

General and specific models of value added tax budgetary fraud and their possible application in the context of investigative action

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Abstract

Aim: The aim of the study is to model the offence of fiscal fraud (also known as VAT fraud) committed by exploiting the operating mechanism of the value added tax (VAT/statutory VAT) introduced in Hungary (by outlining its general and specific models) and to examine the possibility of its application in the investigative action of the authorities.

Methodology: The topic was primarily addressed through secondary research, with a strong emphasis on the application of system thinking and criminological thinking, as well as best practices observed during the service as an investigator at the National Tax and Customs Administration (hereinafter: NAV) and conclusions drawn from case studies.

Findings: If we accept the findings of the sources processed by the research and the conclusions drawn from them and from their further reflection, the three 'building blocks' of the general model of VAT fraud, i.e. the behaviour of the perpetrators, can be isolated on the basis of the VAT operating mechanism, namely: fraudulent deduction, concealment of income and concealment of operation. From these 'building blocks', the perpetrators typically build up complex cross-border structures in practice, which can be described by specific models based on their common features, in particular the specific participants and the invoicing/sales links between them. These specific models can also be considered as 'prefabricated' versions of investigations and, with due care, can

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be used effectively in the investigative action of the law enforcement authorities, although in practice they appear in more complex, distorted, mixed and sometimes renewed forms.

Value: The value of the research lies in its approach to the VAT fraud offences in terms of systems, forensic thinking and best practice, and its integration into a coherent model that can be applied with due care and attention, but also effectively in the course of investigative action by the law enforcement authorities.

Keywords: cross-border transactions, tax evasion, domestic and international fiscal fraud, working method

Introduction

Problem statement

Benjamin Franklin said: 'only two things are certain in life: death and taxes'. Gábor Tolnai added: 'the third is that men make considerable efforts to avoid the first two.' (Fodor, 2017) Nevertheless, taxation is a necessary part of human existence, of community life. Its institutionalised form, in the modern sense, can be traced back to the end of prehistory, to the emergence of statehood, since in order to maintain the state, members of the community necessarily had to contribute to it in some form (Bahn, P. & Renfrew, 1999)

VAT was first introduced in France in 1954, and today it is the largest tax in the world, except for a few countries, and the largest tax generating budget revenues. (Szlifka, 2020.) Hungary, VAT was introduced in 1988. (Sólyom, 2015).

However, in addition to the successful application of this tax worldwide, we should not forget about the downsides of its operating mechanism - especially with regard to economic transactions crossing the borders of the European Union (hereinafter: EU) Member States - which may provide opportunities for numerous abuses for the perpetrators.) Although there are no precise statistical figures available in the literature on the subject, only rough estimates, which, however, indicate that the amount of unpaid VAT in the EU can be in the order of EUR 100 billion per year (Magyar-Áhel, 2018, Ritzlné & Máténé, 2022) and in the domestic context, the so-called 'VAT margin' can reach 10-30% of the VAT collected in the budget (Ritzlné & Máténé, 2020).

Objective

In the context of the above problem, the objective of the study is to model the VAT fraud offence, to define its general and specific models and to examine their possible application in the investigative action of the authorities.

However, the case studies presented in this paper also draw attention to the limitations of the applicability of these models, since, as we shall see, there are no 'set in stone' patterns of offences, in reality they are more complex, distorted and mixed, and new patterns emerge over time and as the legal environment changes.

Research methodology

The topic was primarily dealt with *by secondary research*, as a result of which - after describing the legal facts of VAT fraud and the operating mechanism of VAT and *modelling* the taxpayer's compliance behaviour - I attempted *to isolate* the simplest, most general, independently interpretable element of the operating mechanism of VAT and through this I defined a general model of VAT fraud applicable to all types of VAT fraud in *a systems* approach. I have also attempted to derive from the general model - as a quasi 'building block' - the most important complex offences as specific models in terms of *best practice* observed during my service as an investigator at the NAV.

The results of the research, i.e. the general and specific models of VAT fraud and their practical application, were evaluated and further developed by applying a *criminological approach* and taking into account the good practice and *case studies* mentioned above.

Introduction of the research topic, presentation and evaluation of the relevant literature

The legal definition of VAT fraud

If we start from the legal principle of *nullum crimen sine lege* - i.e., there is no crime without a law - budget fraud was introduced as a new criminal offence in the Hungarian Criminal Code by Article 2 of Act LXIII of 2011 with effect from 1 January 2012. With the new statutory definition, the legislator merged several previous offences, including tax fraud, in order to formulate the direct legal object of budget-damaging offences (tax, customs, revenue, etc.) and the conduct of the offence in the most abstract way possible (Molnár, 2023)

Budget fraud is defined in Article 396 (1) (a) of Act C of 2012 on the Criminal Code (hereinafter: Criminal Code) in force at the time of writing as 'whoever, in relation to an obligation to pay into the budget or funds from the budget, misleads or misleads another person, makes a false statement or conceals a true fact, thereby causing financial loss to one or more budgets,' commits the crime of budget fraud

Paragraph 462 (3) of this Act also provides that 'no offence is committed... if the financial loss caused by budget fraud does not exceed five hundred thousand forints'. In the latter case, it is possible to conduct a tax audit within the framework of administrative proceedings, in the course of which a tax deficiency may be established and a tax penalty may be imposed pursuant to Act CL of 2017 on the order of taxation. A tax audit may also be conducted in parallel with criminal proceedings under Act XC of 2017 on Criminal Procedure, but in this case, the so-called *ne bis in idem* principle, i.e. the prohibition of double jeopardy, must be observed.

