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A Dynamic Analysis of Economic Crime in Europe: The Role of the European Institutions in the Prevention of Economic Crimes in the COVID-19 Pandemic

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ABSTRACT

Fraud in the economy is also known as financial crime and refers to the illegal acts committed by individuals or groups of individuals for the purpose of gaining a financial or professional advantage. For organized criminal groups, economic fraud has the advantage of a low risk and a high return, especially for fraud cases that can only be discovered through international cooperation, as well as for Internet crimes for which jurisdiction needs to be established. Using the AFC statistical analysis method, this research focuses on the comparative analysis of crime in the economic sphere among European states and proposes a dynamic analysis of the prevention of financial crime in the context of the COVID-19 pandemic. The results of the study are significant from both research and a practical perspective, providing important clues regarding the ability to adapt to unforeseen situations of the institutions with a role in the investigation and sanctioning of economic crimes at the level of each country included in the analysis.

1. Introduction

Fraud in the economy is also known as financial crime and refers to the illegal acts committed by individuals or groups of individuals for the purpose of gaining a financial or professional advantage. Economic gain is the primary motivation for such crimes.

Areas of the economic crime of particular interest to Europol's Joint Investigation Teams include:

- fraud known as MTIC (Missing Trader Intra Community Fraud) is a criminal exploitation of value-added tax (VAT) rules in the EU that causes billions of euros in revenue loss to member states;
- excise fraud, which refers to the smuggling of highly taxed goods such as tobacco, alcohol, and fuel;
- money laundering is the process of making the proceeds of criminal activity appear legal (Europol, 2022).

Economic fraud is a very attractive activity for organized crime groups due to its low risk and high profits. Due to the complexity of the investigations required, fraud is unlikely to be detected and prosecuted. This is particularly true in cases of fraud which can only be discovered through international cooperation and in cases of Internet crimes for which jurisdiction must be established. (Aivaz et al, 2022)

Different national laws provide benefits to organized crime groups operati ng internationally. Fraud is enabled in most instances by vulnerabilities on the part of individuals and organizations, such as victims' lack of awareness and target groups' perceptions of low risk.

At this point mankind is in the third revolution that is driven by the knowledge-based service sector. Although, over time, the laws of economics have not changed, however, the economy itself has changed in a fundamental way. There are several important aspects of the knowledge economy, which is also called, „the new economy", that are different and are marked differently from, „the old economy". These differences between the two as „economies" can be compared with the differences that led to the transition from the agrarian economy of the nineteenth century to the twentieth-century industrial economy. Thus, if in the industrial economy capital was more important than land, in „the new economy" innovation through knowledge is the most important aspect. Currently most aspects of the economy are characterized by it. In the global knowledge economy, the advantage of some nations over others will result, not only from the use of natural resources owned or by cheap work force, but also from their ability to assert their intellectual capital. (Rus, 2013)

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2. Literature review

2.1. Definition of the term

While the term *economic and financial criminal law* may sound simple, it is difficult to define this branch of criminal law precisely. Economic and financial criminal law, for example, may be described as the set of criminal laws relating to the criminal prosecution and punishment of violations of economic and financial regulations. Accordingly, the exact scope of this branch is determined by what is considered to be part of the "economic and financial sphere" and how broadly the protected interests are defined.

At the national level, economic and financial criminal law encompasses a variety of related terms. There is a wide variety of meanings and focuses associated with each of these national terms, and some may be specific to a particular legal system.

In judicial and economic practice, a delimitation as close to reality as possible was looked for between legal and illegal tax evasion, although, tax evasion once invoked it does not mean anything else but breaching the law.

Legal tax evasion is that tax evasion which succeeds to avoid, totally or partially, the payment of budgetary liabilities due to certain legislation stipulations. It is interesting the fact that this leads to the decrease of incomings to the state but, at the same time, it does not mean it is a defeat of the law, i.e. this evasion does appear due to law breaking but to its observance.

It can be said that the legal tax evasion is due to a conjunction between a competence, respectively of the contributor who may chose the most advantageous part of the law and an incompetence, respectively, of the legislator who provided certain "doors" which allow for this type of tax evasion. From the legal point of view, this evasion is not incriminated directly but, if it appears as a result of an act of corruption from the part of the legislator, then this act is incriminated and punished according to law.

The illegal tax evasion, unlike the legal one, appears then when a breach of the fiscal standard occurs which may bring damages to the financial interests of the state and is the result of the defeat of the fiscal laws. (Rus, 2019).

A new term in the Dutch penal system is *bijzonder strafrecht* (special criminal law) which constitutes all criminal laws and criminal procedures not covered by the Criminal Code or Code of Criminal Procedure. It includes, among others, the following two subdivisions: economic criminal law and fiscal criminal law (Kristen, Lamp, Lindeman, 2011). This combination of subdivisions is referred to as *social-economisch strafrecht* (socio-economic criminal law), and it encompasses all offenses covered by the Economic Offenses Act of 1950 (*Wet op de economische delicate*). These crimes include customs offenses, banking law, money laundering, terrorism financing, environmental crimes, transportation crimes, labor law violations, health violations, product and food safety violations, as well as infringements of labor law regulations (EOA, 1950).

The terms corporate criminal law, criminal business law, and white-collar criminal law are comparable Anglo-Saxon terms (Garner BA., 2009). The term refers to the type of offender or the context in which offenses tend to occur and is a criminological term.

The term *economic criminal law* is also often encountered. In addition to antitrust crimes, securities fraud, and some tax laws, this term is used to refer to economic regulations that "impose restrictions on the conduct of business as part of a deemed economic policy". Aside from this, traditional property crimes are not included in the definition unless those crimes are extended by the courts and legislators to "emerging new methods of dealing", such as frauds or embezzlements. (Kadish SH., 1963).

The French concept of *Droit pénal des affairs* includes, for example, all crimes which protect either the economy as a whole or particular financial interests of private or public victims. This includes all crimes committed within a corporate setting, including traditional property crimes. (Delmas-Marty M., 2000). Comparatively, the German notion of *Wirtschaftsstrafrecht* refers to crimes committed in connection with business activities and excludes traditional property crimes. (Tiedemann K., 2010).

