

## THEORETICAL APPROACH OF ILLIGAL FINANCIAL FLOWS' DEFINING AND IDENTIFICATION

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**Abstract:** *The last decade has perceived illicit financial flows as a growing concern and threat to human progress. The topicality of this research is conditioned by the need for a scientific approach to the phenomenon of illicit financial flows to analyze its complexity (all dimensions and facets). At the same time, it is imperative to evaluate the existing methodologies for quantifying illicit financial flows in order to develop a methodology, which will be relevant for the Republic of Moldova, with the aim to reduce the economic-financial and social risks through their efficient management and to reap the benefits of the recovered financial flows. The purpose of the research carried out consists in the theoretical substantiation of the process of identification and evaluation of illicit financial flows. In order to achieve the proposed goal, the following objectives were proposed: identifying the conceptual-methodological landmarks of the concept of illicit financial flow; researching the fundamental methodological elements for evaluating illicit financial flows.*

**Keywords:** *illicit financial flow, balance of payments, exports, imports, external debt, Global Financial Integrity.*

**JEL Classification:** *E26, K42.*

### 1. Introduction

The topicality of the research theme is conditioned by the need for a scientific approach of the phenomenon of illicit financial flows to perceive its complexity (all dimensions and facets), at the same time, it is imperative to evaluate the existing methodologies for quantifying illicit financial flows in order to develop a sustainable methodologies for the Republic of Moldova, the aim being to reduce the economic-financial and social risks by efficiently managing them and reaping the benefits of the recovered financial flows. The state, through its institutions, must act as a whole in order to ensure economic and financial stability by increasing budget revenues.

The purpose of the research carried out consists in the theoretical substantiation of the process of identification and evaluation of illicit financial flows. In order to achieve the proposed goal, the following objectives have been proposed:

- identifying the conceptual-methodological landmarks of the concept of illicit financial flow;
- researching the fundamental methodological elements for evaluating illicit financial flows.

Therefore, *the importance of identifying and assessing illicit financial flows is evident in the context of providing the state budget with additional revenues that will allow the development of major investment projects at the country level, as well as improving the social problems of Moldovan citizens.*

The research methodology was based on the following methods and techniques: analysis and synthesis, induction and deduction, graphical and tabular methods, methods inherent in economic disciplines - observation, reasoning, comparison, classification, which allowed an in-depth analysis of the research topic. The data sources of the paper constituted the works of researchers in the domestic and foreign economic field, official statistics of some public institutions in the Republic of Moldova, as well as studies in the field of international organizations.

## 2. Conceptual-methodological landmarks of the illicit financial flow notion

Illicit financial flows represent a phenomenon that developed during the XXth century with the unprecedented evolution of the exchange of goods and capital, on the one hand, and the increase in fiscal pressure from states with their adoption of the interventionist doctrine, events after which illicit financial flows could no longer be stopped. The very term “illicit financial flows” has a general character, which reached an enviable political importance during the elaboration of the Millennium Development Goals (2000-2015) (UN, 2015). Its success, in part, was due to the broad spectrum it contains. The term allowed for a common agenda for those who set out to fight corrupt leaders and officials, as well as for those who saw a critical obstacle to the success of development in multinational companies that did not pay taxes in the country of production of goods and services. The common elements of hidden behaviors that eliminate resources and weaken governance were clear enough that an irresistible impulse developed to ensure prioritization in the Sustainable Development Goals (SDGs). Therefore, in order to have a full understanding of the phenomenon of illicit financial flows, we must first understand what is to be defined as “illicit”.

According to the Explanatory Dictionary of the Romanian Language, “licit means - legally, permitted, allowed by law”, and “illegal” Contrary (to a law or) to a norm. Dishonest”. In the “legal / illegal” part, it is necessary to identify which norms apply - domestic civil / criminal law, the legislation of the ordering or beneficiary states of the payments, the existing international framework, etc.