As it is clear from the statutory facts, the object of the offence of budget fraud is budget revenue, the elements of which include tax, as defined in Act CXCV of 2011 on Public Finances 6. § (Fischer, 2018:14.) The individual tax elements are defined by the legislator in a separate act, VAT is regulated by Act CXXVII of 2007 (hereinafter: VAT Act).

Therefore, in the case where the object of the fraud is tax, including VAT, we are talking about VAT fraud, or in other words - in short - VAT fraud.

VAT operating mechanism and legal regulation

In order to understand and typify the types of VAT fraud, it is essential to clarify the essential elements of VAT legislation and its operating mechanisms.

The European Economic Community, now known as the EU, devised the VAT system in the 1960s, leaving it up to the Member States to set the tax rates. The First and Second VAT Directives adopted on 11 April 1967 (67/227/EEC, 67/228/EEC) made it compulsory for the countries of the Community to introduce the tax by 1 January 1970 (Molnár, 2011:215.) In Hungary, VAT was ratified by Act V of 1987 with effect from 1 January 1988, during the transitional period before the change of regime. The current VAT law is based on the Sixth VAT Directive (77/388/EEC) (Steiner, 2023:65.)

VAT was introduced by the Hungarian legislator as an all-phase tax in the Hungarian tax system, which means that it must be paid at each point in the supply chain on the net price, i.e. excluding VAT. However, in order to avoid tax accumulation, the taxpayer may deduct the input tax charged and paid by him from

the tax payable and must account to the tax authority for the difference (in the case of a positive balance, he is liable to pay the tax, in the case of a negative balance, he is entitled to a refund). As a result, the taxpayer pays tax only on the value added. (Molnár, 2011:210.) This is why in international terminology this tax is called value added tax (abbreviated as VAT).

In international trade, the VAT operating mechanism varies as follows:

- In the case of *imports and intra-Community acquisitions*, goods and services are subject to the same VAT rates as those of domestic origin. However, the purchaser can deduct the tax due on his own imports and intra-Community acquisitions, as if they had been domestic acquisitions, provided that the legal conditions are met (Balláné, 2020:77-78.)
- In *transit transactions*, i.e. where the imported goods are imported for a taxfree resale in another Member State, the importer is exempt from paying VAT because the VAT will be paid in the country of destination. It is important to note, however, that in transit transactions the importer's administrative tax obligations other than the payment of VAT will continue to apply.
- Exports of goods and intra-Community supplies not subject to VAT due to the aforementioned destination taxation principle, but input VAT is deductible (Fellegi, 2017:121,127.)

Taxpayers' compliance behaviour

If the criminal and tax law norms described above are examined through the 'lenses' of criminological thinking, I feel it is important to take into account and distinguish the compliance behaviour of taxpayers, since, as we will see below, in taking action against those who stray from the path of legality, the means of addressing them is essentially a function of this. Hatfield (2011:860) argues, however, that in a society the line between compliance and tax evasion, the exploitation of 'loopholes', is not clear. Similarly, according to Szilovics (2003:11), only in a world that is confined to the theoretical plane of law can members of society be clearly divided into tax compliant and tax non-compliant. However, if we start from the main areas of expertise of the NAV (above all: tax and customs administration, law enforcement, criminal law), taking into account the *ultima ratio* principle - i.e. criminal law can only be used as a last resort - taxpayers can be divided into three relatively clearly distinguishable main groups based on their willingness to comply with the law, as shown in *Table 1* below:

1) Compliant taxpayers (ideally the majority of taxpayers) who voluntarily declare and pay tax. To address them - so that they do not get lost in the tax 'maze' - it is sufficient to use the tax administration tools.

- 2) Presumptively compliant taxpayers (presumably a not too small but not too large group of taxpayers) who are compliant only up to the point where they feel pressure from the authorities (e.g. the introduction of online cash registers). To address them to keep them on the path of compliance a system of law enforcement is needed.
- 3) Tax evaders (the so-called 'persistent minority' of taxpayers) who deliberately do not declare or pay tax. They operate in secret, invisible to the tax authorities, often using stooges. There is no possibility to contact them to detect and prosecute them, due to the lack of *criminal justice* tools (Vankó, 2017:74-75).

 Table 1

 Grouping of taxpayers according to their willingness to comply

TAXPAYER GROUPS	Main characteristics of taxpayer groups		Targeting taxpayers	
	Their behaviour	Their estimated size	Means of address	Purpose of the call
Compliant taxpayers	They voluntarily declare and pay the tax	Majority of taxpayers	Tax administration	Don't get lost in the tax 'maze'
Presumptively compliant taxpayers	Only in case of pressure from public authorities	A not too small but not too large group of taxpayers	Law enforcement	Stay on the path to justice
Tax avoiders	Deliberately fail to declare and pay tax	A 'persistent minority' of taxpayers	Criminal	Their detection and prosecution

Note. Table edited by the author, based on Vankó (2017).

