Global Illicit Trade and Illicit Financial Flows

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Abstract

In this paper, the authors analyse the patterns of illegal flows of goods and money in the world economy. The aim of this work is to point out the importance, trends and international standards of illicit trade of goods and illicit financial flows in the global economy.

The illicit trade consists of sale of counterfeited goods globally. The counterfeit goods are goods, often of inferior quality, made or sold under brand name without the brand owner's authorization, infringing the intellectual property rights of the brand owner. This trade in counterfeit goods causes not only economic damage, but also poses additional risks to citizens, including health and safety risks to person using the goods. Many international organisations, like Organisation for Economic Co-operation and Development (OECD) and the European Union Intellectual Property Office (EUIPO), are trying to quantify the world trade in counterfeit and pirated products. OECD-EUIPO studies estimated that trade in counterfeit and pirated goods was up to 2.5 % of world trade in 2013, and even 3.3% of world trade in 2016, which was around 509 billion USD. The statistics on trade in counterfeit goods comes from customs seizures data originating from national customs administrations. Most of the customs seizure data comes from the World Customs Organization (WCO), the European Commission's Directorate-General for Taxation and Customs Union (DG TAXUD) and from the United States Department of Homeland Security (DHS). In the European Union (EU) imports of counterfeit and pirated products amounted to 119 billion EUR in 2019, which represents up to 5.8 % of EU imports.

The illicit financial flows consist of movement of money across borders that is illegal in its source (e.g. corruption, smuggling), its transfer (e.g. tax evasion), or its use (e.g. terrorist financing). The statistics on illicit financial flows are gathered by UN Conference on Trade and development (UNCTAD), United Office on drugs and Crime, World Bank, Global Financial Integrity (GFI) etc. These flows have important economic impact because they strip the country of necessary financial resources.

Keywords: Illicit trade, trade in counterfeit goods, illicit financial flows, world trade

1. Introduction

The period following the Second World War witnessed a remarkable and steady increase in international trade. This increase was facilitated by the creation of the multilateral trade system and the existence of the global economic environment that was conductive to international business. Growth in international trade intensified with technological and political developments in 1980s and 1990s, resulting in historically unprecedented growth in trade.

With this increase in licit trade flows there has been a simultaneous rise of illicit trade activities. As licit trade transactions increased in frequency and volume, so did the ones in outside the realm of regulatory and institutional frameworks. This raises important questions about the nature of illicit trade flows. The main aim of our study is to explore this complex and insufficiently understood phenomenon and its implications for economic development of the affected countries and global economy in general. By analysing the intricate dynamics of illicit trade and financial flows, we provide insight into global patterns of illicit trade and financing, as well as the specifics of various segments of these illicit flows. The research is based on literature review and comparative and descriptive statistical analysis.

The remainder of this paper is structured as follows. In the next section, we consider the theoretical framework explaining the main factors causing illicit trade flows. In Section 3, we briefly discuss the major expected economic, environmental and health effects of illicit trade.

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Section 5 provides an overview of global patterns of illicit trade. In Section 6, we provide greater detail of illicit trade flows, focusing on individual segments and some case studies of specific regions. The analysis of illicit financial flows and the discussion of its patterns is provided in Section 7. The final section concludes.

2. The Factors of Illicit Trade Flows

Illicit trade activities include all trade activities prohibited by law. Wider definitions could also include auxiliary activities which enable and facilitate the conduction of illicit trade. These activities are conducted covertly and usually involve criminal organisations. Illicit trade could refer to trade in illegal goods, as well as generally legal goods which infringe on intellectual property rights (for example, counterfeited and pirated goods).

There are specific circumstances related to illicit trade necessary for understanding the decisions of major agents. One such circumstance refers to the relationship between risks and profitability. Namely, the illegal nature of the activity increases risks for all the parties involved in illicit trade flows. Legal repercussions imply higher risks for the agents, which is, in turn, related to higher demanded profitability of the activity in order to compensate for the relatively high risks (Kastratović, 2023, p. 48).

Another important circumstance is relative inelasticity of demand for most illicit goods. This makes the aforesaid illicit goods relatively insensitive to price increases. In turn, legal barriers and increased risks (and demanded profitability) strongly impact the prices. The demanded quantity adjusts relatively modestly to higher prices. As a result, illicit goods present larger expenditure for buyer, compared to the licit trade. This, further, means that more resources get allocated into production and procurement of illicit goods. Simultaneously, in this case, more resources are also required to combat illicit trade (Storti & De Grauwe, 2012, p. 3). The result is a suboptimal allocation of resources which imperils welfare at societal level.

Earlier theories of illicit trade observed these trade flows from purely moral and legal perspective (Dickinson, 1926). One of the earliest theoretical explorations of this problem employing economic perspective was done by Bhagwati and Hansen (1973). Their theoretical model analyses smuggling operations as purely economic phenomenon. They demonstrate that under the assumption of constant costs and perfect competition, provided that the tariffs in licit trade are non-prohibitive, licit and illicit trade can coexist. In such an environment, illicit trade results in the reduction of global welfare. The same conclusion holds for non-competitive market structures. Furthermore, monopoly structure existing in illicit trade leads to a better welfare outcome compared to perfect competition.

The Bhagwati-Hansen model was extended further by Bhagwati and Srinivasan (1974). However, they maintained purely macroeconomic perspective. The model provides more insight into the relationship between trade policy and illicit trade flows, but provides little information on the factors determining the extent of illicit trade and illegal behaviour of firms. Attempt of the expansion in this direction was made by Sheikh (1974), who explicitly introduced in the modelling framework the transport costs smugglers face. The transport costs reflect increasing risks borne by smugglers. However, the model equilibrium is indeterminate in terms of allocation of illicit and licit trade at both macro and micro level.

The risks of illicit trade are explicitly introduced in the deterministic model of Martin and Panagariya (1984). They specify costs of smuggling and under strict assumption reach somewhat unrealistic conclusions that in the case of perfect competition all importing firms will necessarily turn to illicit trade. Moreover, their model implies that all firms in an economy will have an equal share of illicit imports in total imports.