At the same time, it would be strange to limit the notion of “illicit financial flows” only to cases that fall into the category of offenses or sanctions by regulators, as these transactions have a major impact on poverty and pollution, which are, at least, just as serious.

To conceptualize illicit financial flows, we must first introduce a broader notion. Thus, in our opinion, *all financial operations and manipulations with money or capital will be considered illicit financial movements, when they are illegally earned, transferred and / or used, actions that take place both at national and cross-border level.*

Based on this definition, we will consider domestic illicit financial movements, transactions that take place within a state, and external illicit financial movements, those that take place across an international border. Thus, according to the definition provided by the Non-Governmental Organization “Global Financial Integrity (GFI)”, which states as follows: “Illicit financial flows (IFF) are illegal movements of money or capital from one country to another, being classified these movements as illicit flows when funds are illegally earned, transferred and / or used across an international border” (GFI, 2020). Thus, the notion of illicit financial flows corresponds to external illicit financial movements, which represents its research element.

The authors Sisoeva and Ergasheva mention as characteristics of illicit financial flows the lack of control and statistical reflection, the illegal origin and, in most cases, the non-payment of taxes from the obtained incomes.

While researchers Reed and Fontana state that one or more conditions must be present in order to consider certain funds as illicit:

- Their transfer itself is illegal;
- The money comes from illegal activity;
- Fiscal obligations related to obtaining these funds were not honored.

Another classification, in the author's view, of illicit financial flows would be that related to the mechanism used for the transfer of value, so we can deduce:

- illicit financial flows based on commercial transactions;
- illicit financial flows based on capital transfer;

- illicit cash flows.

Researcher Peter Reuter distinguished the *groups of people who practice activities that generate illicit financial flows* (Reuter, 2017):

(1) Multinational corporations. Studies have shown that corrupt behavior, lobbying by multinational corporations in developing countries, and abusive transfer pricing behavior in low-tax jurisdictions (Global Witness, 2020).

(2) Corrupt officials. They can get bribes through various activities, such as taxing rights that should be freely available, improper awarding of contracts, extortion for non-application of appropriate criminal sanctions. Some authors assume that only high-ranking corrupt officials obtain illicit revenues large enough to make the transfer of funds abroad worthwhile.

(3) Tax evasion. The activities that generate the financial flows are legal. Illegality is exclusively in hiding them for tax purposes. The evaders can be individuals or private companies.

(4) Criminal entrepreneurs. Drug traffickers, smugglers and illegal entrepreneurs on the market can generate high revenues. There is a reasonable question whether they generate financial outflows from developing countries as important as illegal inflows, as most of their revenue is generated in rich, high-priced markets.

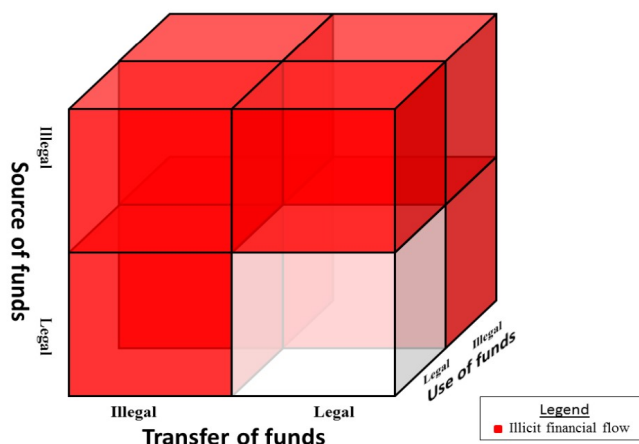
Another *classification of illicit financial flows can be made by the source, type and destination of the transfer*, as shown in Figure 1, which are comprised as a whole, from the perspective of the logical cause-effect link and vice versa, in the components of the unobserved economy related to the formal sector and its illegal production.

Thus, illicit financial flows can be classified according to the legality of the source of the financial means into:

- financial means of legal origin
- financial means of illegal origin.