Many systems also contain a variety of (sub)terms that can be classified as economic and financial crimes. For example, in Belgium, the French notion of *Droit pénal des affaires* coexists with the English idea of *witteboardencriminaliteit* (white-collar crime) and with more specific terms referring to subdivisions of economic and financial criminal law, such as *Droit pénal économique/economisch strafrecht* (economic criminal law), *Droit pénal fiscal/fiscaal strafrecht* (fiscal criminal law) and *Droit pénal social/social strafrecht* (covering crimes in the field of labor law and social insurance)(Delmas-Marty M., 2000).

2.2. The challenges of legislative systems

Global economic and financial crime has increasingly challenged criminal justice systems worldwide in recent years, when there has been an emerging awareness that certain acts in the financial sector might in fact be criminal in nature. It is considered serious and organized crime when major investments are made in an imprudent manner, financial statements are misrepresented, and interbank interest rates are manipulated.

After the financial and economic crisis of 2008, the first alarm signal highlighted the interconnected nature of financial markets and economies: an event affecting one market or economy will inevitably affect others. There is no doubt that globalization has played a major role in preventing, controlling, and punishing economic crime.

Secondly, this economic and financial involvement is further enhanced by the use of the Internet, online networking systems, and social networking sites. In the virtual world, money can easily be moved from one location to another; financial assets can be transferred quickly between legal entities. The spread of information about investments or economic performance is rapid, and once the information has been dispersed, the consequences are difficult to estimate and are often irreversible. Further, criminals have become more mobile through the use of transportation. Further, criminals have become more mobile through the use of transportation. This raises questions as to the appropriateness of existing investigative measures and sanctions, which will normally be carried out and applied within the confines of a single jurisdiction (Ligeti K, 2017).. The comparative analysis of investment performance or types of activities between different geographical regions (Munteanu, 2021) can improve the identification of new economic risk tracks with criminal repercussions.

The third aspect that the crisis highlights is that economic and financial misconduct is often systemic, with widespread consequences for many victims (private, institutional, and/or public). Some breaches may even affect an entire economic or financial system. In these circumstances, the need to prevent harm becomes even more potent, and new mechanisms for regulating and enforcing the law are often developed as a result. (Lobont O., Nicolescu A., Moldovan N., Kuloglu A., 2017).

Economic and financial crimes are also difficult to expose and investigate. There is a tendency for economic and financial crimes to cause widespread and long-term damage to private and public assets. Usually, criminals are highly skilled and possess specialized knowledge or classified information, which gives them an advantage over law enforcement officials. (Diaw A., Lobont O., Moldovan N., 2014) Additionally, they often work within large organizations that are "closed" to the outside world. In most cases, authorities do not even know that crimes are being committed, and even if they do, it is difficult for them to determine who or what was responsible without the cooperation of insiders, witnesses, or whistleblowers. (Bowles, 2008).

Due to these challenges, legislators and law enforcement agencies are adjusting policies, norms, and practices that deal with substantive, procedural, and jurisdictional boundaries within existing policies, norms, and practices in light of these concerns. (Stan et Vancea, 2016) They create new enforcement mechanisms and adapt existing policies, norms, and practices to combat economic and financial crime.

2.3. Challenges regarding a multi-disciplinary investigation

In order to effectively detect and investigate economic and financial crimes, several administrative authorities must intervene and cooperate. Despite this, multi-agency investigations do not always succeed. Furthermore, the information obtained by the various authorities involved is often not shared among them. Possibly, this is caused by a lack of trust between the various authorities and the absence of a clear legal framework for fostering cooperation among them. It should also be noted that even with a legal framework, legislation is often fragmented, with divergent rules in different sectors (Ligeti K., 2014). Multi-agency investigations may be difficult to conduct due to sectoral differences in data protection and/or procedural rights.

Transnational multidisciplinary investigations also raise delicate questions regarding the protection of procedural rights, both for natural persons and for legal entities, and how those rights can be ensured when applying to several national authorities at the same time as to European applications. In spite of the fact that these authorities may pursue similar objectives, they may do so in accordance with different legal norms, whether they are criminal, administrative, or otherwise (Luchtman M., 2020).

Aside from the prominent role played by (specialized) administrative authorities in economic and financial crime, these authorities often work closely with police and judicial authorities. For instance, "multidisciplinary investigations" refer to investigations involving different types of authorities, including the police, national (and potentially supranational) administrative authorities, and national judicial authorities. Whenever a multidisciplinary investigation is conducted, the EU's financial interests are protected, as national customs and tax authorities, as well as national prosecution authorities, are required to cooperate with the EU's anti-fraud service. Practice, however, indicates that this cooperation does not often go smoothly due to the need for full trust between the different authorities and/or due to insufficient regulation of such multidisciplinary cooperation within the legal framework (Diamons PS., 2014).

As a result, the situation becomes even more complex when a country's administrative authorities (for example, its customs authorities) have to cooperate with foreign (or supranational) structures or other administrative authorities (for example, the competition authorities or the OLAF). However, mutual administrative assistance lacks a coherent legal framework, as opposed to mutual legal assistance. Additionally, even when some rules exist, they are typically restricted to a single sector (e.g. cooperation between customs authorities or competition authorities). As a result, economic and financial crimes are more difficult to detect, investigate, and prosecute (Altenhain K, 2007).

Therefore, in such a multi-level constellation, the procedural safeguards that have been developed in the context of the nation-state often fail to function adequately. There is therefore a clear need for legal mechanisms to give EU citizens an adequate indication of the content and scope of government power in a transnational legal domain. Finally, this also requires "full and effective judicial review". However, such allocation of responsibilities may prove to be even more difficult in post-Brexit periods.

2.4. Administrative challenges

On the one hand, economic and financial criminal law is characterized by particularities in the administration of justice, while on the other hand, it is characterized by a close collaboration between legal and administrative authorities (national and supranational (First H., 1990)).