A more nuanced theoretical model was proposed by Desmond (1988), hinting at the causes of illicit trade flows. The model shows that the volume of illicit trade flows increases with the increase in tariff differential between countries. The results of Desmond's analysis implies that the size of penalties firms involved in illicit trade face, in addition to the increase in corresponding risks, lead to a reduction of illicit trade volume.

The previously discussed theoretical framework indicates some of the main causes of illicit trade flows. However, the seminal theories are mostly concerned with trade barriers and regulatory factors. The illicit trade flows are considered a method of circumventing the trade barriers and bands. Such a view is generally more applicable to legal than illegal goods, and is better suited for analysing informal rather than illicit trade, as large tax burdens incentivise marginal trade companies to move to informal sector in a strategy to cut costs.

Other factors relevant for licit trade are also applicable in explaining illicit trade flows. Such are the gravity model factors (Tinbergen, 1962). Geographical factors, for instance, could explain certain patterns of illicit trade flows. Large distance from suppliers and poor connectivity inherently increases transport costs. These costs are already substantially higher than normal because of the illegal nature of this activity. The high costs are, thus, further exacerbated by distance and isolation, making more remote economies generally less involved in illicit trade activities. Similar effect to the ones described in the gravity framework relates to the effects of the economy size. Larger economies provide larger market for illicit goods, making these economies more entangled with illicit trade flows.

The relationship between licit and illicit trade flows is also worth considering. A more developed licit trade in a particular economy implies better developed supporting services and infrastructure. This facilitates the conduction of trade in general, and can, thus, potentially be abused for the purposes of illicit trade.

One of the key factors in explaining illicit trade flows and the most important detrimental one is institutional framework. The quality of institutions is instrumental for controlling trade activities effectively and efficiently. Particularly important is the enforcement of the existing regulation, which requires high levels of effectiveness of government and its specialised agencies. Good governance is necessary not only for directly addressing and curbing illicit trade flows, but also to minimise corruption in order to lower the initial possibilities of subjects considering entering the illicit trade. For example, if the corruption is high and the informal economy relatively large, opportunities for illicit trade are abound and it is more likely the illicit trade flows will flourish in such an environment.

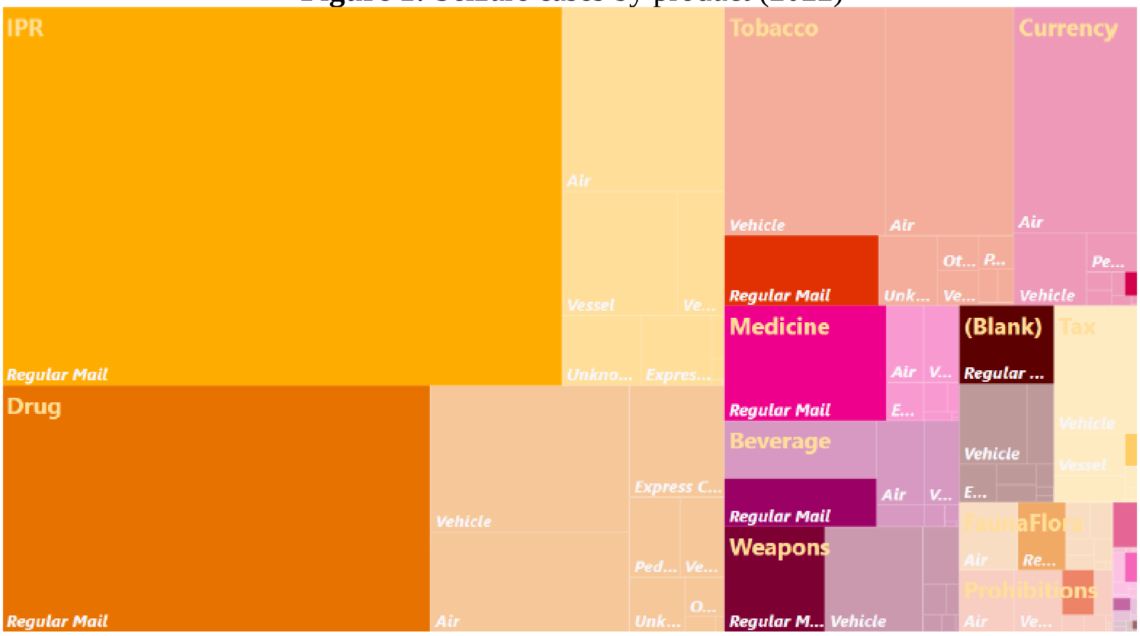
Strong institutional framework provides effective rule of law ensuring the enforcement of regulations against illicit trade. This directly increases risks and costs for participants in illicit trade activities. This, in turn, reduces illicit trade flows and, consequently, increases global welfare. Therefore, a strong and functioning institutional framework addresses the previously outlined negative effects of illicit trade.

In the context of institutional framework in curbing illicit trade flow, particularly relevant is the efficiency of customs administration. Well-functioning customs are necessary both for addressing illicit trade flows and enabling efficient functioning of licit trade according to regulation. The international cooperation in customs administration is paramount in improving the efficiency of these efforts. The interdisciplinary approach is warranted here, as it would allow for better understanding of the problem of illicit trade, shedding light on the possible enforcement options and the relative effectiveness of various approaches. Furthermore, infrastructural investment in customs administration is also important for improving efficiency. Other possible venues of improvement include further standardisation in this area as well as improving the risk analysis and management approaches.

Seizures are an important activity conducted by customs aimed at preventing illicit trade flows. The existing data on this activity suggests strong orientation and high efficiency of customs on the control of trade in counterfeited goods, drugs and tobacco products. Regular mail is, perhaps surpassingly, a highly common channel of illicit trade operation, based on the existing seizure activity. More information on this aspect is provided in Figure 1.

A significant challenge is posed by the efforts to address illicit trade flows without negatively affecting the efficiency of conducting customs procedures for licit trade flows. This is particularly challenging for customs officials in the European Union, due to the sheer length of its borders and exceptional levels of integration into the world economy. An important possibility for addressing this problem gaining increasing prevalence is automation and the application of information and communication technologies in the administrative procedures. Particularly important aspects of this technological advancement are related to electronic data exchanges, automated border procedures and electronic risk management systems. Some of these applications of information and communication technology in e-government were found to affect the possibilities of control of international trade in general (Kastratović & Bjelić, 2022a).

