global witness

GOLD TRADE DATA

What it reveals and how it could be better used for due diligence purposes

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CONTENTS

Introduction 1

WHAT IS SUPPLY CHAIN DUE DILIGENCE? 1

Trade data can reveal gold supply chain risks .. 3

Countries without any significant gold deposits export large amounts of gold 3

Asymmetries - gold trade is reported by the importing country but not by the exporting country 4

Big fluctuations in the trade data 5

Mined gold is reported as scrap gold 6

Difficulties with existing trade data 7

Lack of publicly available data 7

Gaps in the data 8

Poor data quality 8

Recommendations 10

Endnotes 11

INTRODUCTION

Gold leaves traces when it crosses borders. Like other commodities, shipments of gold are usually registered by customs when leaving and entering countries.

Trade data is an important resource for various actors playing a role in responsible gold supply chains. Global Witness and other organizations have reported extensively about conflict, human rights abuse and environmental problems which are often connected with gold supply chains. Identifying these risks in the supply chain and adequately dealing with them should be key elements of companies' due diligence systems. For refineries, traders and bullion banks trade data can be a means of carrying out simple checks for red flags related to the gold they source. However, by reviewing cases of high-risk gold entering the supposedly clean supply chains, Global Witness found various cases in which companies claiming to adhere to the highest due diligence standards in the gold sector either did not do the most basic checks or seemingly ignored the red flags.

For government bodies tasked with the enforcement of regulations related to supply chain due diligence, for example police and customs, trade data can help indicate high-risk gold. Civil society organisations and journalists can use it in their role as watchdogs. However, the value of gold trade data as a tool for better due diligence depends on the availability and quality of the data – and Global Witness' research indicates that there is much room for improvement. Important data is often not publicly available or the categories used are not helpful for due diligence purposes. Furthermore, GW has detected mistakes in trade data. As a consequence, available trade data often hides problems rather than helping to uncover them.
This article is based on an analysis of major international trade databases including the UN Comtrade website, databases on gold production,[1] and examples from Global Witness', other NGOs and media's long-standing work on high-risk gold.

WHAT IS SUPPLY CHAIN DUE DILIGENCE?

Supply chain due diligence is an ongoing process by which companies identify whether there is a risk that the commodities they purchase or handle may be linked to human rights abuses, conflict, corruption or environmental destruction, and put in place strategies to mitigate such risks where they are found to exist.

As a concept, it is based upon the premise that companies have a responsibility to ensure that they do not profit from serious harm to individuals, societies or the environment.[2] Concretely, it comprises the steps that companies must take to identify and address risks in their supply chain where they arise.

The Organisation for Economic Co-operation and Development (OECD) has published *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* (OECD Guidance hereafter),[3] which is the international standard for responsible mineral sourcing.

The OECD Guidance lays out a proactive and reactive process to ensure that risks are managed responsibly as part of a company's day-to-day business practices. It aims to help companies decide from which suppliers they can safely source and from which ones they must suspend sourcing, and how to source responsibly from, and contribute to sustainable development in, conflict-affected and high-risk areas.

The OECD Guidance lays out a *five-step process* that companies can use to ensure that their mineral purchases are not contributing to conflict or human rights abuses. The steps are:

1. Establish strong company management systems. This includes the development of a bespoke, company-specific conflict minerals policy and the creation of internal structures to support supply chain due diligence.

2. Identify and assess risks in the supply chain, for example using 'red flags'.

3. Design and implement a strategy to respond to identified risks. Once a company has defined and identified risks in its supply chain, it must work to mitigate and manage these risks through a risk management plan.

4. Carry out an independent third-party audit of supply chain due diligence at identified points in the supply chain.

5. Publicly report on supply chain due diligence on an annual basis, including company management systems and, risk assessment and management. In addition, refiners should also publish their summary audit reports.[4]

Companies identifying red flags in their supply chains (under step 2) should particularly look out for the following types of red flags:

Red flag locations of gold origin and transit:

> The gold originates from or has been transported through a conflict-affected or high-risk area.

> The gold is claimed to originate from a country that has limited known reserves or stocks, likely resources or expected production levels of gold.

> The gold is claimed to originate from a country through which gold from conflict-affected and high-risk areas is known or reasonably suspected to transit.

> The gold is claimed to originate from recyclable/scrap or mixed sources and has been refined in a country where gold from conflict-affected and high-risk areas is known or reasonably suspected to transit.

Supplier red flags:

> Suppliers or other known upstream companies operate in one of the abovementioned red flag locations of gold origin and transit, or have shareholder or other interests in suppliers of gold from one of the above-mentioned red flag locations of gold origin and transit.

> Suppliers or other known upstream companies are known to have sourced gold from a red flag location of gold origin and transit in the last 12 months.

Red flag circumstances:

> Anomalies or unusual circumstances which give rise to a reasonable suspicion that the gold may contribute to conflict or serious abuses associated with the extraction, transport or trade of gold.[5]

Subsequently, companies should review in-depth the context of all red flag locations in their supply chain and the due diligence practices of red-flagged suppliers.[6] Based on this review they should form a view on the risks in the supply chain and adopt an appropriate risk management strategy (step 3).[7]

The OECD Guidance is global in scope and all companies buying, selling or handling any minerals should conduct due diligence on their supply chains. However, the appropriate level and scope of due diligence for each company will depend on individual circumstances, such as the size of the company, its sector, location and position in the supply chain.[8] Although individual companies bear the primary responsibility for the implementation of due diligence, industry actors have developed a series of schemes specifically focusing on the smelting and/or refining stage, which has been identified by relevant stakeholders as the most vulnerable stage of supply chains.[9]

The most prominent gold industry scheme is organised by the London Bullion Market Association (LBMA), a gold industry association coordinating the world's largest gold bullion market. The LBMA launched its Responsible Gold Guidance (RGG) in 2012 for all refiners on the LBMA Gold Delivery List, which is recognised globally as the benchmark standard for gold bullion bars.[10] The programme was developed to implement the OECD Guidance recommendations.[11]

TRADE DATA CAN REVEAL GOLD SUPPLY CHAIN RISKS

While the analysis of gold trade data can be complex, the following cases show that very basic checks can raise red flags relating to potential connections with human rights abuse or conflict. However, examples in this analysis show, that refineries seemingly either failed to identify obvious risks in their supply chains or didn't take appropriate measures as set out in the OECD Guidance.[12] Furthermore, government agencies, customs or police in several cases apparently did not take any measures with regards to the obvious warning signs despite domestic legal requirements.