In turn, within the illicit transactions with financial means of legal origin are distinguished:

- illicit financial flows directed against fiscal regulations
- illicit financial flows directed against market regulations (Cobham, Jansky, 2020).



**Fig. 1. Three-dimensional representation of the common definition of illicit financial flows source**

**Source:** (Chowla P., Falcao T., 2016)

Through illicit financial flows directed against tax regulations, natural and legal persons commit tax evasion and avoidance of customs duties, which is due to the rigid tax

system, insufficient regulations from regulators, corruption, the economic and social situation in the country, and through illicit financial flows directed against market regulations the same actors try to avoid political sanctions, for not identifying the dominant position on the market, sanctions for the repatriation of financial means, avoidance of controls by relevant bodies, regulations on capping prices.

At the same time, *illicit financial flows based on transactions with illegally obtained assets* can be divided into two categories:

- assets arising from the abuse of power, corruption and theft of state funds and assets
- assets generated from criminal activity.

The classification of illicit financial flows by their use after the completion of the transaction can be summarized by analogy with the procedural institution in the criminal law "Poisoned Fruit Rule", which is a phrase taken from the American legal system, the doctrine of "Poisoned Fruit" is a product of the exclusionary rule of the American system, which states that evidence obtained through unlawful arrest, unjustified investigation, or forced interrogation must be excluded from the trial. By analogy, the use of financial means will not be considered legal if they have had a source of illicit origin or transfer.

This approach allows us to identify the main beneficiaries of illicit financial flows as a whole. Thus, private, domestic and foreign natural and legal persons are the basic perpetrators of illicit financial flows directed against tax regulations, market regulations, as well as illicit financial flows carried out by means of committing abuse of power, corruption and theft of funds, and state assets. Civil servants are ordinarors for illicit financial flows resulting from the abuse of power, corruption and theft of funds and state assets, as well as transactions carried out with financial means generated by criminal activity. And, in turn, criminal organizations and criminal groups are the main perpetrators of illicit financial flows with financial means generated by criminal activity, to which are attributed the trade in drugs, weapons, pimping, weapons of mass destruction, the means derived from the activity of groups and criminal organizations and, last but not least, the provision of money laundering services, as a separate type of activity, when the beneficiaries of those services are abroad.

This classification gives us an overview of the illicit financial flows and its authorizing officers. This classification is not exhaustive, as there is the potential to create an illicit flow in any transaction, and the range of potential illicit motives is indeed wide and, at the same time, demonstrates the magnitude of the phenomenon of illicit financial flows. It is important to note that the types of illicit financial flows mentioned above will seriously damage the state budget, institutional power by limiting the funds available for social programs and reducing the quality of those expenditures, as well as aggravate the poverty and pollution of the environment. It is also important to note the existence of substantial overlap in the mechanisms used to generate illicit financial flows, regardless of the motivation. When there is a regulatory, procedural or functional gap that allows the generation of illicit financial flows, it will be used for several purposes.

### **3. Fundamental methodological elements for the illicit financial flows evaluation**

*The need to estimate illicit financial flows arises in response to the challenges of the 21st century in terms of the sustainable development of a democratic state. Any mathematical calculation will focus on a formula or, in our case, a calculation methodology, as well as data and information relevant to the above methodology. Moreover, the last decade has seen a growing concern about "illicit financial flows" as a threat to human progress. This culminated in 2015 with the global agreement to set a goal*