Of course, the above categories can also be interpreted on a 'theoretical plane'. Based on best practice, the range of taxpayers' willingness to comply cannot be divided into sharp boundaries. For example, compliant taxpayers may be motivated to stay on the path of legality by a combination of factors, which may be voluntary or based on pressure from public authorities. The behaviour of tax avoiders may also be determined by several components. Some offenders are basically law-abiding, but due to a life situation (e.g. in the case of livelihood criminals) they may deviate from the path of legality for a certain period of time in the course of their economic activity, to a greater or lesser extent (in extreme cases in its entirety), but there may also be some who deliberately (even without actually engaging in economic activity) accumulate wealth at the expense of the budget as a way of life.

If the above line of thought is accepted, it necessarily follows, in my view, that the boundary between the tax administration, law enforcement and criminal justice tools used to target taxpayer groups is blurred, and that the three taxpayer groups with the above three 'labels' may be targeted by several tools at the same time. This latter point seems to be supported by best practice. Indeed, it is not uncommon that, in addition to the application of the ne bis in idem principle mentioned above, a tax control and a criminal prosecution are carried out in connection with the same act; thus, the persons subject to proceedings are addressed by means of several multidisciplinary instruments ('Phoenix Bird Case' case study). I also consider it important to note that law enforcement tools understood in the context of taxpayer compliance (e.g. online cash register) do not necessarily coincide with those that can be considered as such from a police perspective.

In view of the above clarifications, I believe that the taxpayer conduct model summarised *in Table 1*, delimited according to the most distinctive criteria possible, can serve as a good guide for best practice in the context of investigative action by the investigating authorities, in the light of the NAV's main areas of expertise.

Offending behaviour of taxpayers who have lost their way

The VAT 'persistent non-compliance' behaviour of taxpayers who have lost their way¹ is grouped in the literature according to a wide range of criteria. For example, without claiming completeness:

- Steiner (2023:75.) based his analysis on the VAT operating mechanism, distinguishing between: failure to file a tax return (operation concealment); failure to declare part of the revenue (revenue concealment); reduction of the amount of tax due by fictitious invoices (fraudulent deduction); unauthorised VAT reclaim (fraudulent reclaim); and so-called carousel fraud.
- Szabó & Zierer (2023:176) also took the VAT operating mechanism as a basis, in their view there are only two ways to commit VAT fraud, by concealing income and/or by fraudulent tax deduction.
- Sólyom (2015:64) started from the geographical location and components of invoicing chains and divided the myriads of offences into three main groups: normal, general tax fraud in domestic trade; normal, general tax fraud in cross-border trade and so-called missing trader fraud schemes.
- Magyar-Áhel (2018:126-135) looked at organised EU VAT fraud, and highlighted two relevant behaviours, the aforementioned carousel fraud and missing trader fraud.

In order to avoid unnecessary duplication and to improve clarity, the description of each type of offence is presented when the models of VAT fraud are presented, and the criminological concepts used when examining the application of the models are derived when drawing conclusions.

- Molnár (2023:809.), based on the wording of the law, distinguished between budget fraud committed by misrepresentation; by keeping a false record and by concealment of a true fact.
- Szabó (2019:111-115.) grouped the VAT fraud offences into a complex system delimited by three principles according to the characteristics of investigative work. First and foremost, he distinguished, based on the VAT operating mechanism: fraudulently increasing the value of deductible VAT; and failing to pay VAT in whole or in part. Then, on the basis of the invoicing chains, it distinguished: cross-border organised VAT fraud (carousel fraud, various cases of missing trader fraud and other forms such as abuse of the 4200 procedure, fictitious intra-Community supply/fictitious export, cross-invoice fraud, abuse of triangular transactions); domestic VAT fraud. Finally, on the basis of the statutory facts, it distinguished between making a false declaration tax return; and concealment of a true fact.

In the remainder of the paper, I have attempted to model VAT evasion, mainly in the light of the sources cited above, by applying the research methods described earlier.

Research results

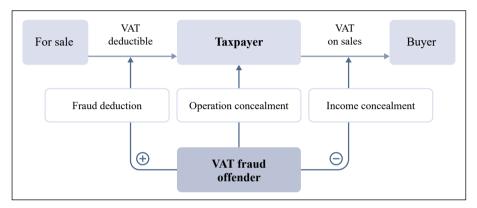
General model of VAT fraud (based on the VAT mechanism)

In my view, if we are looking for a general model of VAT fraud, it is in any case appropriate to isolate the simplest, most common elements of the offence, which can be assessed independently. However, in view of the fact that, as we have seen above, the statutory offence of VAT fraud is a framework offence, i.e. it is filled out with actual content by other legislation - in our case the VAT Act - these basic elements can necessarily be isolated when examining the VAT operating mechanism.