Countries without any significant gold deposits export large amounts of gold

How is it that countries can export large amounts of gold when they neither produce nor import gold? The reason for this anomaly is in some cases simple: smuggling. When gold is smuggled into a country, it is not reported as an import, but it often leaves the country through legal channels and shows up in the export figures, leading to gaps between production and net export figures.[13] The OECD Guidance states that countries which declare volumes of gold that significantly deviate from their known reserves or expected production levels should be considered red flag locations.[14]

Looking back on data for the 15 countries with the largest gaps between gold production and net exports in 2017 data, we find at least 8 countries where gold smuggling is widely known, such as Bolivia[15], Togo[16], Peru[17], Sudan[18], Suriname[19], Egypt[20] and also Hong Kong[21] and Japan[22].

If this simple check shows a large difference between declared net exports of gold and gold production, this should trigger further investigations into the supply chain.[23]

Nonetheless, reports have highlighted that some refineries listed on the LBMA's Good Delivery List have bought gold from such red flag countries raising questions if they had carried out proper due diligence.

Table: Countries with the highest difference between gold production and net exports[24]

Country	Gold Production (tonnes)	Net exports of gold (tonnes)	Gap (tonnes)
Hong Kong	0	461.4	-461.4
Argentina	63.3	436.2	-372.9
Peru	162.3	504.1	-341.8
Japan	6.4	183.3	-176.9
Suriname	33.4	187.3	-153.9
Mexico	126.8	279.7	-152.9
Spain	0	48.2	-48.2
Egypt	16.9	48.7	-31.8
Philippines	47.9	70.9	-23.0
Sudan	14.5	37.4	-22.9
Bolivia	6.4	27.8	-21.4
Cyprus	0	20.7	-20.7
Togo	0	20.0	-20.0
Germany	0	15.6	-15.6
France	0	11.8	-11.8

Togo exported almost 20 tonnes of gold without having significant gold mining activities and did not report any gold imports in 2017.[25] According to a report by the Swiss NGO Public Eye, the world's biggest refiner,[26] Switzerland-based Valcambi, bought gold from Togo. Public Eye alleged that the Togolese gold came from mines in Burkina Faso and was extracted using child labour before it was smuggled to Togo, depriving Burkina Faso of millions in tax revenues and contributing to human rights abuses.[27]

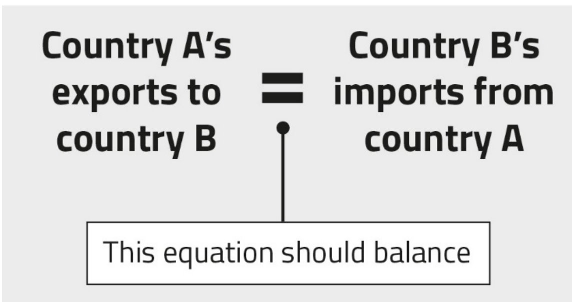
Valcambi did not report any red flags related to the Togo gold in its yearly reports which are available[28] as stipulated in the OECD Guidance[29] to which the refiner states it adheres.[30] Valcambi declined to answer Public Eye's questions about whether gold exports from the non-gold-producing Togo raised red flags.[31] It also seems that the obvious warning signs from the trade data went unheeded by Swiss authorities which only from 2019 have started carrying out inspections on refiners' risk management.[32]

Another striking example is the case of the US-based refiner Elemetal LLC, which in 2014 sourced gold worth 270 million USD from Bolivia.[33] At the time this would have been approximately 6.6 tonnes of gold.[34] However, in the same year Bolivia only produced 6.3 tonnes of gold in total, according to one of the major gold surveys.[35] Peruvian customs officials have indicated that illegally extracted gold from the notorious Madre de Dios region was smuggled in large quantities to Bolivia.[36] In 2017, a US court found Elemetal LLC guilty of failing to maintain a compliance programme to stop its gold dealers from engaging in a $3.6 billion money laundering scheme, which included imports of illegally mined and smuggled gold from South America.[37]

Asymmetries - gold trade is reported by the importing country but not by the exporting country

Country A's exports to country B and country B's imports from country A should balance. If there are big gaps, this is a quite obvious indicator that something might be amiss.

An explanation for such asymmetries can once again be smuggling. Gold is leaving country A illegally, for example in order to avoid taxes and is therefore not registered with the relevant authorities, but enters country B legally, showing up in the statistics of country B.



It can also mean that gold coming from a country that is regarded as high-risk (say country A), is declared as coming from a different country (say country C) instead, to avoid scrutiny when it arrives in country B.

Other possible reasons explaining the mismatches between import and export figures are time lags between cargo leaving and arriving, free zones sometimes not appearing in trade data or unintended mistakes by customs.

Looking at the United Arab Emirates (UAE) import data, the differences between declared exports of African countries sending gold to the UAE and declared imports by the UAE are huge. Overall, African gold exporting countries report having sent gold worth almost 4.7 billion USD to the Emirates in 2018, whereas the UAE report having imported gold worth almost 7.4 billion USD from the same countries. Furthermore, 23 African countries have not reported any exports to UAE in 2018 but the Emirates report gold imports worth a further 6 billion USD from these countries.[38]

Both explanations given above – smuggling and the false attribution of the country of origin - are possible applicable explanations in this case. There is much evidence of gold smuggling to UAE's refineries and gold souks.[39] It has also been documented that gold from the eastern regions of Democratic Republic of Congo (DRC), which is considered a high-risk area, is sometimes declared as coming from another country when imported into the UAE.[40] Nevertheless, Dubai customs authorities' fail to appropriately check imported gold according to UN reports.[41]

The OECD Guidance considers gold from countries, through which gold from conflict-affected and high-risk areas is known or reasonably suspected to transit as red flags.[42] This doesn't mean that companies should cease imports of gold from such hubs, but they should do enhanced due diligence in order to exercise their responsibility to make sure that they don't import problematic gold.