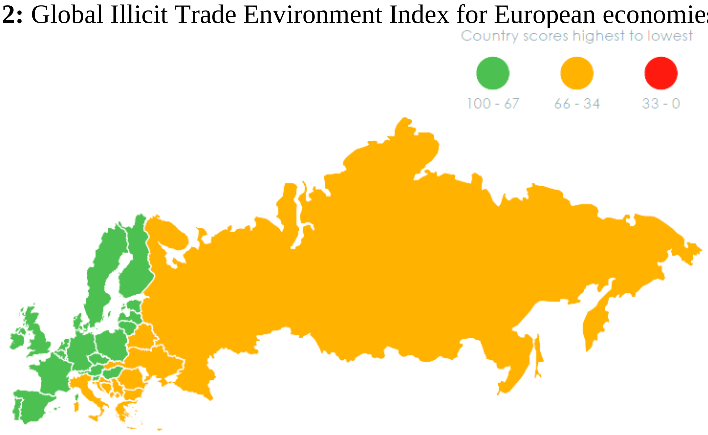
Figure 1: Seizure cases by product (2022)



Source: CEN (Customs Enforcement Network) in World Customs Organisation (2022).

Useful measure of the institutional framework and its potentials for dealing with illicit trade flows is provided by the Economist Intelligence Unit in the forms of Global Illicit Trade Environment Index. The index measures effectiveness of individual economies in addressing the problem of illicit trade. It is strongly focused on regulatory framework and the existing governance systems. A higher value of the index indicates greater capacity of the observed country in suppressing illicit trade flows. The index values for European countries are illustrated in Figure 2.

Figure 2: Global Illicit Trade Environment Index for European economies (2018)



1	85.6	Finland	13	73.1	Malta	25	64.4	Italy
2	85.1	United Kingdom	14	71.6	Slovenia	26	61.7	Greece
3	80.9	Sweden	15	71.4	Czech Republic	27	60.8	Romania
4	80.5	Austria	16	71.1	Estonia	28	57.7	Bulgaria
5	80.0	Netherlands	17	70.8	Lithuania	29	52.2	Serbia
6	79.3	Denmark	18	69.9	Latvia	30	49.1	Russia
7	78.9	Germany	19	69.6	Slovakia	31	49.0	Montenegro
8	78.6	Belgium	20	68.5	Hungary	32	41.5	Belarus
9	78.3	Luxembourg	21	68.4	Portugal	33	40.9	Bosnia
10	76.5	Ireland	22	68.3	Poland	34	37.8	Ukraine
11	74.1	Spain	23	66.9	Cyprus			
12	73.8	France	24	65.8	Croatia			

Source: The Economist Intelligence Unit (2018)

The index values reveal a pattern where the highest capacity for suppressing illicit trade flows is present in the most developed countries, most of which are the member states of the European Union. In contrast, the lowest capacity in this regard characterises non-European Union economies. The pattern could be explained by a high level of harmonisation and co-operation of the customs authorities within the framework established by the European Union. On the other hand, countries outside of the European Union are often characterised by higher levels of corruption, which enables more intensive illicit trade. Furthermore, these economies impose higher social burdens and generally have relatively weaker institutions to effectively suppress illicit trade flows. Finally, lower income in these economies creates demand for illicit goods. Cultural factors could also play a role in determining the patterns of institutional capacity to suppress illicit trade flows. Namely, a large proportion of population in the lagging economies believes that the use of counterfeited goods is acceptable, particularly if they consumption is intended for private use (The Economist Intelligence Unit, 2018).

3. The Effects of Illicit Trade Flows

Illicit trade flows have important implication for economies in which they occur. They cause substantial economic damage. These flows imperil economic growth. As demonstrated by the main theories of illicit trade, it leads to suboptimal allocation of resources and, consequently, to a decrease in total global welfare. This suboptimal allocation of resources is, to a large extent, caused by diverting resources from legal to illegal activities, as well as by increasing the need to provide increasing resources to enforcing the regulations against illicit trade. The existence of illicit trade flows is an important factor contributing to price distortions. Finally, an important economic effect of illicit trade is decrease in tax revenue, as these economic activities remain outside the scope of formal economy, yet, at the same time, creates demand for budgetary resources.

Additionally, there are wider social effects of illicit trade. These are mostly related to crime and corruption. Namely, the illicit trade creates a revenue stream for criminal organisation, which reinforces and supports their other illegal activities. The increased financial potential of criminal organisation increases risks of corruption, thus, weakening the institutional framework, leading to a causal nexus. Moreover, the illicit trade in arms could empower criminal organisation and increase challenges of law enforcement. This could ultimately threaten the state sovereignty (Mashiri & Sebele-Mpofu, 2015).

Illicit trade exerts detrimental effects on public health, straining the healthcare systems. In this regard, particularly problematic is trade in drugs and counterfeited medical products. Drug trade, for instance enables drug usage, which promotes addictive behaviours of population and negatively affects their health, strongly increasing the demand for healthcare services. Counterfeited medications infiltrate the markets in the affected countries, which could result in administration of ineffective and potentially harmful substances. The result is, similar to increased supply of drugs, deterioration of the health of population and further straining of the healthcare system. Finally, illicit trade in tobacco and alcohol also has substantial effects on public health. The avoidance of taxes imposed on these products enabled by illicit trade and the creation of black markets, provides greater access to a broader population to these products. Their consumption, in turn, results in considerable negative health and, in the case of alcohol even criminal, externalities, exerting further pressure on both the public finances and the healthcare system.