Under the VAT Act, which defines the VAT operating mechanism, the taxpayer pays tax only on the value added, i.e. he is entitled to deduct the VAT content of incoming invoices (input VAT) from the VAT content of the invoices he issues (output VAT). As a result, the balance of these two variables, i.e. the tax liability, can necessarily be reduced by increasing the input VAT and/or reducing the output VAT. Accordingly, in my view, VAT fraud can be committed in the simplest and most general way - to use the terminology of Steiner (2023) and Szabó & Zierer (2023) - in the following three ways (*Figure 1*):

- 1) fraudulent deductions, i.e. fictitious increases in input VAT and/or
- 2) by concealing income, i.e. by not declaring all or part of the output VAT; and
- 3) operation by concealment, where the taxpayer completely phantoms his economic activity by either submitting a nil tax return to the tax authority or deliberately failing to fulfil his tax return obligations.

Figure 1
General model of VAT fraud



Note. Figure edited by the author, based on Steiner (2023), Szabó & Zierer (2023).

If we consider the above 'building blocks' as the basic elements of a general model of VAT fraud, and look at the intentions of the perpetrators within this framework, the following three main motivating factors can be identified:

- 1) VAT payment reduction if input VAT < output VAT
- 2) tax avoidance if input VAT = output VAT;
- 3) unauthorised VAT refund if input VAT > output VAT;

The general model of VAT fraud described above is, like the taxpayer behaviour model, a theoretical category. In order to be operational in grey market² conditions - and in such a way that it does not come to the attention of the authorities, or comes as late as possible - it needs to be further developed, i.e. it needs to be extended by new system elements, above all:

² By white market, I mean the economy of legal products that comply with administrative requirements (tax declarations and payments); by grey market, I mean the economy of legal products that do not comply with administrative requirements in whole or in part; by black market, I mean the economy of illegal products.

- *on the input side*, to fraudulently increase the amount of VAT deductible, e.g. by using a phantom invoice issuer to create the appearance of a real operation when accepting fictitious expense invoices;
- on the output side, the use of various techniques (e.g. fictitious intra-Community sales or fictitious exports) to clear out the non-real inventory left over after unaccounted sales by concealing revenue;
- on both sides, further organisational work, including the introduction of new elements to make the work of the authorities more difficult (e.g. phantom companies that issue, invoice and receive fictitious invoices; strawman representatives; cross-border invoicing and sales links; and invoice warehouses³ to administer invoicing chains) and coordinate their activities with the aim of disguising their criminal intentions and making them as opaque as possible.

Therefore, in order to make the general model of VAT fraud transferable to practice (e.g. in investigative action), I believe it needs to be merged into a larger structure - specific models of VAT fraud as explained in the following chapter. Nevertheless, I believe that the general model outlined by isolating the smallest, most general elements of VAT fraud, which can be assessed independently, can provide a good starting point not only for understanding the 'drivers' of the crime, but also:

- to derive, interpret and recognise the functioning of more complex structures (specific models) in investigative action;
- when determining the value of the offence, i.e. the quantification of the financial loss caused by the offenders to the budget⁴, by a forensic accountant or audit consultant appointed to clarify the issues; and
- when assessing the forensic accountant's opinion and the auditor's note received and using them as evidence in an investigation.

Specific models of VAT fraud (based on the general model of VAT fraud)

According to Tóth (2018), 'The often dry and difficult world of economic crime is never challenging because of its excitement and flamboyance, but rather

³ In many cases, VAT fraud is committed by means of fictitious invoices, which are often not issued by the VAT fraudsters themselves, but by specialized independent groups of perpetrators, also known as invoice factories. This activity is not mentioned in the Criminal Code as a separate statutory offence but should be assessed as an accessory to the offences of fiscal fraud and the misdemeanor of using false private documents (Patz, 2018:19-22.)

⁴ Determining the value of the offence is a specialist matter, quantification is carried out by appointing a forensic accountant, and in exceptional cases (e.g. for the preparation of expert work in complex cases) by requesting an audit consultant.

because of its complexity and complexity.' In my opinion, this is no different in the case of VAT fraud, since we are also confronted in the course of best practice with the devious ingenuity with which perpetrators build complex and organic structures that cross national borders from the general model of VAT fraud described in the previous chapter, as quasi 'building blocks'. The challenge for investigative authorities is not only their spatial extent and complexity, but also the fact that over time their individual elements are changed and replaced, even on a monthly basis, and new, even more complex formations are created as a result.

So, if we call the three 'building blocks' of VAT fraud (fraudulent deduction, income concealment, operation concealment) a general model, I think it is appropriate to consider the systems built from them as special models of VAT fraud.