In 2014 Global Witness revealed how large amounts of highly problematic gold were imported into the UAE and refined by Kaloti, the largest refiner in the UAE.[43] Surprisingly, the Swiss import figures of gold from the UAE have sharply increased from 52 tonnes in 2013, to 64 tonnes in 2014, 76 tonnes in 2015, reaching 373 tonnes in 2016.[44] This raises questions if the Swiss refineries and other companies importing gold from UAE have serious due diligence systems in place. Our recent investigation found that Valcambi has sourced gold from Kaloti in 2018 and 2019 apparently without conducting appropriate due diligence. Kaloti was at high risk of having bought conflict gold from Sudan at the time Valcambi sourced gold from the company.[45] Swiss customs don't use trade data to scrutinize gold imports, including in relation to human rights issues – this is despite the fact that Swiss refineries process two-thirds of the world's gold.[46]

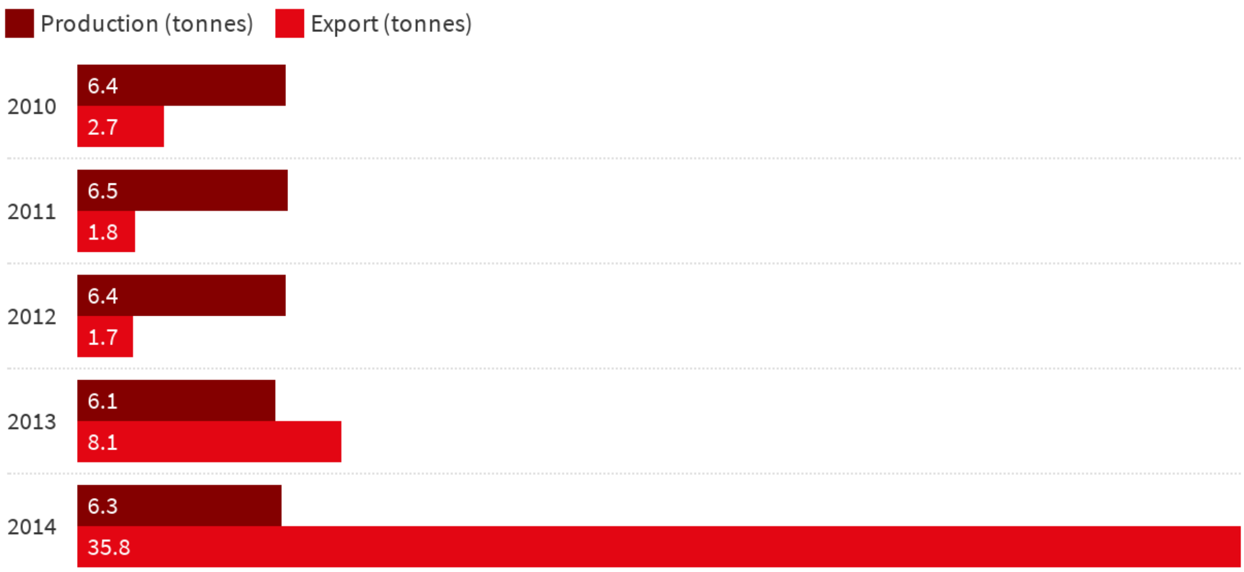
Big fluctuations in the trade data

The OECD Guidance considers anomalies or unusual circumstances which give rise to a reasonable suspicion that the gold may contribute to conflict or serious abuses to be a red flag.[47] Such anomalies or unusual circumstances can be indicated by trade data.

In Bolivia, annual reported exports have increased from less than 3 tonnes since 2010 to 8 tonnes in 2013 and over 35 tonnes in 2014.[48] However, Bolivia's gold production has remained around 6 tonnes per year between 2010 and 2014[49] and imports are consistently of a trade value of around one tonne or less.[50] Therefore, there is a gap of over 28 tonnes for the year 2014, which remains unexplained.

Many of the Bolivian companies exporting the gold allegedly filed false information about the purpose of their company (e.g. the company reported repairing and selling cars) with the Bolivian authorities. According to the Peruvian NGO Ojo Publico, the origin of the gold being exported from Bolivia is suspicious and could be

BOLIVIA GOLD



Source: GFMS Gold Survey; UN Comtrade

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linked to organised crime.[51] Nevertheless, U.S. companies including Elemetal (previously operating under the name NTR Metals)[52] and Republic Metals Corporation, which were both on the LBMA Good Delivery List, reportedly sourced gold from Bolivia in 2014.[53]

Mined gold is reported as scrap gold

A typical way of attempting to escape scrutiny of high-risk gold is by labelling it as scrap gold when in reality it is mined gold. Looking at trade data, it is easy to find cases which raise questions about the accuracy of the labelling.

Hong Kong reports having imported over 5 tonnes of scrap gold from Suriname in 2018 whereas Suriname reports almost the same amount but labelled as raw gold. According to Hong Kong, the trade value of that gold was worth around US$215 million.[54] Therefore the kilo price (US$39 590) paid is slightly higher than the average gold price for that year (US$39 470).[55] Since scrap gold mostly consists of old jewellery which is usually of a lower purity, and therefore of lower value than pure gold, this raises questions as to whether Hong Kong really imported scrap gold. Since Suriname is known as a hub for high-risk gold, this is all the more concerning.[56] Global Witness does not have any information about which companies in Hong Kong acquired the gold from Suriname but is aware that two refineries on the LBMA Good Delivery List were based in Hong Kong in 2018.[57]

The OECD Guidance considers it a red flag if gold it is claimed to be scrap gold and has been refined in a country where gold from conflict-affected and high-risk areas is known or reasonably suspected to transit.[58] Despite the risks relating to scrap gold, the EU Responsible Sourcing Regulation, which comes into full force in 2021, requires lower obligations for importing scrap minerals as compared to mined minerals.[59]

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The examples in the preceding pages suggest that various refiners, which were at the time LBMA-accredited and claim to adhere to the highest standards of responsible sourcing in the gold sector, seemingly failed to implement some of the most basic due diligence measures. Similarly, the OECD's 2018 Alignment Assessment highlighted refiners' inadequate compliance with the OECD standards.[60] It also seems that countries like Switzerland, the UAE or Hong Kong failed to carry out sufficient checks on some of the imported gold.