In order to effectively investigate and prosecute economic and financial crimes, new investigative measures have been introduced, (Aivaz et al., 2022), specialized investigation and prosecution authorities have been established, negotiated justice techniques have been intensified, and suspect cooperation has become increasingly important during, after, and before the investigation.

The number of prosecutions and convictions for economic and financial crimes is low worldwide (Annual report, Germany, 2014). The investigation may be time-consuming and burdensome due to the magnitude of such a crime. Additionally, many national criminal justice systems are overwhelmed and tend to settle cases out of court to avoid lengthy proceedings. Negotiated justice techniques are generally resorted to in order to expedite proceedings and handle a growing number of cases efficiently. It is for this reason that such techniques are particularly attractive in the context of economic and financial crime. (Ligeti K, 2017).

2.5. Challenges regarding integrated procedures

To prevent and combat the potentially widespread effects of economic and financial crime, many countries have implemented new regulatory and law enforcement measures. Therefore, diversification of enforcement tools should be more effective.

Such diversification has mainly three consequences. First, punitive administrative law provides administrative agencies with more investigative powers than quasi-criminal law. A lack of separation of powers can also result in the creation of administrative agencies that do not respect it. An example is the French Financial Market Authority, which is called, in French jargon, "jurislateur". There are three components to this authority, namely legislators (define regulatory offenses), investigators (conduct administrative investigations), and judges (pronounce punishments for regulatory offenses). In addition, it also has control and sanctioning powers. There are many similarities between these agencies and their American counterparts, such as the Securities and Exchange Commission (SEC), which performs legislative and judicial duties as well. It is important to note, however, that the SEC has only administrative powers. Criminal enforcement is the prerogative of the Department of Justice (DOJ). (Stasiak F., 2014)

A second problem in Europe is the tendency to label specific enforcement mechanisms as 'administrative', despite the fact that investigative powers and sanctions can be as coercive and intrusive as (formal) criminal law powers and sanctions. As an example, the 2014 Market Abuse Regulation (2014) gives competent national authorities broad supervisory and investigative powers. In some instances, these powers can be compared to the investigative powers of judicial authorities (for example, they may require existing records of telephone conversations, electronic communications, or traffic data held by investment firms, credit institutions, or financial institutions). Other administrative powers require the intervention of judicial authorities (eg, search of premises and seizure of records).

The third reason is that parallel administrative and criminal enforcement often leads to cumulative proceedings and/or cumulative penalties. Several areas of economic and financial crime are subject to parallel prosecution by administrative and criminal law enforcement authorities in Europe and the United States (Ferguson CM., 2011).

There is not always a clear distinction between administrative and criminal powers in Europe. A number of European countries grant administrative and criminal law powers to the same authority in certain areas. This combination of purely administrative tasks and powers (covering supervision and control of economic activity, as well as sanctioning and correcting certain deviations) and punitive-repressive functions brings about significant problems. As a result of the "two-hat model", administrative and criminal cases can be managed more efficiently, however, it raises procedural rights issues when a defendant is confronted with an authority that has significant powers both under administrative and criminal law.

It is also problematic in light of the principles of "one bis in idem" and proportionality to allow other sanctions (administrative, civil, and criminal) to accumulate from different national and/or supranational authorities. The European Union courts have become more aware of the issue following the landmark judgment by the Court of Justice of the European Union in Kerberg Fransson (Case C-617/10, 2013). Sweden, for instance, reversed its previous case law to prohibit the simultaneous imposition of tax surcharges and criminal charges for the same act of omitting or providing false information on tax returns.

US federal law does not prohibit the accumulation of penalties, even if the principle of proportionality is applied. When it comes to negotiated justice, different types of sanctions become more relevant, for example, when a corporate defendant wishes to reach a global settlement with the US Department of Justice in order to avoid further federal sanctions after the settlement has been reached.

Criminal sanctions are generally viewed as secondary to other types of sanctions in European countries based on the final report of the criminal enforcement process. The principle of independence between administrative and judicial enforcement is adhered to by some countries, while others prohibit parallel administrative and criminal proceedings. (Moneyval, 2013).

There is a much more conscious effort in the United States to establish partnerships between regulators and the Department of Justice. For example, competent authorities have developed a "natural" division of labor in the enforcement of securities fraud over the years. On the one hand, the criminal justice authorities (DOJ) possess investigative tools that the SEC does not possess, such as the ability to obtain search warrants and wiretaps, and to conduct undercover investigations which are essential to a successful investigation. Alternatives include the SEC reviewing documents and records and interviewing witnesses jointly. Additionally, the SEC can freeze assets and obtain temporary injunctions based on suspicious transactions in order to prevent illegal profits from dissipating during an investigation (White MJ., 2014).

Contrary to this, most European legal systems need to improve their ability to design and implement coherent enforcement policies. (Ligeti K., 2014)

Furthermore, developments at the EU level have also significantly influenced the development of economic and financial criminal law in European countries (for example, in cartel law, market abuse, and environmental law). It is true that the Treaty of Lisbon gives the legislators of the EU broad powers to harmonise national criminal laws in economic and financial matters. Additionally, the EU may require its Member States to adopt minimum rules on offenses and criminal sanctions in all areas where harmonization measures have been adopted (Article 83(2) TFEU). An example of one of these areas would be unfair market practices, VAT fraud, accounting fraud, market manipulation, environmental law, health and consumer law, and transport law.

The EU may also establish minimum standards for severe crimes with a cross-border dimension pursuant to Article 83(1) TFEU. As part of this list, certain economic and financial crimes are included, such as money laundering, corruption, counterfeiting of means of payment, and computer crimes (or cybercrime).

Furthermore, under Article 325 of the TFEU, the EU and Member States are jointly responsible for taking effective and dissuasive measures to combat fraud and other illegal activities affecting the financial interests of the Union. There are a number of crimes that fall under this umbrella, including active and passive corruption, subsidy fraud, money laundering, and embezzlement.