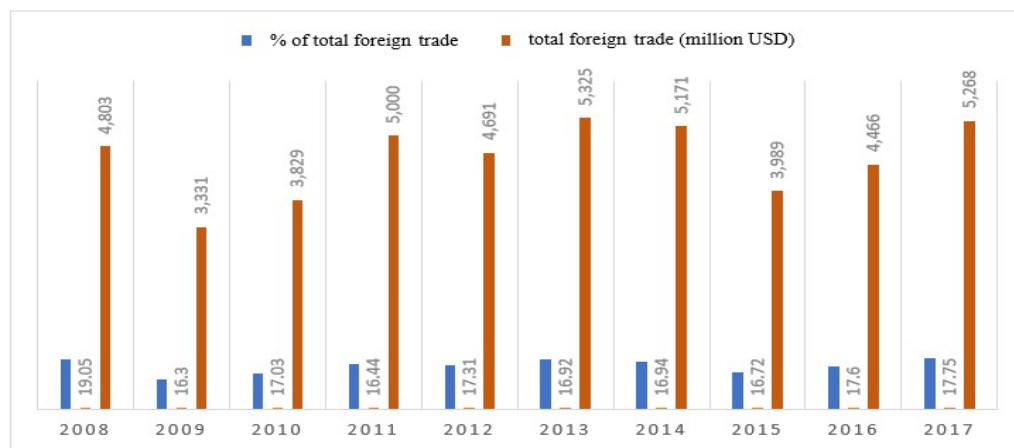
in the UN Sustainable Development Goals to reduce illicit flows (Cobham, Jansky, 2020). What was missing then and still is missing is the consensus on indicators and measurement for this purpose, which is due, last but not least, to the lack of a universal methodology for estimating the illicit financial flows.

Researches on illicit financial flows are now developing rapidly. This is a welcome change after a long period of unwarranted neglect (Cobham, Jansky, 2020). However, the task facing researchers and public institutions is more like "running after the train", as the mechanisms and tools used in illicit financial flows are constantly changing and adapting to the new regulatory realities of public institutions, the international community, but also the evolution of financial systems and the development of information.

The common features of illicit financial flows are that they are deliberately hidden, made opaque to hide their true role. They drain resources from states, which, in turn, do not meet the needs of education, health, protection of citizens.

Thus, starting from the fact that illicit financial flows are largely unidentified and quantified at the moment, it is difficult to make a fair assessment if the Sustainable Development Goal of reducing illicit financial flows is making any progress. This is indirectly confirmed by the lack of information on the progress made in the Voluntary National Assessment of Progress Report on the Implementation of the 2030 Agenda, published by the Government of the Republic of Moldova in 2020 (Government of the Republic of Moldova, 2020).

Moreover, according to the report of the Non-Governmental Organization "Global Financial Integrity (GFI)" "Illicit capital flows on foreign trade of 135 developing countries for the years 2008-2017", there is no obvious dynamic of decreasing flows illegal financial statements, which are due to the inauthentic declaration of the value of imports / exports of the Republic of Moldova with other states. This shows that, in fact, illicit financial flows made through the inclusion of distorted data in import / export invoices increase with the total volume of their transactions, so that regulatory authorities are unable to reduce these flows.



**Fig. 2. Discrepancy between the data of the national and foreign authorities regarding the value of the import / export of the Republic of Moldova, related to the value of the foreign trade**

Source: elaborated by authors basing on GFI data (GFI, 2020)

The research aims to identify fundamental methodological elements for assessing *illicit financial flows that are generated by the formal sector and illegal production, as components of the unobserved economy.*

Moreover, this approach is in line with the definition given by the Non-Governmental Organization “Global Financial Integrity (GFI)”, which reads as follows: “Illicit financial flows (IFF) are illegal movements of money or capital from a in other countries, these movements are classified as illicit flows when funds are illegally earned, transferred and / or used across an international border” (GFI, 2020). Moreover, the 2030 Agenda for Sustainable Development of the United Nations means reducing the value of financial flows entering and leaving the country illegally.

In order to develop a reliable methodology for estimating illicit financial flows, it is first of all important to make a retrospective of the calculations, but more importantly of the methodologies applied in the past for evaluating illicit financial flows.

