartis ophthalmology products were the most targeted by counterfeiters in 2018, representing 45% of total counterfeit incidents involving Novartis products.

Industry action

Novartis actively counters illicit trade in medicines. Only in 2019 the company investigated 268 incidents of suspected falsified medicines. It led to 61 successful enforcement actions and the seizure of over 2 million falsified unit dosage medicines by law enforcement and health authorities and the dismantling of 11 illegal pharmaceutical manufacturing facilities. Among these dismantlements, a broad-scale assembly line in China was producing counterfeit cardiovascular treatments.

Novartis is also monitoring the most targeted Novartis products on online pharmacies, social media and commercial platforms which are an important distribution channel for fake pharmaceuticals. This monitoring led to 102 online investigations and the removal of 13 891 illegal listings in 2019.



COVID-19 and fake "Swiss made"

The COVID-19 pandemic has largely re-shaped illicit trade in counterfeit "Swiss made" goods, and consequently, some results have been coined in a set of discussions with enforcement officials and industry delegates and following the on-going enforcement actions. Other lasting results on counterfeiting are expected to emerge gradually.

As for the short-term effects, trade and enforcement experts highlight that the pandemics has flamed existing problems, and in terms of volumes there are some modest effects. Experts also point at several COVID-19-related factors that have shaped the landscape of illicit trade for fake "Swiss made" products, such a changing trade routes and distorted supply chains.

Criminal networks have reacted very quickly to the crisis and adapted their strategies to take advantage of the shifting landscape. For example counterfeiters have continued to supply fake "Swiss made" watches during the lockdowns in Europe and the US, indicating that

these well-organized criminal networks have foreseen the disruptions of some transport routes and managed their operations accordingly.

At the same time, COVID-19 also resulted in *changes in customs control priorities* (e.g., focus on COVID-19-related products) and labour shortages among law enforcement officials. Unfortunately, these factors reduce enforcement efforts to counter illicit trade in many counterfeit products.

Another observed trend is a substantial shift towards further *misuse of the online environment*. The online boom also resulted in a considerable growth of new

online marketplace and online platforms – created during the COVID-crisis. Apart from websites, criminals also begin to misuse new online channels of communication, such as WhatsApp or Facebook messenger.

There is robust observable *growth in the online supply of fake "Swiss made goods"* including watches, products of the mechanical and electrical engineering industries, FMCGs and pharmaceuticals. It occurs on all types of online platforms, including those that used to be relatively free from this risk. For example in 2020, FH's Internet Enforcement Team closed more than 1.2 million offers for fake watches on numerous Internet sales platforms.

Due to the lockdown, e-commerce is becoming one of the leading platforms for fake and substandard medicines that infringe the IP of Swiss pharmaceutical companies. Enforcement officials also highlight that those counterfeit medical products that are related to COVID-19 are often bought online and shipped by air cargo in small parcels.

Finally, due to the pandemic, the demand for pharmaceuticals and personal protective equipment (PPE) (for example: masks, safety glasses, protective clothing) grew sharply. Criminals entered this niche, not only offering fake PPEs but also counterfeit Swiss equipment to produce the PPEs or spare parts of machines. In addition, to enhance their attractiveness, criminals tend to misuse existing trademarks of trusted Swiss FMCG producers. Counterfeiters tend to put their brands on fake PPEs, even when the right holder does not supply the PPEs of this particular kind. This clearly illustrates the free-riding of counterfeiters on the goodwill established by Swiss FMCG companies and trust that consumers associate with their brands.

The industry continues to combat this scourge actively, using modern techniques, e.g., artificial intelligence. After the detection, the websites tend to reappear almost instantly, however. The effective prosecution of criminals behind these websites seems to be extremely hard and difficult.

Another example of industry action is a set of online training for police and customs authorities worldwide organized by the Federation of the Swiss Watch Industry (FH). Also, support programs for brand owners were initiated to offset the negative impacts caused by the illicit trade during the pandemic.





THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 35 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies. http://oe.cd/illicit-trade

The OECD Task Force on Countering Illicit Trade (TF-CIT) convenes governments and a wide range of stakeholders to map and analyse the underlying dynamics of illicit trade. Its evidence-based research and advanced analytics draw attention to the convergence of criminal networks that operate illicit trade, from counterfeits to narcotics, from excise goods to the trafficking of persons and wildlife. The goal of the TFCIT is to foster public policies, international cooperation and public private partnerships that deter and reduce illicit markets. http://oe.cd/tfcit