It can therefore be concluded that there is a real multiplicity of competencies at the EU level with respect to the broad field of economic and financial criminal law. It is anticipated, however, that the descriptions of offenses and the level and type of applicable sanctions in the EU will be largely equivalent as a result of the new EU powers.

It is important to emphasize that EU criminal policy choices are primarily based on economic logic, in accordance with the original ambition of the Union to develop a single internal market. Therefore, many legislative initiatives in criminal law are based on the pre-existing practice of the Union of administrative regulation. As a result, EU criminal law follows an explicit logic of effectiveness. In addition to exerting stronger deterrent effects, criminal law contributes to the better implementation of EU law by exerting greater deterrent effects (Blomsma J., 2012). In many EU policy areas, however, the EU has only partially addressed the enforcement aspects, as illustrated by Silvia Allegrezza and Ioannis Rodopoulos in their article on the European Banking Union. As a result of the new banking union regulation, the European Central Bank, along with ESMA and EBA, now has a new supervisory and enforcement role. There is, however, no provision in EU law regarding criminal law or judicial enforcement, for example, and only a system of administrative supervision and enforcement is established by the EU (Regulation 2013/1024/EU).

3. Results and discussions

The research used factor analysis of correspondences (FCA), a descriptive method of multidimensional data analysis. The objective of the AFC method was to describe the associations between two non-numerical, categorical variables: the country and the year. The data were processed starting from the information taken from the SPACE Final Reports (annual criminal statistics of the Council of Europe) - I published in the years 2018/2019/2020/2021 by UNIL (Universite de Lausanne – Ecole de sciences criminelles) regarding the population of prisoners depending on the type of crime committed. In order to create criminal incidence profiles in the economic sphere, the research focused on the Prisoners for economic offenses indicator, which represents people convicted and imprisoned after committing economic or financial crimes.

By applying the AFC method, the initial information from the contingency table is summarized in a system of factorial axes on which the points represented by the categories of the recorded variables are projected. The factorial analysis of the correspondences seeks to find the orthogonal axes uncorrelated with each other on which to project the cloud of line points, respectively the cloud of column points (Munteanu and Aivaz, 2017). For this, the eigenvalues (k) of the intertie matrix and the coordinates of the eigenvectors associated with each k value are calculated. The sum of the eigenvalues represents the total inertia. The calculation of the coordinates of the line points and the column points on the factorial axes is performed using the coordinates of the eigenvectors associated with the eigenvalues of the intertie matrix. Distance 2 is used to estimate the distance between the two points.

The initial contingency table, table 1, used the number of Prisoners for economic/financial offenses as frequencies.

Table 1. Prisoners for economic/financial offenses by country and years

Correspondence Table

Country	Year 2018	2019	2020	2021	Active Margin
Bulgaria	377	382	326	278	1363
Croatia	149	159	200	154	662
Denmark	72	63	67	56	258
Finland	166	158	136	112	572
France	2731	2686	2601	3187	11205
Germany	6624	5865	5829	4604	22922
Italy	393	351	418	326	1488
Latvia	281	289	236	227	1033
Lithuania	47	40	41	33	161
Luxemburg	15	11	10	12	48
Netherlands	262	259	295	233	1049
Norway	183	125	132	115	555
Poland	641	680	687	592	2600
Romania	825	632	485	513	2455
Slovakia	454	435	447	413	1749
Slovenia	215	207	203	128	753
Spain	2522	1695	2817	2608	9642
Sweden	150	148	191	179	668
Active Margin	16107	14185	15121	13770	59183

Source: The authors' own processing with the help of the SPSS program

The analysis of the contingency table allows the comparative and dynamic observation of the number of cases of economic crime sanctioned with the imprisonment of the perpetrators, at the level of the European states. From a numerical perspective, the highest number of crimes sanctioned with the deprivation of liberty of the guilty persons was recorded in Germany (22,922 cases) and France (11,205 cases) during the analyzed period. It is interesting to note the large number of cases registered in Poland (2,600 cases) and Romania (2,455 cases), countries that during the analyzed period have made progress in terms of justice reforms.

From the analysis of Table 1, it is also interesting to note that the period of 2020-2021 does not seem to indicate, in the case of all the analyzed countries, the short-term disruption of the institutional activity of investigating financial frauds as a result of the restrictions imposed during the pandemic regarding social distancing or increased hygiene rules. In the case of Croatia, Spain or Italy, for example, the number of solved cases increased in 2020, when the effects of the pandemic were felt at the level of several institutions or activities worldwide. On the other hand, in Bulgaria and Romania, the number of cases completed in 2020 registered decreases that indicate the influence of the restrictions instituted during the pandemic.

Globally, the number of 13,770 cases of convictions in 2021 is the lowest of the entire analyzed period. The study continued the investigation of additional indications of the decrease of this indicator against the background of the Covid-19 pandemic.

Table 2 of the line profiles shows the partial relative frequencies calculated for each analyzed country. A line profile shows, for each country, the share of the number of *Prisoners for economic/financial offenses* in each year.

For Romania, of the total number of *Prisoners for economic/financial offenses* recorded in the analyzed horizon (2018-2021), 33.6% were in 2018, 25.7% in 2019, 19.8% in 2020 and 20.9% in 2021.

An oscillating structure per year is also observed in Spain: 26.2% in 2018, 17.6% in 2019, 29.2% in 2020 and 27% in 2021.

A statistical association between 2 countries (two line profiles) shows a similar distribution of the number of *Prisoners for economic/financial offenses* over the analyzed years. The analysis of the values in table 2 highlights the fact that Denmark and the Netherlands are characterized by similar distributions of the number of *Prisoners for economic/financial offenses* per year.

For all countries, the share of the number of *Prisoners for economic/financial offenses* is 27.2% in 2018, 24% in 2019, 25.5% in 2020 and 23.3% in 2021 (Mass).