The players in complex VAT fraud

In order to better understand the functioning of the fraud mechanisms that constitute the specific models of VAT fraud and to identify the fraudulent elements in time, I consider it necessary to know the characteristics of the perpetrators, which can be grouped into the following main categories (*Table 2*):

- Missing Trader: usually the first domestic element in the billing chain. It is designed to assist other participants in the fraud to make unauthorised VAT deductions or refunds by failing to declare and/or pay VAT. Either they fail to comply with their tax return obligations; or they comply but file a nil return with no data content. In addition, there are cases where they comply with their VAT return obligations with the correct data content but fail to pay VAT. These companies are typically inaccessible to the authorities and are often based in a head office (post office box companies). Missing traders are typically new businesses or so-called dormant companies revived by the acquisition of shares or a change of management, often represented by strawmen elected from the margins of society. It is important to note that the adjective 'missing trader' does not imply that these companies are inaccessible to the authorities, but that there is a lack of intention to continue economic activity.
- Buffer: an element in the settlement chain between the missing trader and the broker, which will be described later. Its purpose is to mask and complicate the fraudulent chain. They typically comply with their tax reporting and payment obligations, but their tax returns are characterised by tax minimisation. Another key characteristic of buffers is that they lack economic capacity but are accessible to the authorities, but usually to the point

- where they are not aware of their true intentions. It is important to note that, although not common in practice, perpetrators may also create a situation where a representative of the buffer company becomes part of the fraudulent chain without his or her will, in order to increase the credibility of the chain. Therefore, the examination of consciousness is also essential.
- Broker: usually the last link in the domestic billing chain. The last link in the criminal billing chain. They are tax filers and tax payers, and their returns usually show them to be tax minimizers or continuous remitters. They are accessible to the authorities and present themselves as bona fide and due diligence businesses. Brokerage firms are kept alive as long as possible by the fraud organisers. However, their accounting records, which are typically fully compliant with formalities, include expense accounts received from missing trader/buffer firms, which are typically invoiced onwards to another EU Member State or third country. As with buffer firms, brokers may in exceptional cases become unwitting participants in the fraudulent chain, so an awareness check is essential.
- Conduit: the foreign element in the billing chain. Conduit buys from the
 broker company and sells to the missing trader company. Its purpose and
 characteristics are essentially the same as buffers, except that it is incorporated in another Member State or in a third country.
- Organiser: the organiser is the central person who 'keeps the billing chain moving'. The central organizer is the person who orchestrates the ordering process. The facilitator may be a single person, and may be a multiple perpetrator as well. It is not uncommon for the promoters to control 50-100 firms, between which complex billing and financial settlement chains require a high level of complex expertise to build (Magyar-Áhel, 2018:128-133.)

 Table 2

 The actors and key characteristics of complex VAT fraud

	The main characteristics of VAT fraud operators				
VAT FRAUD OPERATORS	Their place in the billing chain	Their aim	Fulfilling their VAT return and payment obligations and the content of their VAT returns	Their willingness to be contacted by the authorities, their behaviour	
Missing trader	First domestic element; buys from conduit and sells to buffer.	It helps other participants in the fraud to make unauthorised VAT deductions or recover VAT.	You do not declare; or you make a zero return; or you declare but do not pay.	Unavailable; often a 'letterbox company' with a stromman manager.	
Buffer	Missing trader to broker; buys from the former and sells to the latter-or other buffers.	Unmasking the fraudulent chain, making it more complex.	It does enough; with tax-minimising content.	It is available; but only until it is clear to that its true intentions have been recognised.	
Broker	Last domestic element; buys from buffer and sells to conduit.	Realising the profit for which the fraudulent chain was set up.	Complies with tax rules on the basis of maximum accounting compliance; tax minimizer or continuous filer.	He is approachable; he presents himself as bona fide and due diligence.	
Conduit	Foreign link in the clearing chain; buys from broker, sells to missing trader.	It is essentially the same as Buffer.			
Organiser	Typically an external element of the chain; but can also be the broker.	It controls the fraudulent chain.	Through the actors in the chain, it does or does not comply.	It is not accessible; it is hidden behind the other elements of the chain.	

Note. Table edited by the author on Magyar-Áhel (2018).

The main forms of complex VAT fraud:

In the presentation of the typical forms (specific models) of complex VAT fraud, I have introduced simplifications (limiting conditions) and a uniform marking scheme for ease of understanding as follows:

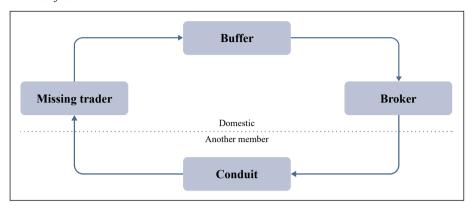
- In view of Hungary's regional position, I have based my analysis of cross-border transactions primarily on intra-Community acquisitions and intra-Community sales (except for the abuse of the 4200 procedure), although these formations can also be interpreted in the context of a third country, in the context of imports and exports.
- In the connection diagrams showing specific models of VAT fraud, I have

- used rectangles to represent the persons involved in the fraud; and arrows to indicate the invoicing/sales chains and their directions.
- The terminology summarised *in Table 2* has been used to model the actors of VAT fraud, supplemented by 'Seller' and 'Buyer' for ease of reference when describing each chain, although in many cases these sellers and buyers are equivalent to one of the actors named in *Table 2*.
- For better clarity, fraudulent actors and fraudulent billing/sales chains highlighted in bold.
- I have used a solid line to show the actors and billing/sales chains that I want to be seen by the authorities and a dashed line show the actors and billing/sales chains that I want to hide from the authorities (except in the case of the abuse triangular transaction, where the dashed arrow shows the path of the goods that do not match the billing chain).