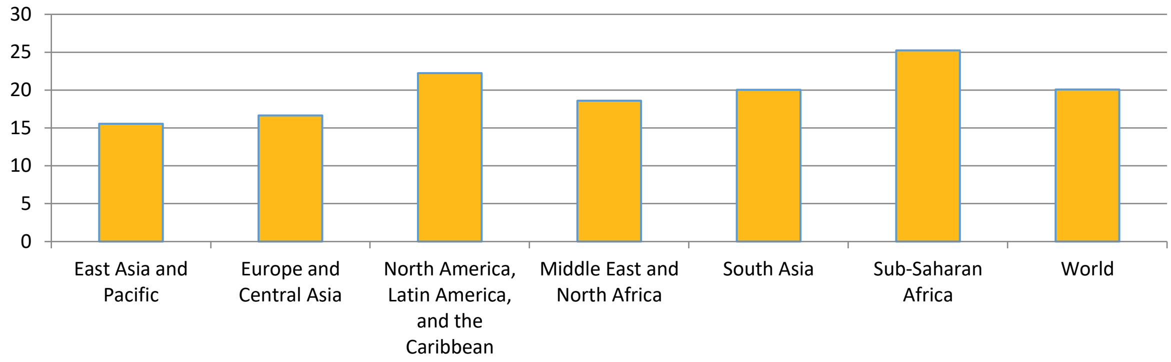
Finally, illicit trade could potentially cause environmental degradation, similarly to other types of international economic activity (Kastratović, 2019). Certain aspects of this type of trade are particularly likely to exert such type of negative influence. For example, the illicit trade in toxic materials directly enables inadequate disposal of toxic waste in the economies with weaker institution frameworks (particularly in relation to environmental protection). Similarly, illicit trade in wildlife could cause overexploitation of natural resources and disrupt fragile ecosystems. Considering all the outlined detrimental effects of illicit trade, it is important to understand its patterns in order to better understand its risks and possibilities of addressing the problem.

4. The Global Patterns of Illicit Trade Flows

The existing literature considers illicit trade mostly on conceptual level. There are few empirical studies. The empirical analysis of illicit trade patterns is highly challenging, mainly due to limited data availability. This is especially true for cross-country comparative studies. Therefore, most of the existing studies are based on estimated values, either using the structural equation modelling framework to obtain estimates of the extent of illicit trade, or using approximative measures of illicit trade, such as discrepancies in licit trade flows, customs seizures data and similar. In this study, we combine both approaches in describing global patterns of illicit trade.

Some of the more recent estimates based on structural framework suggest that around one fifth of international trade is informal, whereas in some regions of the world the estimates go up to a quarter of total trade value (Abid, 2019). Although formal economy is a wider concept compared to illicit trade, including all trade not recorded by customs administration it is an adequate approximation of potential extent of illicit trade flows. The regional patterns of prevalence of illicit trade based on these estimates are presented in Figure 3.

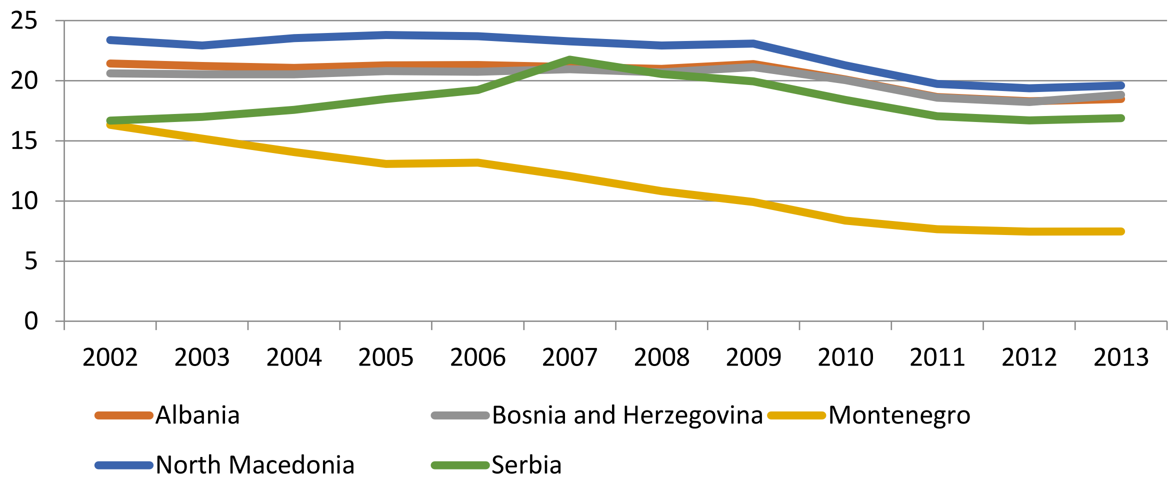
Figure 3: Regional structure of potential illicit trade prevalence (2002-2013)



Source: Authors, based on data from Abid (2019)
Note: The values are average estimated shares of potentially illicit trade in total trade in the observed period.

Prevalence of potentially illicit trade flows is particularly high in the regions characterised by lower levels of economic development, institutional quality and less stabile political environment. In contrast, the lowest prevalence is found in the most developed regions with strong institutional framework capable of combatting illicit trade. This supports the theoretical expectations previously discussed. Globally countries where largest number of illicit products originate are China, Hong kong and Turkey (Bjelić, 2018) Concentrating on Europe and Western Balkan in particular, there is further support for this conclusion. More details of patterns of potentially illicit trade which include temporal development of this phenomenon is provided in Figure 4.

Figure 4: FDI Inflows in CEFTA 2006 Countries (2010-2019)



Source: Authors, based on data from Abid (2019)
Note: The values are estimated shares of potentially illicit trade in total trade.

The presented patterns highly correspond to conductive environment for illicit trade, previously presented in Figure 2. Namely, the European countries characterised by lowest values of Global Illicit Trade Environment index are simultaneously the countries with notably higher potential prevalence of illicit trade that the European average. The average prevalence in Western Balkan countries in the observed period was 18.49%, which is by nearly 2 percent points higher than the European average. The potential prevalence in particularly high in North Macedonia, Albania and Bosnia and Herzegovina, where it exceeded 20% in the majority of the observed period. However, there is also a noticeable trend of decline in potentially illicit trade in of all the observed countries.

Other empirical studies indicate similar patterns of illicit trade. For instance, Buehn and Farzanegan adopts similar structural methodological framework, determining country rankings on illicit trade rather than shares of informal trade in total trade. The regional and country-level prevalence of illicit trade is similar as previously discussed (Buehn & Eichler, 2011; Buehn & Farzanegan, 2012). The same authors developed a methodology for calculating smuggling index used for ranking the analysed economies, based on tariffs, trade restrictions corruption, rule of law and difference between parallel and official exchange rates. The results of their analysis suggest a very strong correlation between corruption and illicit trade activities.