Table 2. Line profiles of the number of *Prisoners for economic/financial crimes*

Row Profiles

Country	2018	2019	2020	2021	Active Margin
	Year				
Bulgaria	.277	.280	.239	.204	1.000
Croatia	.225	.240	.302	.233	1.000
Denmark	.279	.244	.260	.217	1.000
Finland	.290	.276	.238	.196	1.000
France	.244	.240	.232	.284	1.000
Germany	.289	.256	.254	.201	1.000
Italy	.264	.236	.281	.219	1.000
Latvia	.272	.280	.228	.220	1.000
Lithuania	.292	.248	.255	.205	1.000
Luxemburg	.313	.229	.208	.250	1.000
Netherlands	.250	.247	.281	.222	1.000
Norway	.330	.225	.238	.207	1.000
Poland	.247	.262	.264	.228	1.000
Romania	.336	.257	.198	.209	1.000
Slovakia	.260	.249	.256	.236	1.000
Slovenia	.286	.275	.270	.170	1.000
Spain	.262	.176	.292	.270	1.000
Sweden	.225	.222	.286	.268	1.000
Mass	.272	.240	.255	.233	

Source: The authors' own processing with the help of the SPSS program

Therefore, from the analysis of the line profiles of cases of criminal sanctions applied to cases of economic crime, the observation is maintained that, viewed as a whole, the year 2021 is an atypical year, with a low concentration of sanctions compared to the rest of the years, at the level of several countries Viewed at the level of each country, according to the graphic representation in Figure 1, the situation of the line profiles calculated in each country does not present any particularities for the year 2021.

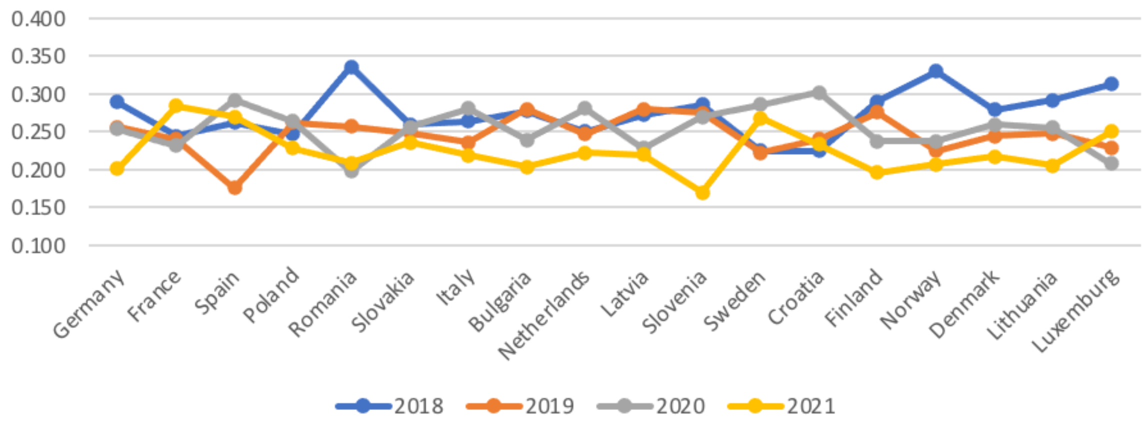

Figure 1. The evolution over time of the line profiles in each analyzed country

Source: Authors' own processing

As can be seen in Figure 1, in the case of France, Spain, Romania, Sweden, Croatia or Luxembourg, the year 2021 presents a concentration of resolved cases in the heterogeneous range of institutional activity from the rest of the years. In the case of these countries, the situation indicates that the effects of the restrictions instituted during the pandemic were diminished by the capacity of criminal investigation institutions to find levers for the balanced continuation of economic fraud investigation activities.

The values of the column profiles in table 3 show us the distribution of the number of *Prisoners for economic/financial offenses* each year by country: of the total number of *Prisoners for economic/financial offenses* in 2018, 41.1% are from Germany, 17% from France, 15.7% from Spain, 5.1% from Romania, 4% from Poland, etc. These values form the 2018 country profile.

A statistical association between two column profiles (years) shows a similar territorial distribution of the number of *Prisoners for economic/financial offenses* in a given year. Analyzing the values in Figure 2, it is observed that the years 2018 and 2019 have similar territorial distributions, and the year 2021 is an atypical year. The points represented by the years 2018 and 2019 are located at a small distance from each other in the system of factorial axes, and the year 2021 at a significant distance (Figure 1).

Table 3 Column profiles of the number of *Prisoners for economic/financial offences*

Column Profiles

Country	Year 2018	2019	2020	2021	Mass
Bulgaria	.023	.027	.022	.020	.023
Croatia	.009	.011	.013	.011	.011
Denmark	.004	.004	.004	.004	.004
Finland	.010	.011	.009	.008	.010
France	.170	.189	.172	.231	.189
Germany	.411	.413	.385	.334	.387
Italy	.024	.025	.028	.024	.025
Latvia	.017	.020	.016	.016	.017
Lithuania	.003	.003	.003	.002	.003
Luxemburg	.001	.001	.001	.001	.001
Netherlands	.016	.018	.020	.017	.018
Norway	.011	.009	.009	.008	.009
Poland	.040	.048	.045	.043	.044
Romania	.051	.045	.032	.037	.041
Slovakia	.028	.031	.030	.030	.030
Slovenia	.013	.015	.013	.009	.013
Spain	.157	.119	.186	.189	.163
Sweden	.009	.010	.013	.013	.011
Active Margin	1.000	1.000	1.000	1.000	

Source: The authors' own processing with the help of the SPSS program

Testing the hypothesis of independence between the variables requires the formulation of the following hypotheses: H0: there are no links between the statistical variables; H1: there are links between the statistical variables. The output presented in table 4 shows us the calculated value of the test statistic 2. Since Sig.<0.001, the null hypothesis is rejected, being able to guarantee with a probability of 95% that there is a relationship between the statistical variables. The description of these links will be achieved by interpreting the AFC results for the line-profiles, respectively for the column-profiles.

The variance explained by each factorial axis is presented in the *Proportion of Inertia* column in table 4. Thus, the first factorial axis explains 67.1% of the total variance and the second factorial axis 22.9%. Since the first factorial axis has an important contribution in explaining these links, in what follows, the analysis will focus on its interpretation.