An example is one of the first estimates of illicit financial flows made by Raymond Baker in 2005 (Baker, 2005), who in 2006 founded Global Financial Integrity (GFI), a non-governmental organization that is well known for its own estimates. The latter, based on about 550 interviews with corporate employees, estimated that more than \$ 539 billion represents annual illicit financial flows leaving developing and transition countries due to a combination of tax evasion, fraud, drug trafficking and corruption. These abuses are due to both criminal production (illegal arms trade, smuggling) and tax evasion (indication of erroneous values in export / import transactions, as well as the conduct of fictitious transactions).

In contrast to Baker's (2005) pioneering estimates based in part on interviews, most recent approaches to estimating illicit financial flows acknowledge that it is not possible to directly observe and estimate illicit financial flows (Cobham, Jansky, 2020). These approaches are based on the little information on available economic transactions that is available about activities that could be related to illicit financial flows. Specifically, methodologies often focus on exploiting data anomalies that may arise from the process of hiding flows.

The most prominent approaches focus on current account and capital account deviations. Some authors combine the two approaches, including the reports of the Non-Governmental Organization "Global Financial Integrity", which covers most developing countries.

Within the estimates made, we distinguish three broadly defined groups of approaches, depending on the data used. The first group examines estimates based mainly on country-level data. The second group addresses data-based studies on trade in goods. Each of the first two groups also deals with a specific methodological approach. Thus, the first group focuses on so-called trade relations statistics, while the second group analyzes studies on abnormal prices.

The third group is based only on detailed data recently available at the level of each import / export transaction, including data on the type, volume, quality and cost of the goods traded. This type of detailed data is only available to a limited number of countries so far, although their numbers are growing.

Thus, we conclude that the difference between the three groups lies in the type of information underlying the calculations performed to estimate the volume of illicit financial flows, but using the same methodological approach. An example of this approach is the non-governmental organization Global Trade Integrity, which relies on the assumption that any exports or imports are reported by advanced economies but are not equally reported by countries. In development, they are illicit financial flows because the difference is the very value of the financial flows that is hidden. In addition to what they

call the lower limit estimate using only relations between developing countries and advanced economies, their upper limit estimates are extended on the assumption that traders include erroneous data in import / export invoices in their relations with developing countries. In general, incorrect invoicing of foreign trade is the act of deliberately manipulating the value of a commercial transaction by falsifying the price, quantity, quality (customs tariff) or country of origin of a good or service of at least part of the transaction. Wrong trade invoicing is a widely used method of concealing illicit financial flows within the international trading system, as well as the evasion and / or exploitation of customs procedures. For example, financial means can be illegally moved to other countries either through exports, artificially increased value, or undervalued imports.

Although the World Trade Organization (WTO) has estimated the value of global trade in goods at almost 18 trillion US dollars in 2017, less than two percent of these shipments are verified the veracity of customs invoices indirectly (Cobham, Jansky, 2020), thus providing access to a channel for illicit financial flows. Thus, as the volume of world trade has been steadily increasing in recent decades, the opportunities for incorrect invoicing of transactions are also increasing (Moiseienko, Reid and Chase, 2019).

Calculation formula for estimating illicit financial flows generated by incorrect invoicing of foreign trade:

$$DI_{md,t} = \frac{I_{m,t}}{r} - X_{d,t},$$

(1)

$$DE_{md,t} = \frac{I_{d,t}}{r} - X_{m,t},$$

(2)

Where:

$DI_{md,t}$  – represents the difference between the value of the declaration on import into the developing country "m" of the goods from partner country "d" and the value of the export declared in partner country "d";

$DE_{md,t}$  – represents the difference between the value of the export declaration of the goods from the developing country "m" to the partner country "d" and the value of the import declared in the partner country "d";

$I_{m,t}$  – represents the import made by the developing country "m" from the partner country "d" in a time "t";

$X_{m,t}$  – represents the export from the developing country "m" to the partner country "d" in a time "t";

$X_{d,t}$  – represents the export from the partner country "d" to the developing country "m" in a time "t";

$r$  – represents a correction coefficient for data on imports from one state with exports declared by another state in that state.