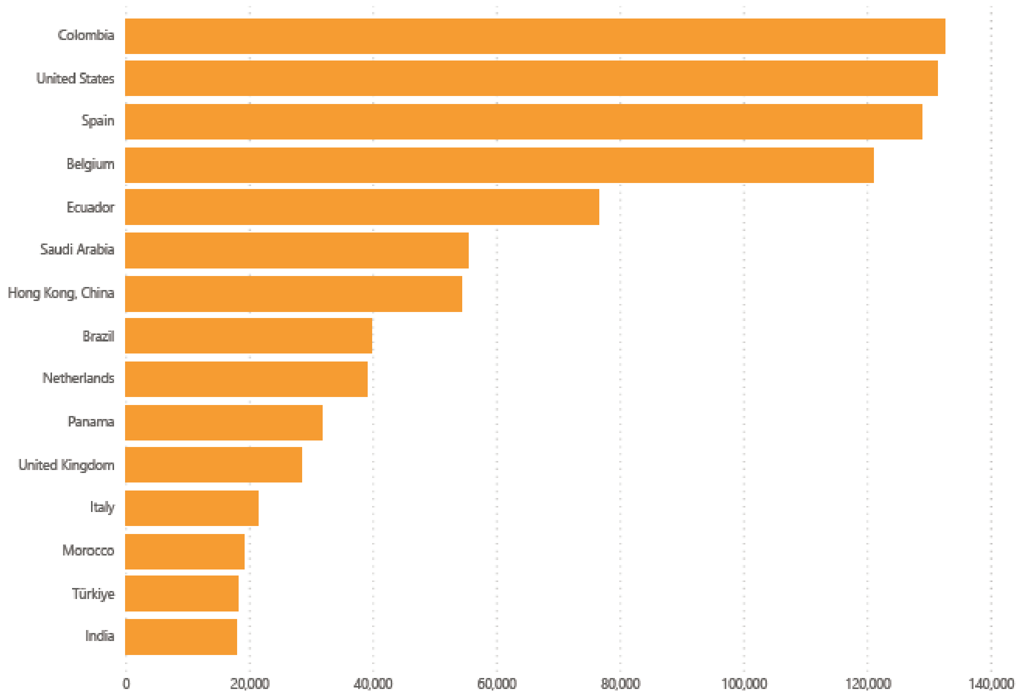
5. Patterns in Illicit Trade Segments

More insight into the patterns of illicit trade could be obtained by focusing on individual segments of these trade flows. Such approach was adopted by Berger and Nitsch (2012), who analysed disaggregated 4-digit product level data for the period 2002-2006, attempting to estimate the extent of illicit trade. The proxy for this were reporting gaps in licit trade. Namely, the authors considered differences between reported country-pair and product level exports with the same inverse flow of imports, reported by trading partners. Discrepancies in the two reported values were found to be highly correlated with corruption indicators. This result could suggest validity of this approach in measuring the extent of illicit or informal trade or, at very least, the extent of misinvoicing practices in licit trade.

Some of the major segment of illicit trade which will be considered in more detail in our study include: drug trade, trade in environmentally hazardous products and protected wildlife, counterfeited goods, and illicit trade in tobacco, alcohol, and arms.

A major destination of illegal drug trade flows is developed economies. This is evidenced indirectly by the data of the volume of drug seizures, presented in Figure 5. However, the same evidence could be interpreted as developing countries having stronger institution and more efficient law enforcement.

Figure 5: Countries by the volume of drug seizures (2022)



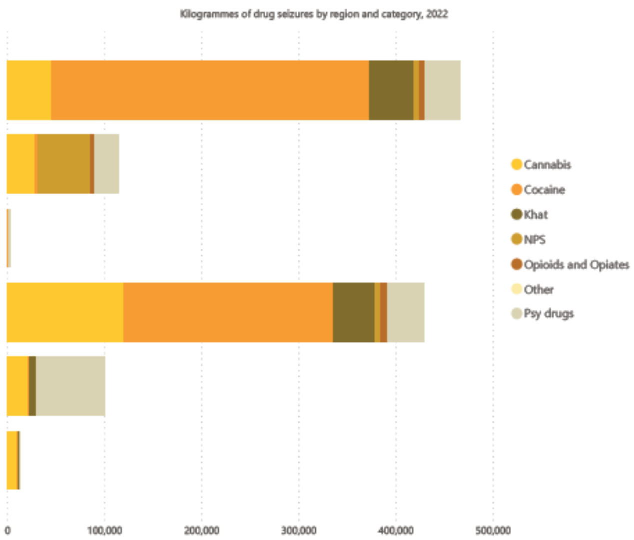
Source: World Customs Organisation (2022)
Note: The values are presented in kilograms.

Most of the illicit drug trade is concentrated on trade in cannabis and cocaine. More details on the product structure of illicit drug trade is based on seizure data presented in Figure 6.

Customs administrations have an important role in suppressing the illicit drug trade. The efforts are particularly strongly concentrated in the regions of high production, transit and consumption of illegal drugs.

The drug trade value chains were not immune to disruptions caused by Covid, much alike in the licit value chains (Bjelić, Popović Petrović, & Kastratović, 2020; Kastratović & Bjelić, 2022b). These value chains adapted to the new and unstable environment in this period. The participants in illicit drug trade made a significantly greater use of e-commerce in trading activities, often disguising drugs as common objects and infiltrating licit trade channels. Furthermore, the participants continuously perfect the methods of circumventing law enforcement efforts to eliminate illicit drug trade flows.

Figure 6: Products by the volume of drug seizures (2022)



Source: World Customs Organisation (2022)
Note: The values are presented in kilograms.

According to the seizure data provided by the World Customs Organisation, international drug trade relies heavily on vessels, particularly for overseas transport. Air transport and road vehicles are also highly frequent methods of international transporting of illegal drugs, albeit in relatively smaller quantities.