Table 4. The calculated value of statistic χ^2, the eigenvalues and the inertia explained by each factorial axis

Summary

Dimension	Singular Value	Inertia	Chi Square	Sig.	Proportion of Inertia: Accounted for	Proportion of Inertia: Cumulative	Confidence Singular Value: Standard Deviation	Confidence Singular Value: Correlation 2
1	.095	.009			.671	.671	.004	-.025
2	.056	.003			.229	.900	.004	
3	.037	.001			.100	1.000		
Total		.014	803.204	<.001[a]	1.000	1.000		

a. 51 degrees of freedom

Source: The authors' own processing with the help of the SPSS program

The biggest differences per analyzed year from the point of view of the number of *Prisoners for economic/financial offenses* are determined by the values recorded in France, Germany, Spain and Romania.

Table 5. Country results

Overview Row Points[a]

Country	Mass	Score in Dimension		Inertia	Contribution				
					Of Point to Inertia of Dimension		Of Dimension to Inertia of Point		
		1	2		1	2	1	2	Total
Bulgaria	.023	-.318	-.148	.000	.024	.009	.835	.106	.941
Croatia	.011	.170	.168	.000	.003	.006	.166	.095	.261
Denmark	.004	-.102	.081	.000	.000	.001	.720	.266	.987
Finland	.010	-.376	-.077	.000	.014	.001	.974	.024	.998
France	.189	.284	-.400	.003	.160	.544	.462	.538	1.000
Germany	.387	-.253	.084	.003	.259	.049	.938	.061	.999
Italy	.025	.001	.200	.000	.000	.018	.000	.618	.619
Latvia	.017	-.244	-.280	.000	.011	.024	.551	.424	.976
Lithuania	.003	-.212	.108	.000	.001	.001	.850	.130	.980
Luxemburg	.001	-.036	-.211	.000	.000	.001	.007	.151	.158
Netherlands	.018	.010	.112	.000	.000	.004	.002	.136	.138
Norway	.009	-.228	.183	.000	.005	.006	.290	.109	.400
Poland	.044	-.032	-.079	.000	.000	.005	.020	.072	.092
Romania	.041	-.405	-.184	.001	.071	.025	.491	.059	.550
Slovakia	.030	.013	-.079	.000	.000	.003	.017	.358	.376
Slovenia	.013	-.442	.205	.000	.026	.010	.792	.100	.892
Spain	.163	.488	.318	.005	.406	.295	.787	.195	.982
Sweden	.011	.387	.015	.000	.018	.000	.767	.001	.767
Active Total	1.000			.014	1.000	1.000			

a. Symmetrical normalization

The biggest differences between the analyzed countries in terms of the number of *Prisoners for economic/financial offenses* are determined by the values recorded in 2019 and 2021.

Overview Column Points[a]

Year	Mass	Score in Dimension		Inertia	Contribution				
					Of Point to Inertia of Dimension		Of Dimension to Inertia of Point		
		1	2		1	2	1	2	Total
2018	.272	-.218	.113	.002	.136	.062	.577	.090	.666
2019	.240	-.342	-.247	.004	.295	.263	.711	.217	.927
2020	.255	.132	.318	.002	.047	.462	.195	.659	.854
2021	.233	.463	-.226	.005	.523	.213	.871	.121	.992
Active Total	1.000			.014	1.000	1.000			

a. Symmetrical normalization

The interpretation of figure 1 highlights the associations between the categories of the *Country* variable and the *Years* variable. Regarding the *Country* variable, it can be observed that the first factorial axis represented horizontally, highlights significant differences between Romania, Bulgaria, Finland, Latvia, Germany, Lithuania, Slovenia on the one hand and Spain, Sweden, France on the other.

Regarding the Years variable, significant differences are observed between 2019 and 2021.

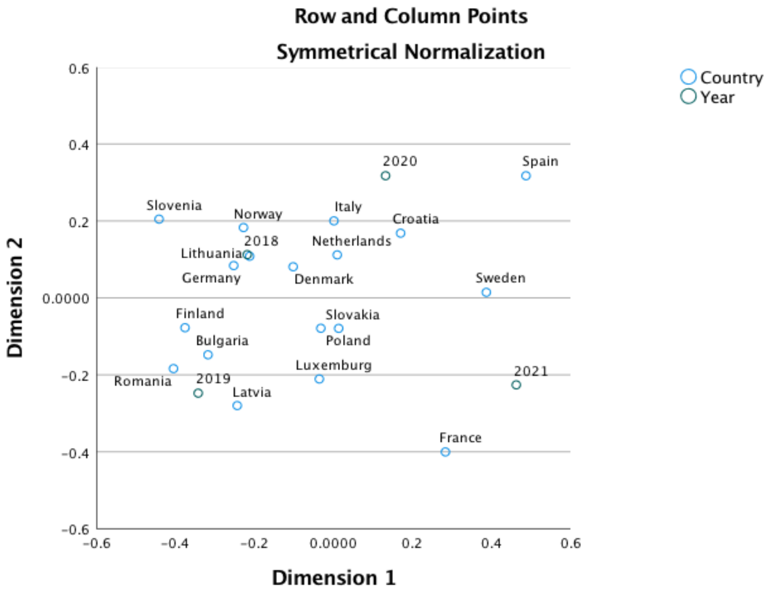

Figure 2. Distribution of row and column points
Source: Authors' own processing

From the dynamic analysis of the indicators carried out in this paper, it can be seen that the effects of the Covid-19 pandemic were felt differently at the level of European countries in terms of the activity of investigating economic crime. The institutional capacity of each country to face the challenges generated by social distancing restrictions or the tightening of hygiene conditions played a key role in the continuation of economic fraud investigations.

The conclusions of the study still require a continuation from multiple perspectives, such as the numerical or structural analysis of the personnel involved in the investigation of crime, the digitization of control services, the legislative analysis or the analysis of the financial indicators of businesses. All these research directions have a strong link on the complexity or extent of economic crime.