Thus, if we accept the general model of VAT fraud and the concept that their practical application requires the incorporation into larger, typically transnational structures - taking into account the characteristics of the actors described earlier, restrictive conditions introduced in the presentation of each chain and, not least, best practice - in my view, the following structures should be highlighted as specific models of VAT fraud:

Carousel fraud (Figure 2): its development is linked to the creation of the Benelux Union, which became more and more sophisticated with the implementation and enlargement of the EU and technological progress (Sólyom, 2015) In carousel fraud, the first element in the domestic invoicing chain is a missing trader with no real economic activity, who receives an invoice from a conduit registered in another Member State and invoices it - typically through a buffer company with the intention of complicating the invoicing chain - to the last element in the domestic invoicing chain, which is a broker company. The broker then issues an invoice to a conduit registered in another Member State, which is again received by the first element of the domestic billing chain (missing trader) from the conduit company, thus closing the billing 'carousel'. The missing trader does not pay the VAT on the sale to the budget and typically does not declare it, and then becomes unavailable to the authorities. The last element in the domestic invoicing chain (broker), on the other hand, deducts the cost invoices received directly from the missing trader or indirectly through other buffer companies (it may then be in a VAT reclaiming position), causing a financial loss to the budget (Steiner, 2023:183-189.)

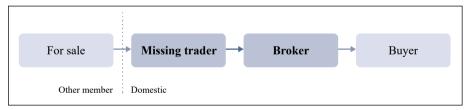
Figure 2
Carousel fraud



Note. Figure edited by the author, based on Steiner (2023).

Missing trader fraud (Figure 3): where a seller registered in another Member State invoices the goods as a tax-exempt intra-Community supply to a missing trader who is not carrying out a genuine economic activity. The missing trader then invoices the goods purchased (either directly or via a buffer) to the broker, who deducts the VAT on the invoice received from the missing trader or buffer company, which reduces the VAT payable and may also put the missing trader in a VAT recovery position. (Magyar-Áhel, 2018:133-135.) Missing trader fraud can be identified with a link in the chain of carousel fraud.

Figure 3
Missing trader fraud



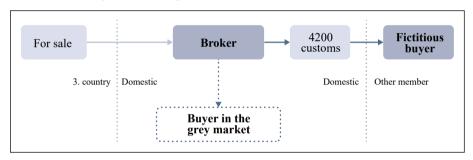
Note. Figure edited by the author, based on Magyar-Áhel (2018).

Abuse of a customs procedure with procedure code 4200 (Figure 4)

Where goods from a third country entering the EU are cleared through customs in the Member State but import VAT is not paid at the same time as the customs

duties are paid. The exemption from the payment of import VAT is conditional on the goods being transported onwards to another Member State and paying import VAT there. Given that this system is not closed, it is open to fraud, for example where broker imports goods from a third country under a procedure code 4200 customs procedure and then sells them within the framework of an intra-Community supply of goods to a fictitious company registered in another Member State. In reality, however, the goods are sold (without payment of import VAT) on the domestic grey market without an invoice (Molnár, 2011:226-228) or with an invoice issued in the name of another .⁵ This fraud (specific model), as we will see in the case study 'The Silk Road case', also has a more complex structure, where the broker sells not on the grey market but on the white market to buyers with an invoice issued in his own name. In this case, the broker needs the intermediation of an importer missing trader and the use of fictitious cost invoices to justify the origin of the goods purchased Figure 9).

Figure 4
Abuse of a customs procedure with procedure code 4200

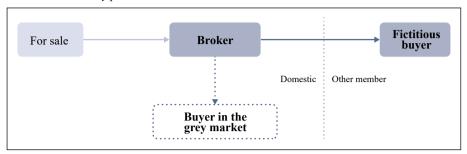


Note. Figure edited by the author, based on Molnár (2011).

Fictitious intra-Community sales of goods (5. While in the case of missing trader fraud and abuse of a 4200 procedure, the fraudulent conduct is aimed at the VAT on the importation of goods, this offence is, on the contrary, aimed at the VAT-free intra-Community supply of goods, where the broker sells to a fictitious company registered in another Member State, but the actual sale is made on the domestic grey market without an invoice (Sólyom, 2015:79-80) or with an invoice issued in the name of another.

⁵ In the latter case - the Btk. According to Article 13 (2) of the BCA, the perpetrator (broker) commits the intentional offence by using a person in error (i.e. the taxpayer on whose behalf the invoice is issued).

Figure 5
Fictitious community product sales

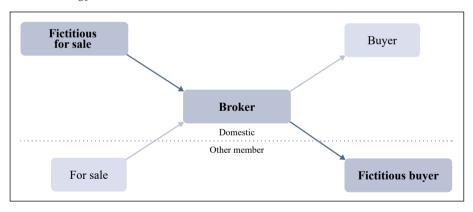


Note. Figure edited by the author, basedon Sólyom (2015).

Cross-billing fraud (Figure 6)

This type of fraud is much more sophisticated than the previous ones. The purpose of cross invoicing is to fraudulently reduce or offset VAT on taxable intra-Community purchases and domestic sales by fictitious domestic purchases and fictitious intra-Community sales of goods (Falcon, 2015:65.