Environmental problems are characterised by considerable cross-country negative externalities. In this regard, trade in environmentally hazardous products and protected wildlife is highly problematic. It directly affects environmental degradation of economies involved in such trade. For instance, trade in protected wildlife or illicit trade in timber, both of which are voluminous illicit trade activities, increase the extent of the connected illicit or destructive activities, such as poaching, species extermination, and deforestation. Such activities endanger ecosystems and increase pollution of water, air, and soil.

The seizure data by the World Customs Organisation indicates that illicit trade in toxic materials is dwarfed by illicit trade in wildlife. Most seizures are made in developed countries, particularly the ones with strong environmental standards, such as the United Kingdom and Germany.

As for the trade in counterfeited goods, there are two main segments in these illicit trade flows: trade in non-medical counterfeited foods and trade in counterfeited medical products.

Counterfeited non-medical products mostly refer to trade in cosmetics, clothing, accessories and electronic appliances that infringes on intellectual property rights. The data of World Customs Organisation suggests that this segment of illicit trade has a notable downwards trend, particularly in 2020s.

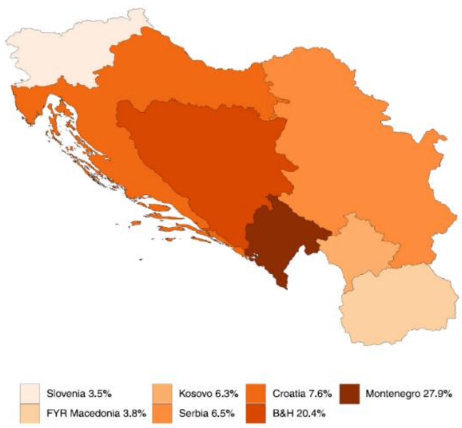
Illicit trade in medical products refer mostly to trade in counterfeited pharmaceutical products and, to a lesser extent, medical equipment. An important problem in this segment of illicit trade is authorisation and obtaining proper licencing for distributing the aforesaid products. This is highly problematic, due to inability to properly control the production technology and chemical and other characteristics of products, increasing dangers to public health. This segment of illicit trade has a significant upwards trend in 2020s.

The seizures of counterfeited goods are concentrated in both developing and developed countries. The modes of transport of counterfeited goods are somewhat more balanced in comparison to other segments of illicit trade. The most common distribution channel for these products is regular mail. Addressing the abuse of such common channels, particularly if the electronic trade platforms are concerned could raise issues with regards to the rights privacy. It is a particular challenge in the European Union with the latest developments of privacy rights in digital environment (Budak, 2019).

Illicit trade is also present in legal products such as tobacco and alcohol. This segment of illicit trade is strongly affected by the unfavourable fiscal policies towards these products in many countries. The illicit trade then serves as a method of avoiding tax burdens creating black markets. Withing this segment of illicit trade, a particularly large trade flows are related to tobacco products. These products are mostly cigarettes, but lately, there has been an increase in the demand for capital goods used in tobacco production intended for illicit trade. The activity of illicit trade in cigarettes is widespread in developed countries, particularly in Europe, while the illicit trade is alcohol is concentrated in Middle Eastern countries.

Western Balkans region provides an interesting environment for a case study on illicit trade in tobacco. The regions is a corridor which is highly conductive for illicit trade flows directed towards Europe (Andreas, 2004). Illicit trade flows in the region were spurred by political instabilities and disintegration of Yugoslavia in 1990s. This led to an establishment of smuggling routes in the region and legitimised these illicit activities (Hajdinjak, 2002). Greater insight into illicit trade in cigarettes in the region is provided by a survey-based case study conducted by Recher (2020). The author estimated the prevalence of illicit tobacco trade in the region. The result is presented in Figure 7.

Figure 7: Percentage of smoker reporting having purchased cigarettes from grey market sources (2018)

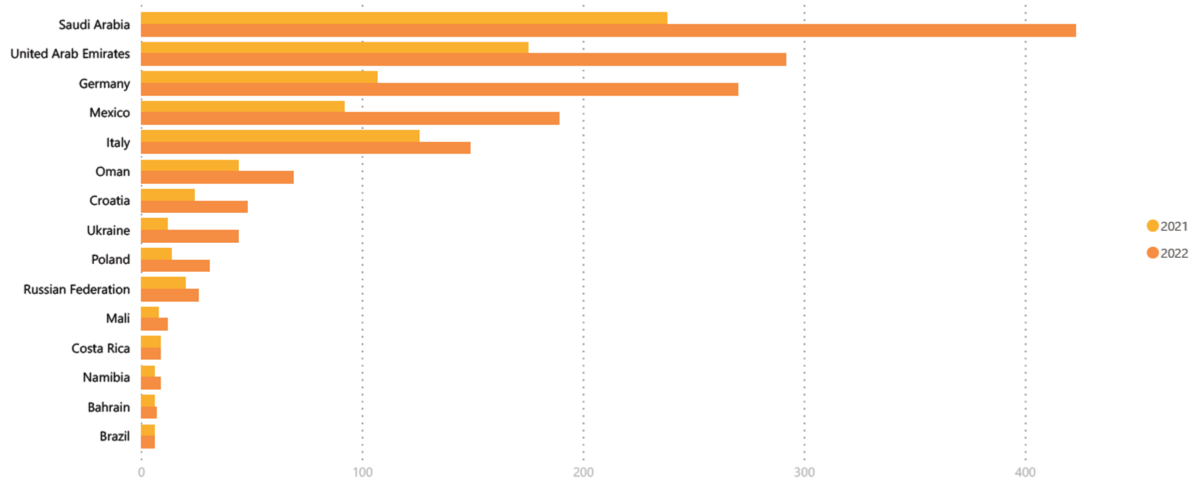


Source: Recher (2020)

The author identified major factors contributing to the likelihood of participation in grey markers. The most important ones include lower income and higher levels of the addiction of the participant.

Finally, we consider some of the main patterns in illicit arms trade. This type of trade, akin to previous examples, produces significant negative externalities as it directly impacts gun violence. The final result of this is over 175,000 deaths annually. Moreover, the availability of arms increases the capacities of criminal organisation involved in other segments of illicit trade, requiring greater engagement of law enforcement in responding to these increasing security risks. More details on the patterns of illicit arms trade in provided in Figure 8.