An extension of the research makes an active contribution to diminishing the limitations of the present study. The number of criminal sanctions resolved in cases of economic crime are strongly influenced by the duration of administrative or judicial procedures. The lack of public data regarding the duration of the procedures that resulted in convictions in the analysed period constitutes a situation of inertia that can influence the completeness of the reporting carried out by each country included in the analysis. At the same time, the lack of information regarding the number of cases initiated or being resolved at the level of each country, the weight of cases of crimes confirmed following criminal procedures compared to the total number of reports of such situations initiated by the control bodies, the ratio of criminality or compliance in the total number of active businesses at the level each country, can provide new clues regarding the phenomenon of economic criminality.

4. Conclusions

It is primarily the EU that harmonizes the law on economic and financial crime, but it is up to the individual member states to decide how it should be applied. There is a need to carefully assess and test the effectiveness of this administrative enforcement in order to assess its potential. However, there is no overall enforcement framework that combines the different types of enforcement (self-regulation or external review by private parties, controls, and criminal activities) with the various levels of enforcement (domestic, national, and European).

There appears to be an apparent conflict between the EU instrumental approach to criminal enforcement and a more traditional approach to criminal law, which is less concerned with efficiency and effectiveness, and emphasizes the protection of specific moral values and classical civil rights (such as the right to life, the right to physical and sexual integrity, and the right to property). Moreover, it appears that EU-level criminal law policy lacks a coherent legal and, more importantly, theoretical framework regarding criminal liability, criminal procedure, and punishment (Harding C., 2016).

As a result of this article, the authors conclude that national and EU legislators and decision-makers need to remain flexible and inventive in order to meet the challenges of changing circumstances. Nevertheless, they should not lose sight of the fundamental rights that are well established and precious.

From the dynamic analysis of the indicators carried out in this paper, it can be seen that the effects of the Covid-19 pandemic were felt differently at the level of European countries in terms of the activity of investigating economic crime. The institutional capacity of each country to face the challenges generated by

social distancing restrictions or the tightening of hygiene conditions played a key role in the continuation of economic fraud investigations.

As can be seen in Figure 1, in the case of France, Spain, Romania, Sweden, Croatia or Luxembourg, the year 2021 presents a concentration of resolved cases in the heterogeneous range of institutional activity from the rest of the years. In the case of these countries, the situation indicates that the effects of the restrictions instituted during the pandemic were diminished by the capacity of criminal investigation institutions to find levers for the balanced continuation of economic fraud investigation activities.

The conclusions of the study still require a continuation from multiple perspectives, such as the numerical or structural analysis of the personnel involved in the investigation of crime, the digitization of control services, the legislative analysis or the analysis of the financial indicators of businesses. All these research directions have a strong link on the complexity or extent of economic crime.

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References

1. Aebi, M. F., & Tiago, M. M. SPACE I - 2018 – Council of Europe Annual Penal Statistics: Prison populations, Strasbourg: Council of Europe, 2018, available at <https://wp.unil.ch/space/space-i/annual-reports>
2. Aebi, M. F., & Tiago, M. M. SPACE I - 2019 – Council of Europe Annual Penal Statistics: Prison populations, Strasbourg: Council of Europe, 2020, available at <https://wp.unil.ch/space/space-i/annual-reports>
3. Aebi, M. F., & Tiago, M. M., SPACE I - 2020 – Council of Europe Annual Penal Statistics: Prison populations, Strasbourg: Council of Europe, 2021, available at <https://wp.unil.ch/space/space-i/annual-reports>
4. Aebi, M. F., Cocco, E., Molnar, L., & Tiago, M. M. SPACE I - 2021 – Council of Europe Annual Penal Statistics: Prison populations. Council of Europe, 2022, available at <https://wp.unil.ch/space/space-i/annual-reports>
5. Aivaz, K.-A., Munteanu, I., Chiriac, A, An exploratory analysis of the dynamics of the activity of the Fiscal Anti-fraud Directorate General in the 2014-2020 period at the level of Romania, Technium Social Sciences Journal, 30, 337-347, https:doi.org/10.47577/tssj.v30i1.6359, 2022.
6. Aivaz, K.-A., Munteanu, I., Stan, M. I., Chiriac, A Multivariate Analysis on the Links Between Transport Noncompliance and Financial Uncertainty in Times of COVID-19 Pandemics and War. Sustainability, 14(16), 10040, 2022, https://doi.org/10.3390/su141610040.
7. Allegrezza S. and Rodopoulos I., Enforcing Prudential Banking Regulations in the Eurozone: A Reading from the Viewpoint of Criminal Law, https://www.academia.edu/35417311/Enforcing_Prudential_Banking_Regulations_in_the_Eurozone_A_Reading_from_the_Viewpoint_of_Criminal_Law
8. Altenhain K., Hagemeier I, Haimerl M, Stammen H-K., Die Praxis des Ansprachen in Wirtschaftsstrafverfahren, Baden-Baden, Nomos, 2007.
9. Annual Federal Financial Supervisory Authority's Annual Report https://www.bafin.de/SharedDocs/Downloads/EN/Jahresbericht/dl_jb_2014_en.pdf?__blob= publicationFile&v=2, Germany, 2014. Art 1 and 1a Economic Offences Act of 1950.
10. Blake S., The case for specialist enforcement authorities from the UK Competition and Markets Authority perspective, speech delivered at University of Luxembourg, 2014.
11. Boomsma J., Men's rea and defenses in European criminal law (54), School of Human Rights Research, Inertia publisher, 2012.
12. Bowles R., Faure M. and Garoupa N., The Scope of Criminal Law and Criminal Sanctions: An Economic View and Policy Implications, 35 Journal of Law and Society 389, 391–392 and 400–401, 2008.
13. Case C-617/10, Åklagaren v Åkerberg Fransson EU:C:2013:105, 26 February 2013.
14. Delmas-Marty M. and Giudicelli-Delage G.,2000. Droit pénal des affaires, 2nd edn, Paris, PUF.
15. Diamond PS., Federal Grand Jury Practice and Procedure, Huntington, Juris Publishing, 2014.
16. Diaw A., Lobont O., Moldovan N., Some relevant risk factors and causal mechanisms to understand crime in Romania, ISSN: 2247-6172; ISSN-L: 2247-6172, Review of Applied Socio- Economic Research ,(Volume 8, Issue 2/2014), pp. 64 URL: http://www.reaser.eu, 2014.
17. Europol,. https://www.europol.europa.eu/crime-areas-and-statistics/crime-areas/economic-crime , 2022.
18. FGH Kristen, RMI Lamp, JMW Lindeman and MJJP Luchtman, Bijzonder strafrecht: Strafrechtelijke handhaving van sociaal-economisch en fiscaal recht in Nederland , The Hague, Boom Lemma, 2011.
19. Florea O., An Exploratory Analysis of the Number of Corruption Crimes in Romania from 2014 to 2020, Technium Social Sciences Journal (ISSN 2668-7798). Available on www.techniumscience.com, Volume 36, October, 2022.
20. Garner BA(ed), Black's Law Dictionary, 9th edn , St Paul, West/Thomson Reuters, 2009
21. Garrett BL., The Constitutional Standing of Corporations , University of Pennsylvania Law Review, 2014.
22. Ferguson CM, The Required Records Doctrine: The Fifth Amendment Privilege Under Attack , Journal of Taxation , 2011.
23. First H., Business Crime: Cases and Materials , Westbury, The Foundation Press, 1990.
24. French Constitutional Council, Decision No 2014-453/454 QPC and 2015-462 QPC,18 March 2015.
25. Harding C. , 'Tasks for Criminology in the Field of EU Criminal Law and Crime Policy', in J Banach-Guttierez and C Harding (eds), EU Criminal Law and Crime Policy: Values, Principles and Methods , 111 et seq. , Abingdon, Routledge, 2016.
26. Judgment of the Constitutional Tribunal, P 50/13 OTK ZU 2014 no 9A Item 103, 21 October 2014.
27. Kadish SH, Some Observations on the Use of Criminal Sanctions in Enforcing Economic Regulations, 30 University of Chicago Law Review 423, 424, 1963.