DIFFICULTIES WITH EXISTING TRADE DATA

Despite offering useful insights on detecting red flags as discussed above, trade data could be much more valuable in supporting key actors' due diligence efforts than it is now. There are two main issues with the existing trade data – much of the necessary data is not available or the quality of the data is poor.

Lack of publicly available data

The most comprehensive publicly available trade database is the UN Comtrade Database,[61] which is a repository of official international trade statistics. It compiles import and export data for goods and services from all governments. Unfortunately, the data is highly aggregated in groups of commodities or services and compiled on an annual basis. Important information such as the names of exporting and importing companies are not reported, despite the fact that customs usually register this data.

Some industry representatives assert that this information is commercially sensitive and therefore confidential. However, the OECD Guidance clearly states that if a refiner or a local exporter is located in a red flag location,[62] downstream companies should always disclose their names in annual reports (except for cases of disengagement) and that this information is not subject to business confidentiality.[63] It is therefore disappointing that refineries in particular, often don't name local exporters in red flag locations.

The fact that a few countries like Peru or Colombia do report details of companies exporting and importing, as well as the partial availability of such data in commercial trade databases, suggests that business confidentiality is an invalid reason for failure to disclose this information. Furthermore, the Extractives Industry Transparency Initiative (EITI) has for example in the case of Mali published data detailing which refiner is sourcing from which gold mining company[64] – seemingly without damage to the industry.

These examples counter the argument that the disclosure of such information is harmful to business and raise suspicions that companies may cite business confidentiality as a means of obstructing scrutiny of problematic sourcing practices.

The cases mentioned in this article and other case studies published by Global Witness, show that problematic gold continues entering the supply chain due to a lack of appropriate due diligence measures. For obvious reasons, determining the origin of gold can be very important in conducting proper due diligence, particularly for refiners. In principle, the UN recommends that customs report the country of origin for imports and the country of last destination that is known for exports.[65] However, if the commodity has been substantially transformed, the country where the commodity has been processed is defined as the origin.[66] This practice is at odds with the common understanding of the term "origin". Countries usually consider gold refining as a substantial transformation[67] and therefore often the country where the gold has been extracted is not shown in trade statistics.

This means that, for example, the gold exported by the Uganda-based company African Gold Refinery (AGR) would according to UN rules be designated as originating in Uganda and therefore is less likely to be viewed as high risk and be subject to the attendant scrutiny. This is of particular concern as AGR reportedly sourced gold from high-risk countries.[68] Numerous sources interviewed by the NGO the Sentry identified AGR as sourcing conflict gold from the

DRC.[69] Very similarly, gold refined in Dubai is labelled as having originated in the UAE for the purposes of the trade statistics, hiding the real and potentially problematic origin of the gold.[70] According to Reuters, gold worth billions of dollars is smuggled out of Africa to the UAE every year.[71]

Gaps in the data

In addition to important information not being made available by companies or customs, there are serious restrictions in data analysis because many countries fail to report the basic data on yearly exports per good which the UN publishes. Of the 154 countries reporting on the gold trade in the UN Comtrade Database, only 70, and therefore less than half, have provided full datasets since 2012.[72]

Data availability gets even patchier because of special economic zones acting as free trade zones and free ports, which are often exempted from reporting trade data. In 2013, there were over 3,000 tax free trade zones, free ports, and similarly designated areas worldwide located in 135 countries.[73]

Free trade zones offer companies tax, tariff or regulatory advantages.[74] Sometimes they are subject to weaker reporting obligations regarding trade activities. Colombian customs authorities for example do not record any exports from the free trade zone in Colombia, from where an important share of the gold leaves the country.[75]

Free ports are warehouses, which encourage imports by lowering duty and paperwork costs and were originally intended to store merchandise in transit but have become popular for storing assets including gold on a permanent basis. In the EU alone, there are over 80 free zones and thousands of free ports.[76] Often no data is available about the goods stored in free ports and furthermore, there is a high degree of secrecy and a risk of money laundering, as an EU report notes.[77]

Poor data quality

The often poor quality of the reported data is a further issue, compounding some of the problems mentioned above. The data is often too general, the classification system is not specific or the data is factually incorrect.

Bjorn Holland via Getty Images

The most commonly used classification system for the trade of commodities is the so-called Harmonized System (HS),[78] an international nomenclature that establishes a common basis to classify traded goods for customs purposes using 6-digit codes.[79]

Many problems related to gold like human rights abuse, conflict and environmental damage happen in the upstream part of the supply chain when gold is mined, transported to a refinery and processed.

In this respect the raw and semi-manufactured gold is the most important category in the HS system from a due diligence point of view, classified under the code number 7108 under four different categories of the 6-digit system. It can be traded as powder (7108.11) as raw gold in various forms such as grains, nuggets, pellets or cast gold bars (7108.12), as other semi-manufactured gold such as mint bars, foils, rods, wires, plates, sheets and strips (7108.13) or finally as monetary gold (7108.20).[80] Waste and scrap gold is a separate category (7112.91)[81] for gold that had previously been refined, such as gold jewellery or investment gold and is returned to a refiner for a new life cycle as recycled gold.[82]

Most of the globally traded gold is reported under the HS-code 7108.12. However, this category does not tell us much about the type of gold. It can be the purest (cast) gold of 99.99% or gold bars of 99.5% purity, as often demanded by the Indian market.[83] It could be a doré gold bar, which is newly mined gold that has been processed to a degree of usually around 85-90% purity.[84] It could also be gold concentrate which has only been processed slightly after mining but not yet to the purity of doré gold.[85]

Such differences of gold purity can give important clues, particularly to customs officers or journalists as to whether refiners heed due diligence requirements. Gold shipments coming from certain areas or shipments from an origin combined with a certain gold fineness may be red flags and should trigger checks by customs officers. Unfortunately, the broad categorisation of the HS system can hinder the detection of potential red flags.