Figure 8: Number of weapons and ammunition seizures by country (2021-2022)



Source: World Customs Organisation (2022)

The highest volume of illicit arms trade, approximated by seizure data, refers to trade in ammunition, followed by illegal firearms, explosives and weapon parts. The seizure activity is mostly concentrated in countries with high gun supply, illegal gun ownership and generally large illicit trade flows. This could, inter alia, indicate an existence of correlation between various segments of illicit trade flows, which warrants further exploration.

6. Illicit Financial Flows

Illicit financial flows (IFFs) have become an issue of increasing concern over the past 20 years, reflecting the damage wrought by kleptocracy, corruption, state capture, and organised crime. Focusing on cross-border financial flows in particular highlights the role of international banks, real estate, and corporate legal structures as vehicles for enabling illgotten gains to be kept out of the reach of law enforcement (Forstater, M. 2018).

IFFs generally refers to cross-border movement of capital associated with illegal activity or more explicitly, money that is illegally earned, transferred or used that crosses borders. This falls into three main areas:

- The flow itself constitutes an illegal act (e.g., international tax evasion, violation of capital account restrictions); or
- The funds are the results of illegal acts (e.g., corruption, smuggling and trafficking in minerals, wildlife, drugs, and people); or
- The funds are used for illegal purposes (e.g., financing of organized crime). The principle adopted by the WB is that cross-border movement of financial assets are considered illicit only when they are associated with activities that are deemed to be illegal in the local jurisdiction (World Bank, 2016).

Global estimates indicate that IFFs are substantial and growing. IFFs are inherently difficult to measure, given the illegality of the flows and their underlying activities. Global Financial Integrity (GFI) estimates that developing countries lose almost US$ one trillion per year—a number that is perhaps most usefully seen as suggesting the scale of the phenomenon (Kar et.al. 2014).

Illicit Financial Flows and its effects

IFFs pose a huge challenge to political and economic security around the world, especially for developing countries. Illicit financial flows have a negative impact on development.

IFF affects the reduction of tax revenues and the reduction of the volume and quality of public services. Also, IFFs support development and pose a security threat.

IFFs are an indicator of problems that legitimize inequality and reduce prosperity. Factors that encourage illicit practices and illicit international capital movements include: policy and regulatory inconsistencies; weak institutions; limited oversight, accountability and rule of law; entrenched interests; and the absence of transparent economic and management processes.

Illicit and tax avoidance related financial flows (ITAFF) can have a significant impact on the economic stability of a country and the global financial system. They can drain foreign exchange reserves, distort competition, inflate prices for real estate and other assets, lower tax receipts, and reduce government revenue. They divert resources from public spending and can cut into the capital available for private investment. Illegal flows also can encourage further criminal activity, undermine the rule of law, erode trust in public institutions, and threaten a country's political stability. In addition, ITAFF can have a negative impact on the broader economy, with potential spillovers into other economies, including by deepening inequality and weakening social cohesion across and within countries.[4]

The impact on development is often most pronounced in the poorest countries, which strive to establish the policies, organizations and practices necessary for stability and prosperity. Lost IFF revenues reduce private investment and limit public funds available for investment and service delivery. This leads to inequality and reduces development opportunities. Developed countries are becoming increasingly aware of the negative consequences of IFF, and there is a broad consensus among the international community to take action.

The international community is therefore committed to solving this problem. This is reflected in concrete commitments to reduce flows and increase the recovery of stolen property within the framework of sustainable development of the United Nations

Currently, obligations related to stopping IFFs rely on international legal agreements and standards such as the UN Convention on Transnational Organized Crime, the UN Convention against Corruption, the OECD Anti-Bribery Convention, the Global Forum on Transparency for the Exchange of Tax Information and the Working Group on Financial Action Task Force (FATF).

Tracking IFFs

The first stage in responding to illegal financial flows is to enable their visibility. Illicit financial flows are hidden in complex movements of capital. They are derived from corrupt and fraudulent actions or from various criminal enterprises. Their obscurity has often served to mask their shared importance, allowing illegal activities to grow and cause long-term damage to local, regional, and even global economies.

[4] IMF (2023). The IMF and the Fight Against Illicit Financial Flows, Internet, https://www.imf.org/en/About/Factsheets/Sheets/2023/Fight-against-illicit-financial-flows (Acessed 15/10/2023).

Certain country or regional studies have established methodologies for measuring IFF and providing details at the individual country level. In particular, the World Bank has used the undertaken national and regional studies on activities that lead to illicit financial flows in order to expand the database and create the basis for more comprehensive methodologies for determining the size and composition of IFF in a given country.

These studies add to the already existing knowledge base on illicit and illegal activities, such as the substantial literature on the size of the shadow economy, the incidence and cost of corruption, and the value of illegal natural resource extraction. These investigations have taken an important step in elaborating the monetary value of problems as well as developmental ones consequences of IFF generated by different types of basic activities. Much of the IFF's measurement work has been done in partnership with organizations such as the IMF and the OECD.

In addition, GSB has undertaken extensive efforts to increase the availability of information needed by clients and others to better measure and record IFF streams. Complementary engagements help build capacity to exploit new information flows, such as supporting tax authorities or legislation requiring new information related to tax payments and assets of public officials.

The United Nations General Assembly adopted the indicator framework for the monitoring of progress towards SDGs with indicator 16.4.1 on the total value of inward and outward illicit financial flows (in United States dollars) selected as one of two indicators to measure progress towards target 16.4 to significantly reduce illicit financial (and arms) flows by 2030, strengthen the recovery and return of stolen assets and combat all forms of organized crime (UNCTAD, 2023).

The custodian agencies of SDG indicator 16.4.1, namely UNODC and the United Nations Conference on Trade and Development (UNCTAD), worked jointly to develop a statistical measurement framework and methodology for this indicator: Conceptual Framework for the Statistical Measurement of Illicit Financial Flows.[5]

Prevention and reducing of IFF

Reducing IFF is an important task that can only be achieved through a concerted and coordinated global effort. Although the foundations for cooperation have already been laid, work must be done on even clearer and deeper cooperation between developed and developing countries, as well as between state and non-state actors at the local, national and regional levels. The comprehensive engagement of the international community refers to the strengthening of financial regulations and the implementation of anti-money laundering rules, the fight against organized crime, as well as the strengthening of border control.