28. *Ligeti K. and Simonato M., Multidisciplinary Investigations into Offences Against the Financial Interests of the EU: A Quest for an Integrated Enforcement Concept, IEE Brussels, 2014.*
29. *Ligeti K., Franssen V., Challenges in the field of Economic and Financial Crime in Europe and in the US, Hart Publishing, Oxford and Portland, Oregon, 2017.*
30. *Lobonţ O., Nicolescu A., Moldovan N. & Kuloğlu A. , The effect of socioeconomic factors on crime rates in Romania: a macro-level analysis, Economic Research-Ekonomska Istraživanja, 30:1, 91-111, DOI: 10.1080/1331677X.2017.1305790 , 2017.*
31. *Luchtman M., Transnational Law-enforcement cooperation Fundamental Rights in European Cooperation in Criminal Matters, 2020.*
32. *Moneyval, The Postponement of Financial Transactions and the Monitoring of Bank Accounts, Research report of the Council of Europe, 2013.*
33. *Munteanu, I. (2021). Comparative Analysis on Financial Performance and Sustainable Incentives in the Construction Sector. Evidence from the Coastal Area of Romania, Annals of Dunarea de Jos University of Galati. Fascicle I. Economics and Applied Informatics, 27, 61-67, https:doi.org/10.35219/eai15840409168.*
34. *Munteanu Florea, I. and Aivaz, K.A. Factorial correspondences in the tourism services provided to the population in Romania. Proceedings of BASIQ International Conference on New Trends in Sustainable Business and Consumption. Graz, Austria, 31 May-3 June 2017. Bucharest: ASE, pp. 436-444, 2017.*
35. *Regulation (EU) 596/2014 of the European Parliament and the Council on market abuse and repealing Directive 2003/6/EC of the European Parliament and the Council and Commission Directives 2003/124/EC, 2003/125/EC, and 2004/72/EC, OJ L 173/1, Market Abuse Regulation, 2014.*
36. *Regulation 2013/1024/EU.*
37. *Rus M.-I., , "The Knowledge Triangle" in a Knowledge-Based Society, Annals of Faculty of Economics, 1(1), 942-947, 2013*
38. *Rus M.-I., Tax Evasion vs. Fiscal Fraud, Fiat Iustitia, 2:144-148, 2019*
39. *Sieber U. and Engelhart M., Compliance Programs for the Prevention of Economic Crimes. An Empirical Survey of German Companies, Max-Planck-Institut für ausländisches und internationals Strafrecht, Berlin, Dunker & Humblot, 2014.*
40. *Stan, L. and Vancea, D., 2014. Much Contest, Little Censure: Motions in the Romanian Parliament (1989– 2012). Europe-Asia Studies, 66(10), pp.1629–1648. https://doi.org/10.1080/09668136.2014.967566.*
41. *Stasiak F., Le procureur de la République financier: véritable innovation ou simple substitut? , Revue Lamy Droit des Affaires, no 4955, 2014.*
42. *Tiedemann K., Wirtschaftsstrafrecht. Einführung und Allgemeiner Teil mit wichtigen Rechtstexten, 3rd edn, Köln, Carl Heymanns Verlag, 6–9 and 16, 2010.*
43. *Tractatus privind Functionarea Uniunii Europene-TFUE, https://eur-lex.europa.eu/resource.html?uri=cellar:2bf140bf-a3f8-4ab2-b506-fd71826e6da6.0001.02/DOC_2&format=PDF , Art. 82, alin.2., Jurnalul Oficial al Uniunii Europene, 26.10.2012.*
44. *Vervaele J., European Criminal Justice in the post-Lisbon area of freedom, security, and justice, Università Degli Studi di Trento, 2014.*
45. *White MJ, Chairwoman, Sec and Exch Comm'n, All-Encompassing Enforcement: The Robust Use of Civil and Criminal Actions to Police the Markets, available at https://www.sec.gov/News/ Speech/Detail/Speech/1370541342996, 31 March 2014.*