Figure 6
Cross invoicing fraud



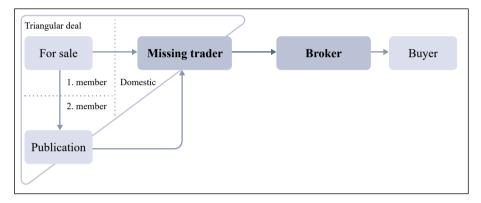
Note. Figure edited by the author, based on Sólyom (2015).

Abuse of the triangular transaction (Figure 7)

First of all, it should be noted that the triangular transaction is essentially a legal construct. It involves the sale of a product by a seller registered in one Member

State of the Community to an intermediary registered in another Member State, who resells the product thus acquired to a buyer registered in a third Member State. However, the goods are delivered directly by the seller to the buyer. A triangular transaction shows fraudulent intent if one of the parties to the transaction is also part of a fraudulent supply chain, such as missing trader fraud. Given that in triangular transactions the invoicing chain necessarily deviates from the actual route of the goods, their use with criminal intent allows the invoicing chain to be made opaquer in order to make the work of the authorities more difficult (Ritzlné & Máténé, 2022; Sólyom, 2015)

Figure 7
Triangular abuse (embedded in missing trader fraud)



Note. Figure edited by the author, based on Ritzlné & Máténé (2022), and Sólyom (2015).

Simple domestic VAT evasion schemes

In view of the mechanism of VAT and the specific models of VAT evasion described above, it is easy to see that cross-border economic events are the main opportunity for the perpetrators to carry out and conceal their criminal intentions. In good practice, however, one can also observe simpler domestic schemes (bad faith attempts) which are in line with the general model of VAT fraud or slightly extended. In this case, brokers usually go back to a single link in the chain in the input, output or both directions (e.g. by accepting a fictitious invoice, by selling without an invoice or by invoicing in the name of another person), but the involvement of missing traders and buffer companies is not excluded in these schemes. However, given the fact that the 'end points' of fraudulent invoicing/sales chains are located domestically, the chances of being caught are much higher for the perpetrators, and so, given the simplicity of

the fraud scheme, this type of behaviour is typically used by so-called forced and livelihood criminals.

In the context of simple domestic VAT fraud schemes, I consider it worth considering their separate modelling as 'hybrid' formations that cross between general and specific models. However, the development of these models is beyond the scope and objective of this research.

The main motive for complex VAT fraud

If we are to understand the specific models of VAT fraud in full depth and, moreover, to use them in the fight against VAT fraud, we cannot, in my view, ignore the intentions of the perpetrators, which, as with the general model, are both inevitable in the fraud scheme and usually reflected in best practice.

Perhaps the most complex form of VAT fraud is carousel fraud, the aim and main motivation of the perpetrators - apart from *their* obvious intention to *enrich themselves illegally* by causing financial loss to the budget⁶ - is to 'drain' the budget, even without real economic events, by administrative means, under 'laboratory conditions'.

In the cases of missing trader fraud, abuse of the 4200-procedure code customs procedure and fictitious intra-Community sales, there is also an intention to *gain a price advantage* over competitors in the market; and in the cases of cross-invoicing fraud and abuse of the triangular transaction, there is also an *intention to make the fraudulent invoicing chain more complex and opaque*. In the case of simple domestic VAT fraud schemes, the motive is more likely to be *a matter of necessity* than a deliberate fraudulent enrichment scheme.

Conclusions

How general and specific models of VAT fraud can be applied in the context of investigative action by the authorities

In my view, if we approach the investigative action against VAT fraud from the perspective of best practice, it is appropriate to draw on the tools of forensic science. As we know, criminology is a discipline of effective and professional

⁶ It also follows from the above that the effectiveness of action against economic crime is not primarily enhanced by the severity of the punishment, but by the deprivation of the proceeds of crime (Tóth, 2015:20.)

law enforcement with a history of about 120-170 years, mainly practical and to a lesser extent theoretical multidisciplinary discipline (Fenyvesi, 2021) Within the toolbox of criminology, I consider it important to mention the *criminalistic thinking*, which has no uniformly defined concept, but according to Angyal (2019) is more than 'common sense'. Lakatos (2005) argues that criminological cognition is one of the methods of cognition, and at the same time a specific method of solving investigative problems. According to Mátyás (2021) and Mészáros (2021), one of the most important elements of criminological thinking is *versioning*, i.e. the formulation of hypotheses (assumptions, conjectures) that can be considered logical and that compete with each other and that can provide a realistic explanation of the motive of the crime, the perpetrator, etc. Of course, a version (hypothesis) can only be considered as a logical hypothesis as long as it is not proven or disproved during the investigation (Petrétei, 2018)

In my view, the specific structures built from the general model of VAT fraud can also be considered as 'prefabricated' versions of best practice, since the VAT operating mechanism systematically includes the actors of each offence and the main links between them (goods, invoicing and financial supply chains). In addition to understanding the motive for the crime, these interrelationships can help in the initial phase of the investigation in the collection and search for relevant evidence (or in the planning and execution of a coordinated operation to this end), and in the later phase of the investigation in the evaluation and analysis of the evidence obtained, in the identification of potential witnesses and in the identification of suspected perpetrators. To support the research findings of this study, particularly given the potential for effective targeting of offenders with multi-disciplinary tools within a single offence; and that perpetrators can create complex VAT fraud structures that can be traced back to the simplified theoretical categories of specific models of VAT fraud in investigative versioning; and new offence patterns are created over time - I would like to present two anonymised case studies with fictitious aliases.