Strategies to combat illicit financial flows include stopping the flows and preventing the underlying activities. Part of the strategies are aimed at strengthening financial supervision, preventing the outflow and inflow of capital funds, and returning stolen property. These strategies work to increase the power and authority of financial regulators and law enforcement institutions. Such approaches emphasize a common strategy for all IFFs regardless of their origin or which countries and sectors are involved. The results are enforcement of anti-money laundering rules and increased financial regulation demonstrated the strengths of these approaches as well as their limitations. This means that in countries with weak institutions and regulatory capacities, their application is limited.

[5] United Nations, Office on Drugs and Crime, "Illicit Financial Flows (IFFs)", UNODC Research. www.unodc.org/unodc/en/data-and-analysis/iff.html .

In order to curb illicit financial flows (IFFs), it is therefore imperative to: a) Understand the scale of domestic crime, notably proceeds-generating crime and organised crime. b) Assess the strength and integrity of public institutions (including law enforcement, tax authorities, and financial supervisors). c) Ensure good governance, rule of law, and strong institutions, including the involvement of civil society and independent media. d) Analyse the size of the financial sector, including international and offshore financial centres, as this might impact the country's exposure to IFFs originating domestically, and from other countries. e) Examine the role of the international environment, the impact of geographical location and cultural links, as these also influence the risks of IFFs from other countries. f) Identify the degree of secrecy/transparency in public and private institutions, e.g. bank secrecy, transparency of beneficial ownership of legal persons and arrangements. g) Survey the composition of the national economy; and explore how this composition may encourage or discourage illicit flows.[6]

The World Bank, which works with developing countries to develop and use tools to prevent, detect and fight basic activities such as corruption, organized crime, environmental crime and tax evasion, has a special role in preventing IFF. In addition, the Bank advocates for financial centers to take measures in their countries against laundering the proceeds of corruption and monitors their progress in relation to international obligations.

Of great importance in the context of IFF is the World Bank's National Risk Assessment. It is a tool developed to help countries identify and respond to money laundering risks. The National Risk Assessment Tool encourages countries to analyze threats, vulnerabilities and risks related to crime flows – domestic and cross-border.

The tool covers all income-generating crimes, including corruption, tax evasion, organized crime and environmental crime. In addition to this, there is also the contribution of developed economies that have signed international standards as a means of increasing transparency, preventing money laundering and international cooperation.

Also, there are several international efforts under the patronage of IMM, including:

- Financial Action Task Force (FATF), which sets the standards for international action against money laundering and terrorist financing.
- Global Forum on Transparency and Exchange of Information for Tax Purposes, which sets standards for the automatic exchange of financial account information, including to reveal the real owners of anonymous legal structures.

7. Conclusions

In this paper, we described some major global patterns of illicit trade and illicit financial flows. The extensive scope and volume of illicit trade, evidenced by the empirical evidence presented in this study, underscores the gravity of the analysed issue.

By reviewing the intricacies of numerous relevant economic theories applicable to explaining illicit trade flows, we synthesised the main factors contributing to formation and growth of illicit trade and financial flows, systematising the existing known mechanisms. Our review of the available data allows for identification of patterns in illicit trade flows, which strongly support the aforementioned theories. The results particularly highlight the important role of institutional framework and the activities of customs administration in suppressing the illicit trade. In contrast, the weaker institutional framework and corruption provide a conductive environment for ineffective enforcement of regulation and development of illicit trade. The consequent proliferation of illicit trade networks and the increase in trade volume affect not

[6] OECD, Toolkit, Internet, https://www.oecd.org/gov/pcsd/ONLINE_Toolkit_IFFs%20(7).pdf.

only economic outcomes, in terms of welfare reduction and suboptimal resource allocation, but also wider societal problems, such as crime increase, environmental degradation and public health issues.

There are several implications of our findings that could be relevant to policymakers. The results, namely, imply that strengthening institutional framework, and improving customs administration and co-operation across borders is paramount in supressing the illicit trade flows. Some identified ways of achieving this goal include support for further digitalisation of customs administration and integrating risk management systems in its procedures.

The previously discussed measures are warranted, as the results suggest that they would lead to global improvement in welfare. The design of measures aimed at curbing illicit trade should integrate the idiosyncrasies of different segments of illicit trade, as our results reveal considerable heterogeneity in patterns of trade depending on the region and product concerned. At the same time, the measures and approaches in solving the problems related to illicit trade and financial flows should be multifaceted and interdisciplinary, providing complementarity of various activities in this regard.

Our results also imply that economic factors, particularly income level, have a considerable effect on the extent of illicit trade involvement of particular economies. In these cases, measures aimed at promoting licit economic activities could serve as a potential instrument in indirectly addressing the issue of illicit trade. If successful, such measures would result in economic growth and development, which could act as its deterrent to illicit trade, particularly in smaller and less developed economies. Another interesting economic aspect of illicit trade is its correlation with licit trade flows and perils of infiltrating the legitimate trade channels, which is a question worth exploring further.

Our study revealed certain problems in the current state of research of illicit trade. The main challenge faced by the researchers of this topic is related to the availability of data. Therefore, more research and, thus, information on the topic could be conducted and obtained with increasing effort in providing more data comparable across countries, or at least by providing estimates of the values of illicit trade and financial flows using the standardised methodology. The standardisation of estimation methodology is another avenue for shedding more light onto the problems of illicit trade and financial flows. A larger scale research in multi-country settings is warranted, as it would provide better understanding of the factors causing the illicit trade and financial flows in global economy, as well as understanding their economic and wider societal effects.

Our paper also covered the illicit financial flows which are important component of illegal activity in the world economy. Illicit financial flows are hidden in complex movements of capital, and they are derived from corrupt and fraudulent actions or from various criminal enterprises. Global estimates indicate that IFFs are substantial and growing. Illicit and tax avoidance related financial flows (ITAFF) can have a significant impact on the economic stability of a country and the global financial system. IFF can drain foreign exchange reserves, distort competition, inflate prices for real estate and other assets, lower tax receipts, and reduce government revenue. Reducing IFF is an important task that can only be achieved through a concerted and coordinated global effort, like FATF.

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