Thus, we can interpret the negative values of  $DI_{md,t}$  as import under-invoicing and, respectively, illicit incoming financial flows, and the positive values as over-invoicing and, consequently, outgoing financial flows from the analyzed jurisdiction. In addition, they interpret the negative values of  $DE_{md,t}$  as excessive invoicing of exports equivalent to illicit inflows, and the positive values of  $DE_{md,t}$  as under-invoicing of exports representing illicit financial outflows.

Of particular interest is the coefficient "r", the task of which is to make comparable the declared values of the same goods exported from one country and imported from another country. Researchers Matt Salomon and Joe Spanjers, in the analysis of the comparability of these values, in the report of the Non-Governmental Organization "Global Financial Integrity (GFI)" "Illicit financial flows to and from developing countries: 2005-2014" (GFI, 2017), assumed to set the value of the coefficient "r" of "1,1", which is a

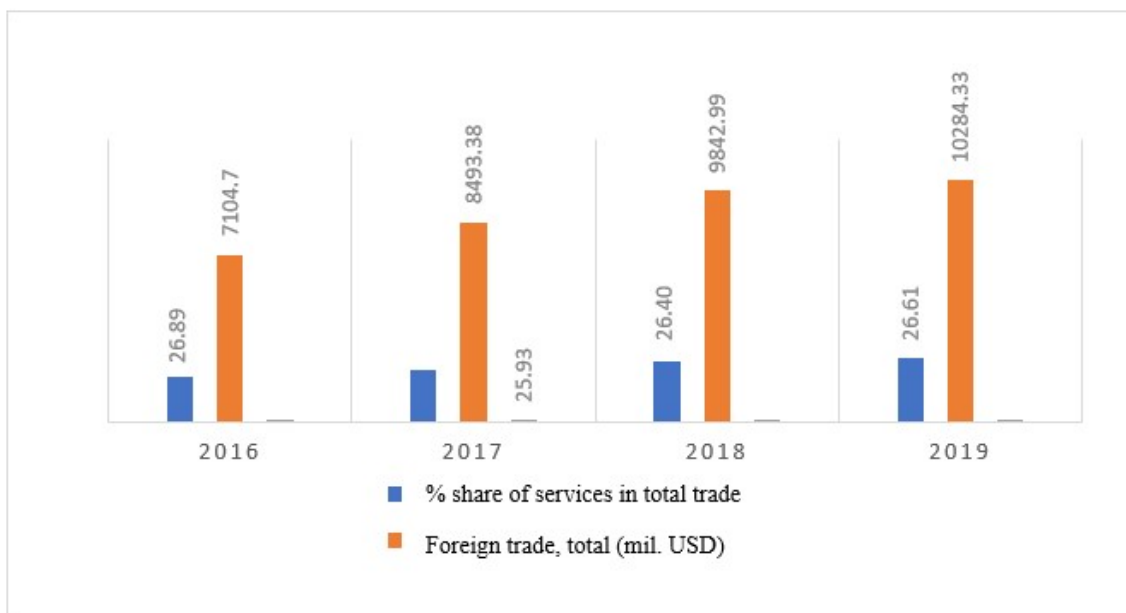
difference of 10% between the CIS and FOB prices of goods exported from one country and imported from another country. The argument for this process was that the transaction values that were used for the analysis were available in USD for exports under the terms of delivery of the goods - FOB, and for the associated imports under the terms of delivery - CIF. FOB and CIF delivery conditions are international trade clauses (INCOTERMS, 2010). The difference between the transaction values according to the FOB and CIF delivery conditions is that the FOB values are indicated by the exporting country and the CIF values by the importing country. Thus, the value of import is increased by the costs of transport and insurance of exported goods, in this way we can conclude that from the beginning between the export values of goods delivered by a country will not correspond to the values of imported goods, declared by the importing country.