'Silk Road case':

During the investigation of the Silk Road case, the investigating authority found that a group of perpetrators (organisers) used companies they had set up that were not engaged in real economic activities to issue false invoices, i.e. they operated an invoice factory.

By the above act, the perpetrators also helped the representatives of the companies receiving the invoices to reduce the amount of VAT payable on the income from their activities, thereby causing a financial loss to the budget. On

the other hand, it allowed goods ordered from the Far East to be cleared through customs in the name of the invoice issuers rather than the companies receiving the invoices, using a 4200 procedure code.

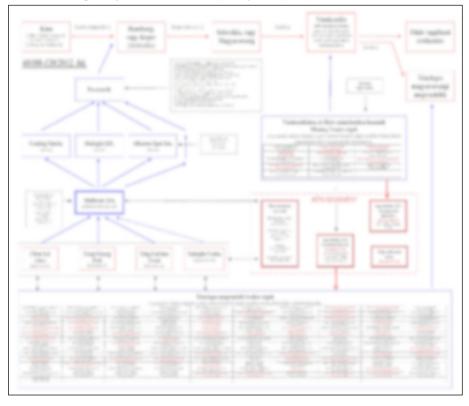
In the course of the investigation, the investigating authority also found that the invoice-issuing companies also attempted to make unauthorised VAT refunds by accepting fictitious expense invoices and issuing fictitious invoices for intra-Community supplies.

The real and fictitious invoicing chains and actors uncovered by the investigation of the Silk Road case have been mapped (*Figure 8*), which, based on the data - in the light of the general and specific models of VAT fraud - are presented in *Figure 4*. A more complex version (with missing trader) of the 4200 procedure of abuse presented in *Figure 4* emerged (*Figure 9*), nuanced by the version of fictitious intra-Community sales presented in *Figure 5*.

During the investigation, around a dozen invoice-issuing companies were identified. These companies basically performed the function of missing traders in the abuse 4200 procedure, but their activities can also be considered as quasi-brokers in the attempts to recover VAT without authorisation.

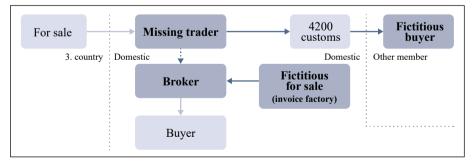
The brokers of the abuse, with 4,200 procedure codes, were more than a hundred self-employed bill collectors, whose actions in some cases did not reach the threshold of the offence of budget fraud. In the case of such brokers, the investigating authority initiated tax audits in the framework of a signalisation procedure, taking into account that, on the basis of the ultima ratio principle, criminal proceedings are not justified and that the tax administration's means are sufficient to address and prosecute them.

Figure 8
Full contact diagram of the 'Silk Road case' (anonymised)



Note. Figure edited by the author.

Figure 9Specific model of abuse of the 4200-procedure code customs procedure investigated in the 'Silk Road case'



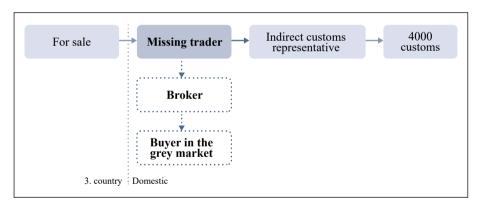
Note. Figure edited by the author.

'The phoenix bird case':

In tackling cases of abuse of the 4200 procedure code, EU Member State authorities have made a number of efforts (e.g. the introduction of a tax bond requirement) in response to which offenders have developed a new type of fraud mechanism. Such a version was also raised during the investigation of the Phoenix Bird case.

In the Phoenix Bird case, the goods imported from country 3 were cleared in Hungary under a 4000-procedure code customs procedure, whereby customs duty and VAT are payable at the time of importation. However, the importer was a missing trader company and acted before the customs authorities through an indirect customs representative. The indirect representative undertook in good faith to pay the customs duty and other public charges (e.g. VAT) related to customs clearance on behalf of his client, the amount of which was invoiced afterwards together with his service fee. Following the above, the missing trader became unavailable and the imported goods were sold by the broker on the grey market without an invoice (*Figure 10*).

Figure 10
Specific model of the 4000-procedure code customs abuse through indirect customs representative examined in the 'Phoenix Bird' case



Note. Figure edited by the author.

Following the discovery of this new type of offence, the investigating authority of the NAV sent an alert to the European Police Office (EUROPOL) in order to take effective action against similar cases.

The case studies presented, in addition to supporting the above findings, also draw attention to the limitations of the application of general and specific models

of VAT fraud, as we have seen that in reality they appear in more complex, distorted and mixed versions, and new formations emerge over time and as the legal environment changes. However, despite this, I believe that they can be used as 'guides' for investigative action by the investigating authorities.

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Council Directive 67/228/EEC on the harmonization of legislation of Member States concerning turnover taxes – structure and procedures of the common system of value added tax

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