To make it more opaque, gold traded under this category (HS-code 7108.12) could in reality even be silver or copper containing only 2% gold. In fact, an alloy only needs to contain 2% of gold to be labelled as gold, the remaining 98% being another metal.[86]

This can lead to confusion. For example, in trade statistics Argentina appears to be one of the largest gold exporters in Latin America with over 530 tonnes exported in 2018[87] despite a confirmed gold production of around 60 tonnes only[88] and virtually no gold imports.[89] The reason is that Argentina is a major silver producer with over 1,000 tonnes mined in 2017.[90] When silver is extracted, the ore often also contains some gold. If the gold content is 2% or higher, the export product is labelled as gold instead of silver. Unfortunately, data relating to the purity of gold, which could offer some clarity, is usually not reported in official statistics.

A category as vast as 7108.12 is obviously problematic. There are solutions for this problem – some countries add two or even four more digits to the HS codes allowing for further differentiation between different types of gold.[91] However, only a few countries apply this differentiated approach. A Swiss proposal to the World Customs Organisation (WCO) from 2020 distinguishes between various degrees of gold purity. If endorsed by the WCO this would be a step forward.[92]

In reality the scope of possibilities for what kind of gold is traded under this category is even wider, because customs make mistakes. Our analysis of gold trade statistics show that customs in some countries have declared silver with even less than 2% gold content as gold.[93] Sometimes customs use the wrong codes from the HS nomenclature. Under the code 7108.12

("unwrought gold") Global Witness has seen shipments as varied as earrings or scrap gold.[94]

The category for monetary gold is effectively an empty category, because trade of monetary gold is not reported at all.[95] When central banks trade physical gold, this gold is called monetary gold and, as such, it is not considered a commodity but a financial asset.[96] Therefore the huge amounts of gold that Venezuela's central bank has sold in recent years—and of which a part is likely linked to organised crime—went totally unreported in trade statistics.[97]

Mistakes of customs are a further reason leading to poor trade data. Attributing scrap gold to the right category (7112.91) seems to be particularly difficult for customs. Our review of trade data shows scrap gold being reported under 14 different HS codes with no relation to scrap gold. Furthermore, a lot of the shipments reported under the correct scrap gold code, don't seem to contain scrap gold.[98]

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The above analysis identifies some of the ways in which trade data checks can enable detection of red flags which in turn can facilitate the ability of refiners to carry out the required due diligence. In some cases identified above, basic checks of trade data would have allowed refineries to spot red flags, which should have triggered further due diligence. Regrettably, it appears that use of the data as a tool to facilitate due diligence is frequently overlooked or ignored. On the other hand, it should be noted that trade data could play an even more important role if the shortcomings with existing data would be overcome. Gaps in available data, as well as the sometimes poor quality of data, plays a significant role in limiting the potential use of the data in contributing to red flag and risk assessment.

RECOMMENDATIONS

> Companies in gold supply chains should make better use of the available trade data to check for potential risks in their supply chains and facilitate fulfilment of their due diligence obligations.

> The WCO should propose meaningful sub-categories for the HS code 7108.12 and the member countries should uniformly adopt them.

> The WCO should distinguish between place of extraction and place of (substantial) transformation and countries should report on both.

> All free zones and free ports should report import and export data.

> The LBMA should make public reporting on the countries of extraction and the names of gold suppliers in high-risk locations an obligation for refineries on their Good Delivery List.

> Eventually, countries should oblige companies along the gold supply chain to report the names of their suppliers.

ENDNOTES

[1] Refinitiv: GFMS Gold Survey; Metals Focus: Gold Focus; CPM Group: Gold Yearbook; U.S. Geological Service: Minerals Yearbook.

[2] UN Human Rights Office of the High Commissioner (2011): UN Guiding Principles on Business and Human Rights.

[3] OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016), Third Edition. Available from https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf

[4] OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016), Third Edition. Page 111-113.

[5] OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016), Third Edition. Page 79-80, 87-88. Available from https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf

[6] OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016), Third Edition. Page 80; 89. Available from https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf

[7] OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016), Third Edition. Page 85-86; 96-97; 99; 103 Available from https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf

[8] OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016), Third Edition. Page 8. Available from https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf

[9] See https://www.oecd.org/corporate/mne/mining.htm

[10] OECD (2018): Alignment Assessment of Industry Programmes with the OECD Minerals Guidance. Page 20.

[11] OECD (2018): Alignment Assessment of Industry Programmes with the OECD Minerals Guidance. Page 19.

[12] OECD (2016): OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, third edition.
See page 111-112: "Company risk assessment in the supply chain: Report on steps taken to implement Step 2. Included in such reporting, companies should explain how the company identified red flag operations or red flags in their supply chain, including the verifications of supplier representations proportional to risk; describe the red flags identified in the gold supply chain; describe the steps taken to map the factual circumstances of those red flag operations and red flagged supply chains; outline the methodology, practices and information yielded by the on-the-ground assessment team, including whether and how the company collaborated with other upstream companies, and how the company ensured that all joint work duly takes into consideration circumstances specific to the individual company; disclose the actual or potential risks identified. For the sake of clarity, companies should not report risks identified for potential suppliers with whom they have not done any business."
[13] Time inconsistency over the reporting period, refining activities (thus reducing the gold weight) or the over- or underestimation of the gold production can be other reasons that could explain the gap between gold production and gold net exports of a country.