It is clear from the very beginning that assigning the coefficient “r” to the value of “1.1” for all states will not contribute to the accuracy of the calculations performed. For these reasons, the Non-Governmental Organization Global Financial Integrity (GFI) in its report for the years 2008-2017 on illicit financial flows from late reporting of foreign trade transactions, published in 2020 information on how to calculate the coefficient “r”. Thus, for the conversion of CIF values into FOB values, the transport information developed by the Center d'Etudes Prospectives et d'Informations Internationales (CEPII) was taken into account, namely the role of factors such as the distance between trading partners, contiguity, the degree to which a “world” prices for individual goods, including factors such as the presence of trade agreements between partners, which should reduce trade costs, as well as categorical factors as to whether one or both trading partners are ongoing countries development (Gaulier, Zignago, 2010). Thus, using more elaborate infrastructure indices and per capita income in pairs of countries, it would be possible to increase the number of countries for which transportation costs could be estimated (Miao, Fortanier, 2016).

It should be emphasized that there are some important limitations of the methodology described above for identifying incorrect invoicing of foreign trade. In our view, first of all, the described methodology only covers the mis-invoicing of trade in goods - they do not include estimates of mis-invoicing involving trade in services due to lack of data in this regard, which has been a growing component of world trade. Therefore, even if trade in services, as a percentage of total world trade, has increased, trade in services cannot be detected in our analysis of the difference in value. Moreover, the non-quantification of any illicit financial flows that could be disguised through the overestimation or fictitious diminution of the value of transactions related to the import and export of services would be a major loophole for a methodology for calculating illicit financial flows for the Republic of Moldova. According to the information available in the Balance of Payments of the Republic of Moldova for the years 2016-2019, the share of services in total foreign trade was about 26%, being maintained at the same level during the analyzed periods, see Figure 3.

Such incorrect commercial invoicing for services includes counterfeit invoices for management fees, interest payments, licenses, payments for copyrights and patents, and other intellectual property rights (IPR), and so on. in one country and another. An additional factor is that the price of services is much more subjective than the price of goods, which generally have clear entry costs, etc. In addition, there are many forms of illicit cash flows (IFF) that cannot be retrieved using available economic data and methods, because they are simply not recorded in available legal sources.



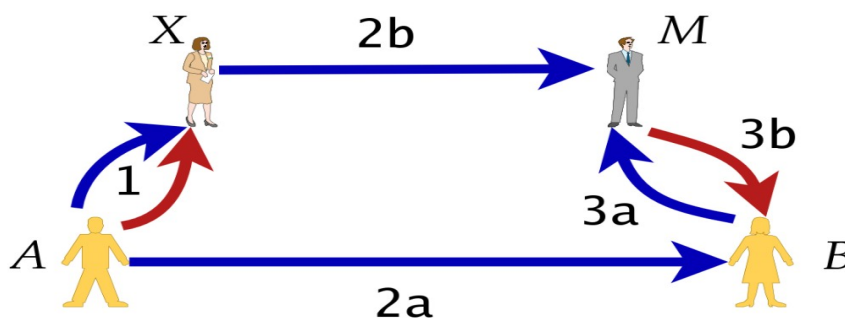


**Fig. 3. Share of services in the total value of foreign trade of the Republic of Moldova**

**Source:** *Elaborated by authors in accordance with the information available in the Balance of Payments of the Republic of Moldova*

As for cash transactions, which are sometimes used in trade and often used in criminal transactions and cash smuggling, they do not appear in official trade data and cannot subsequently be captured in value analysis. Also, this methodology cannot detect transactions that use mechanisms such as "Hawala" transactions or cash smuggling. Thus, hawala is a popular and informal securities transfer system based not on cash flow or telegraphic or computerized network transfers between banks, but on the activity and honor of a huge network of money brokers. In the most basic version of the hawala system, the money is transferred through a network of hawala or hawaladari brokers. It is the transfer of money without actually moving it. In fact, one successful definition of the hawala system that is used is "money transfer without money movement". According to author Sam Vaknin, while there are large Hawala network operators to which networks of intermediaries are connected in cities in many countries, most of the actors involved in this system are small businesses (Vaknin, 2005). The activity in the Hawala network is described in Figure 4.

The Hawala system works as follows: (1) a client (A) approaches a hawala broker (X) in a country and gives a sum of money (red arrow) to be transferred to a recipient (B) in another country. Along with the money, he usually specifies something like a password that will lead to the payment of the money (blue arrows). (2b) The Hawala (X) broker contacts another hawala M broker in the recipient's country and city and informs M of the agreed password or provides other funding arrangements. Then the recipient (B), who was also informed by A about the password (2a), now approaches M and tells him the agreed password (3a). If the password is correct, then M releases the amount transferred to B (3b), usually minus a small commission. X now owes M the money M paid to B; thus, M must trust X's promise to settle the debt at a later date.



**Fig. 4. Carrying out a transaction within the Hawala system**  
Source: (Beispiel, Z., 2009)

Analyzing the previous transfer mechanism, it is absolutely transparent that the methodology for identifying illicit financial flows by identifying erroneous invoicing in foreign trade transactions is inefficient in this case.

These techniques are being used more and more as the volume of trade increases, as they are less expensive than formal value transfer services (e.g., banks, money services, etc.) and are more accessible to underserved communities. and / or non-banking. With regard to the 'falsification of the same invoice', the analysis of the difference in value cannot capture the incidents in which both the importer and the exporter cooperated in advance to agree on the prices they will each declare in the respective falsified import and export documents. In such cases, there is no discrepancy between export and import values and therefore cannot be detected in our analysis. This approach is difficult to detect and is widely used by both multinational corporations and long-term trading partners.

For the Republic of Moldova this mechanism is characteristic in the case of exports of agricultural products to CIS countries, thus, the billing price for exported horticultural products may be several times lower than similar products exported to European Union countries.

*Based on these findings, it is necessary to develop a methodology for calculating illicit financial flows based more on data on the value of each product, taking into account the specifics of each partner state, rather than analyzing the total values of foreign trade transactions as a whole.* However, information on the value of goods traded on the foreign market in different states is limited, and data sources on the value of services provided internationally do not exist.

#### 4. Conclusions

From the analysis of the estimates of illicit financial flows based on foreign trade, we draw three main conclusions. First, international trade is an active channel for illicit financial flows, and research leading to trade estimates is useful in several ways. Thus, it has been established that the use of wrong prices in foreign trade is used to transfer funds illegally abroad. Trade estimates are useful to shed light on discrepancies in international trade data. The identification of these discrepancies should also be useful for customs officers in highlighting appropriate cases for more detailed audit, as well as for other public actors involved in the preparation of public policy documents.

Estimates based on the methodology approach described above, using data at the country level, could be useful in raising awareness about these issues, but are not credible enough to quantify illicit financial flows over time. Secondly, there is an improvement in the methodology used by the Non-Governmental Organization "Global Financial Integrity

(GFI)" in terms of the exact quantification of the coefficient "r", necessary for a more accurate comparison of the information available in the countries involved in the same commercial transaction. However, the use of trade estimates for the Sustainable Development Goal 16.4.1 Significantly reduce illicit financial flows, strengthen the recovery and return of illicit goods is not enough. Indeed, there seems to be a trade-off for trade estimates - either they are available for many countries but not credible, or they are of relatively high quality but are not available for in the required volume. Third, it is necessary to identify mechanisms for assessing illicit financial flows that use other trading channels.

Also, within the process of researching this topic there is a need to identify data sources and a methodology for calculating illicit cash flows, which should be applicable based on the specifics of the Republic of Moldova and the fact that it is an economy based on cash transactions.

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