[14] OECD (2016): OECD Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, third edition. Page 79 and 88.

The gold is claimed to originate from a country that has limited known reserves or stocks, likely resources or expected production levels of gold (i.e. the declared volumes of gold from that country are out of keeping with its known reserves or expected production levels).

[15] See "Los vuelos secretos del oro illegal", Ojo Publico, 5 December 2014. Available from https://ojo-publico.com/12/los-vuelos-secretos-del-oro-ilegal
[16] Public Eye (2016): The Golden Racket. Available from https://www.publiceye.ch/fileadmin/doc/Rohstoffe/2015_PublicEye_A_golden_racket_Report.pdf

[17] See "How to Become an International Gold Smuggler", Bloomberg, 9 March 2017. Available from here https://www.bloomberg.com/news/features/2017-03-09/how-to-become-an-international-gold-smuggler

[18] UN Security Council (2016): Letter dated 22 September 2016 from the Chair of the Security Council Committee established pursuant to resolution 1591 (2005) concerning the Sudan addressed to the President of the Security Council. Page 5.

[19] WWF (2010): The Gold Marketing Chain in Suriname; See "Majority of smuggled gold taken to Suriname via planes", Kaieteurs News, 28 August 2018. Available from https://www.kaieteurnewsonline.com/2015/08/28/majority-of-smuggled-gold-taken-to-suriname-via-planes/

[20] See "Customs officers foil attempt to smuggle gold bars into Egypt", Egypt Independent, 15 May 2019. Available from https://egyptindependent.com/customs-officers-foil-attempt-to-smuggle-gold-bars-into-egypt/; "Egypt security thwarts arms, gold smuggling from Libya", Egypt Independent, 2 June 2011. Available from https://www.egyptindependent.com/egypt-security-thwarts-arms-gold-smuggling-libya/

[21] See "Hong Kong customs seizes HK$5 million in smuggled gold as cases double from last year", South China Morning Post, 18 October 2017. Available from https://www.scmp.com/news/hong-kong/law-crime/article/2115784/hong-kong-customs-seizes-hk5-million-smuggled-gold-cases

[22] See "Gold smuggling to Japan falls, but concerns remain ahead of planned October tax hike", The Japan Times, 5 January 2015. Available from https://www.japantimes.co.jp/news/2019/01/05/national/crime-legal/gold-smuggling-japan-falls-concerns-remain-ahead-planned-october-tax-hike/#.XoYW4XdFwxM

[23] A big gap between production and net exports does not always implicate smuggling but can. In the case of

Argentina, silver is often declared as gold when exported since it can contain amounts of gold. For further reasons which can explain gaps between net exports and production see footnote 13.

[24] The calculation is based on gold production data for 2017 from the 2019 GFMS Gold Survey report, import and export data for HS 7108.12 from the UN Comtrade database for 2017.

[25] According to the Extractive Industry Transparency Initiative (EITI) Togo has some alluvial artisanal gold sites (EITI, "Togo 2012 EITI Report", 2014, page 21). However, EITI also caveat that the majority of Togo's gold exported comes from neighbouring countries. There are no industrial gold mines in Togo and no official gold production figures. For imports see UN Comtrade Database, available from https://comtrade.un.org/data/

[26] See "Valcambi Refinery", BullionStar. Available from https://www.bullionstar.com/gold-university/valcambi-refinery

[27] Public Eye (2016): The Golden Racket. Page 17 and 20.

[28] See Sustainability Report 2015. Available from https://www.valcambi.com/accreditations-compliance/sustainability/ No report is available online for 2014 and 2016. Last checked on 29 April 2020.

[29] OECD (2016): OECD Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, third edition. See page 111-112.

[30] See "Valcambi has not received any gold from the mines mentioned by Berne Declaration - brief details of the process followed by Valcambi while dealing with its suppliers and buyers", Valcambi, 12 September 2015: "Valcambi attaches great importance to our obligation to responsibly and transparently source precious metals. This includes but is not limited to: […] strict compliance with the guidance and principles developed by the Organization for Economic Co-operation and Development (OECD)." Available from https://www.valcambi.com/fileadmin/media/valcambi/News/Press_release_-_Bern_Declaration__english_20150912.pdf

[31] BD comments on Valcambi statement, Berne Declaration, 16 September 2015. Available from https://www.publiceye.ch/fileadmin/doc/Rohstoffe/BD_response_to_Valcambi_20150916.pdf

[32] Swiss Federal Audit Office (2020): Audit de l'efficacité du contrôle des métaux précieux. Page 32.

[33] United States of America v. Juan P. Granda, Case no. 17-MJ-02376-6ARBER, 2017. Paragraph 29, page 11.

[34] The annual average gold price in 2014 was US$1266.4 (according to https://www.statista.com/statistics/675890/average-prices-gold-worldwide/ 270 million USD divided by 1 266.4 are equal to 213 202 troy ounces of gold which equal 6,631 kg.

[35] Refinitiv (2019): GFMS Gold Survey 2019. Page 24.

[36] The Global Initiative Against Transnational Organized Crime (2016): Organized Crime and Illegally Mined Gold in Latin America. Page 18.

[37] See "U.S. company at center of gold racket must pay $15 million fine, Miami judge rules", Miami Herald, 25 May 2018. Available from https://www.miamiherald.com/news/local/article211909529.html

[38] See UN Comtrade Database. Available from https://comtrade.un.org/data/

See also 'Gold worth billions smuggled out of Africa', Reuters, 24 April 2019. Available from https://www.reuters.com/investigates/special-report/gold-africa-smuggling/

[39] See various reports of the United Nations Group of Experts on the Democratic Republic of Congo. Available from https://www.undocs.org/S/2020/482 (page 15); https://www.undocs.org/S/2019/469 (page 36); https://www.undocs.org/S/2018/531 (page 23 and 24); https://www.undocs.org/S/2016/466 (page 34); https://www.undocs.org/S/2015/19 (page 43); See also: "Gold worth billions smuggled out of Africa", Reuters, 24 April 2019. Available from https://www.reuters.com/article/us-gold-africa-smuggling-exclusive/exclusive-gold-worth-billions-smuggled-out-of-africa-idUSKCN1S00IT.

[40] SWISSAID (2020): Détour doré. Page 13.

[41] United Nations Security Council (2020): Final report of the Group of Experts on the Democratic Republic of the Congo (S/2020/482). Paragraph 64; United Nations Security Council (2017): Final report of the Group of Experts on the Democratic Republic of the Congo (S/2017/672). Paragraph 131

[42] OECD (2016): OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, third edition. Page 79 and 88.

The gold is claimed to originate from a country through which gold from conflict-affected and high-risk areas is known or reasonably suspected to transit.

[43] Global Witness (2014): City of Gold.

[44] Swiss-Impex, available from https://www.gate.ezv.admin.ch/swissimpex/

[45] Global Witness (2020): Beneath the Shine. Page 10.

[46] Global Witness (2020): Beneath the Shine. Page 29-31.

[47] OECD (2016): OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, third edition. Page 80 and 90.

[48] See UN Comtrade database. Available from https://comtrade.un.org/data/

Bolivia reports the following exports under HS 7108: 2010: 2,7 t, 2011: 1,8 t, 2012: 1,7 t, 2013: 8,1 t, 2014: 35,8 t.

[49] Refinitiv (2019): GFMS Gold Survey 2019. Page 24.

[50] See UN Comtrade Database. Available from https://comtrade.un.org/data/

The highest trade value for imports in 2013 is 1,273 tonnes worth $47,499,300.

[51] See "Los vuelos secretos del oro ilegal", Ojo Publico, 5 December 2014. Available from https://ojo-publico.com/12/los-vuelos-secretos-del-oro-ilegal

[52] The Elemetal subsidiary Elemetal Refinery LLC has been delisted from the LBMA Good Delivery List in March 2017 for "failing to meet the requirements of the Responsible Sourcing programme" (see http://www.lbma.org.uk/good-delivery-list-refiners-gold-former).

[53] See "Los vuelos secretos del oro ilegal", Ojo Publico, 5 December 2014. Available from https://ojo-publico.com/12/los-vuelos-secretos-del-oro-ilegal; "NTR Metals and Illegal South American Gold", Coinweek, 17 April 2017. Available from https://coinweek.com/bullion-report/ntr-metals-illegal-south-american-gold/.

[54] See UN Comtrade Database. Available from https://comtrade.un.org/data/

Exports reported by Suriname to Hong Kong for HS 7108.12: 5,270kg worth $208,643,219; imports reported by Hong Kong from Suriname in 2018 for HS 7112.91: 5,406kg worth $215,706,708. Both countries don't report any other gold imports or exports.

[55] The annual average gold price in 2018 was US$1269 per troy ounce (according to https://www.statista.com/statistics/675890/average-prices-gold-worldwide/). This is equal to 39 470 kg.

[56] See "Amazon Gold Rush: Gold Mining in Suriname", Amazon Conservation Team. Available from https://www.amazonteam.org/maps/suriname-gold/

[57] See http://www.lbma.org.uk/Default.aspx?CCID=21993&FID=141296&ExcludeBoolFalse=True&ID=/good-delivery-list-refiners-gold-current-results

[58] OECD (2016): OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, third edition. Page 81 and 90.

[59] Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017, Official Journal of the European Union. Article 1, paragraph 6. Available from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0821&from=EN;

See also: Advice Note to Companies, Member States, and the European Commission (2018). Page 15. Available from https://www.globalwitness.org/en/campaigns/conflict-minerals/conflict-minerals-shaping-eu-policy/

Global Witness and other NGOs recommend that importers of recycled and scrap material publish detailed information on the steps they have taken to implement Article 7(4) of the EU Responsible Sourcing Regulation, including: (i) a description of the evidence they have relied on; (ii) the steps they have taken to verify information received from suppliers. Importers should comply in full with the due diligence standards in the OECD Guidance, including specific recommendations for recyclers and traders of recycled material.

[60] OECD (2018): Alignment Assessment of Industry Programmes with OECD Minerals Guidance. Page 11-16.

[61] See UN Comtrade database. Available from https://comtrade.un.org/

[62] The OECD Guidance defines four cases of red flag locations:

- The minerals originate from or have been transported via a conflict-affected or high-risk area.
- The minerals are claimed to originate from a country that has limited known reserves, likely resources or expected production levels of the mineral in question (i.e. the declared volumes of mineral from that country are out of keeping with its known reserves or expected production levels).
- The minerals are claimed to originate from a country in which minerals from conflict-affected and high-risk areas are known to transit.
- The gold is claimed to originate from recyclable/scrap or mixed sources and has been refined in a country where gold from conflict-affected and high-risk areas is known or reasonably suspected to transit.

OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016). Page 79.

[63] OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016). Page 111, footnote 59.

"Business confidentiality and other competitive or security concerns means, without prejudice to subsequent evolving interpretation: price information; supplier identities and relationships (however the identity of the refiner and the local exporter located in red flag locations should always be disclosed except in cases of disengagement); transportation routes; and the identity of information sources and whistle-blowers located in conflict-affected and high-risk areas, where revealing the identity of such sources would threaten their safety."

[64] Initiative pour la Transparence dans les Industries Extractives Mali (2018): Rapport ITIE 2016. Page 114.

[65] International Merchandise Trade Statistics: Concepts and Definitions 2010 (IMTS 2010), adopted by the UN Statistical Commission in 2010. Page 66.

Recommendations regarding partner attribution: "(a) In the case of imports, the country of origin should be recorded; (b) In the case of exports, the country of last known destination should be recorded."

[66] United Nations Economic and Social Affairs (2013): International Merchandise Trade Statistics. Compilers Manual Rev.1. Page 181.

16.9 According to the "substantial transformation criterion" the country of origin is defined as the country in which the last substantial manufacturing or processing, deemed sufficient to give the commodity its essential character, has been carried out.

[67] United Nations Economic and Social Affairs (2013): International Merchandise Trade Statistics. Compilers Manual Rev.1. Page 219.

20.8. Operations considered processing: "The following operations are frequently considered to be processing but countries might treat some other operations as processing as well: […] Oil refining, gold refining, etc.". A side note mentions: "This list should not be considered prescriptive or complete; rather, it is a reference list of activities that could be regarded as constituting processing, depending on a country's circumstances."

[68] The Sentry (2018): The Golden Laundromat. Page 1; See also "How 7.4 Tons of Venezuela's Gold Landed in Africa—and Vanished", Wall Street Journal, 18 June 2019. Available from https://www.wsj.com/articles/how-7-4-tons-of-venezuelas-gold-landed-in-africaand-vanished-11560867792

[69] The Sentry (2018): The Golden Laundromat. Page 1.

[70] United Nations Security Council (2019): Letter dated 6 June 2019 from the Group of Experts on the Democratic Republic of the Congo addressed to the President of the Security Council. Page 36 paragraph 183 and 185. Available from https://undocs.org/en/S/2019/469.

[71] See "Gold worth billions smuggled out of Africa", Reuters, 24 April 2019. Available from https://www.reuters.com/article/us-gold-africa-smuggling-exclusive/exclusive-gold-worth-billions-smuggled-out-of-africa-idUSKCN1S00IT.

[72] See UN Comtrade Database. Available from

https://comtrade.un.org/db/mr/daCommoditiesResults.aspx?px=H4&cc=7108

[73] Susan Tiefenbrun (2013): Tax Free Trade Zones of the World and in the United States.

[74] World Bank (2011): Special Economic Zones. Progress, Emerging Challenges, and Future Directions. Page 3.

[75] Fastenopfer/Tierra digna: Oro Esquivo. Page 82.

[76] European Parliament resolution of 26 March 2019 on financial crimes, tax evasion and tax avoidance (2018/2121(INI)): Report on financial crimes, tax evasion and tax avoidance. Page 36.

[77] European Parliament resolution of 26 March 2019 on financial crimes, tax evasion and tax avoidance (2018/2121(INI)): Report on financial crimes, tax evasion and tax avoidance. Page 36.

[78] The full name is: Harmonized Commodity Description and Coding System.

[79] See United Nations International Trade Statistics. Available from https://unstats.un.org/unsd/tradekb/Knowledgebase/50018/Harmonized-Commodity-Description-and-Coding-Systems-HS

[80] See UN Comtrade Database. Available from https://comtrade.un.org/db/mr/rfCommoditiesList.aspx?px=H4&cc=7108; See also "Chapter 71, Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin" Available from http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs_nomenclature_2012/~/media/8DD4CCFFE60443B3B6C0C0130A3F98EB.ashx

[81] See UN Comtrade Database. Available from https://comtrade.un.org/db/mr/rfCommoditiesList.aspx?px=H4&cc=7112

[82] OECD (2016): OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, second edition. Page 68.

[83] LBMA (2017): The Guide. An Introduction to the Global Precious Metals OTC Market. Page 27. Available from http://www.lbma.org.uk/downloads/LBMA-TheGuide-2017-v1.pdf

[84] OECD (2016): OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, second edition. Page 67.

[85] OECD (2016): OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, second edition. Page 67.

Sometimes the value of the gold is reported, which allow for conclusions on the fineness of the gold, but due to the high level of aggregation, its interpretation can be difficult.

[86] See "Chapter 71, Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin". Available from http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs_nomenclature_2012/~/media/8DD4CCFFE60443B3B6C0C0130A3F98EB.ashx

[87] See UN Comtrade Database. Available from https://comtrade.un.org/data/

Only Peru is reporting slightly higher gold exports for 2018 with 542 tonnes.

[88] Metals Focus (2019): Gold Focus 2019. Page 18.

[89] See UN Comtrade Database. Available from https://comtrade.un.org/data/

[90] U.S. Geological Service (2019): Mineral Commodity Summaries 2019. Page 151.

[91] See "HS Codes, HTS Codes, and Schedule B Codes: What's the Difference?", International Trade Blog, 8 May 2019. Available from https://www.shippingsolutions.com/blog/whats-the-difference-between-hs-codes-hts-codes

[92] SECO: Raw materials: Switzerland calls for greater transparency in international gold trade. Available from: https://www.seco.admin.ch/seco/en/home/seco/nsb-news.msg-id-80500.html

[93] Based on shipment data from Panjiva.

[94] Based on shipment data from Panjiva.

[95] See UN Comtrade Database. Available from https://comtrade.un.org/data/

No data is available for HS 7108.20.

[96] International Merchandise Trade Statistics: Concepts and Definitions 2010 (IMTS 2010), adopted by the UN Statistical Commission in 2010. Page 16 and 23.

[97] See: "Venezuela, Smuggler's Paradise", InfoAmazonia, 23 July 2019. Available from https://smugglersparadise.infoamazonia.org/

[98] Based on shipment data from the database in Panjiva. Shipments on Panjiva labelled as gold scrap have been reported under the HS codes 3915.90, 3926.90, 7106.91, 7108.12, 7112.91, 7112.92, 7112.99, 7118.10, 7204.21, 7204.29, 7204.49, 7220.20, 7404.00 and 9814.00. Gold scrap should be reported under the HS code 7112.91 ("waste and scrap of gold"). The following HS codes seem to have been applied erroneously for scrap gold: 3915.90 (scrap of plastic); 3926.90 (articles of plastic); 7106.91 (silver plated with gold); 7108.12 (gold, unwrought);

7112.92 (scrap, platinum); 7112.99 (“other than gold”); 7118.10 (coins, excl. gold coins incl. scrap); 7204.21 (scrap, stainless steel); 7204.29 (scrap, alloy steel); 7204.49 (scrap, iron or steel); 7220.20 (flat-rolled products of stainless steel); 7404.00 (scrap, copper); 9814.00 (doesn’t exist as a category).