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REQUIREMENTS OF THE RULE OF LAW FROM THE PERSPECTIVE OF EUROPEAN UNION LAW

Paul Iulian, NEDELCU ¹

Abstract:

The most important political and historical project after the Second World War, the EU brings together countries that share and promote together a set of common European values, among them respect for human dignity, democracy, the rule of law, fundamental rights, freedom and equality before the law, all of this in a dynamic legal construction, but as concrete as possible in regulations.

Romania's accession to the EU and, especially, the integration into the overall system that this implies, and here we refer in particular to the normative and jurisprudential aspects, determines, among others, two immediate, complex and permanent consequences on the one hand, the harmonization of national legislation in relation to European norms, privileged in application and, on the other hand, the major influence of the jurisprudence of the European Court of Justice on the justice of all member states.

Keywords: State, rights, values, equality, freedom

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1. Introducere

The most important political and historical project after World War II, the EU brings together countries that share and jointly promote a set of common European values, among them respect for human dignity, democracy, the rule of law, fundamental rights, freedom and equality before the law, all of this in a dynamic legal construction, but as concrete as possible in regulations.

Romania's accession to the EU² and, above all, the integration into the overall system that this implies, and here we refer in particular to the normative and jurisprudential aspects, determines, among others, two immediate, complex and permanent consequences on the one hand, the harmonization of national legislation in relation to European norms, privileged in application and, on the other hand, the major influence of the case law of the European Court of Justice on the justice of all Member States.

Due to the fact that at European level there are three distinct legal orders, generated by national norms, European norms and the norms contained in the European Convention, in practice situations arise when all three categories of norms are incident in the same case, between which complex and diversified relationships are established.

These situations, imposed by the need to apply several categories of norms simultaneously, determine the emergence of conflicts between them, on the one hand natural if we consider that the particularities of each national system leave their mark on the relations between domestic law and European law.

Moreover, the integration procedure is carried out both vertically between the regional and national levels, and horizontally between the two European systems - European law and the

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² Achieved by the Treaty between the Member States of the European Union and the Republic of Bulgaria and Romania concerning the accession of Bulgaria and Romania to the EU on 25 April 2005, with entry into force on 1 January 2007, signed, at that time, on behalf of Romania by President Traian Băsescu, Prime Minister Călin Popescu Tăriceanu, Minister of Foreign Affairs Mihai Răzvan Ungureanu and Chief Negotiator with the European Union Leonard Orban (OJ L 157 of 21 June 2005).

European Convention.¹

As regards the European Convention, we must point out that with the entry into force of the Treaty of Lisbon, the Charter of Fundamental Rights transformed values and principles into concrete and enforceable rights,² and this, having the same legal value as the Treaty, has become legally binding on the EU institutions, bodies and agencies, as well as on the Member States, in the context of the implementation of EU legislation.

European rules, by their very vocation, are rules of wide scope, sometimes competing with those of the internal law of the Member States, they acquire full concreteness and undoubted significance through the jurisprudence of the European Court. Proper knowledge of these rules and their application when they are incident to a specific dispute, is subsumed under the obligation assumed by our country regarding compliance with European law.

We also share the doctrinal appreciation³ that the uniform and efficient implementation of European law in an enlarged Europe will be an immense challenge both for the European legal orders, but, above all, we also consider, for the various national orders of each Member State.

A strong administration will be permanently necessary, to face the challenge of achieving a reform of the national administrative structures of the acceding States, in order to be able to achieve, on the one hand, the hierarchy of the norms taken over in the national legal system and, on the other hand, their harmonization, knowing that the diversity of the legal systems of the Member States can constitute a source of uncertainty and destabilization of the legal systems.⁴

2. Primary and secondary European law

From these arguments presented so far and, because, further, and through the Treaty of Lisbon, the principle of supremacy of Community law in relation to national law is maintained, we consider it necessary to briefly present, in this section, some elements of European law. The European legal order or, in other words, European law⁵, is made up of a series of structured and hierarchical rules.

European law is made up of the three founding treaties of the Union⁶ and the amending treaties, which adapted the new realities emerging in European life and which, moreover, underline the dynamic and unpredictable nature⁷ of European integration. The Treaties represent the fundamental part of European law and the EU legal system because, on the basis of and in accordance with them, all the norms that make up all secondary legislation, as well as other EU acts, are generated.

Moreover, primary legislation constitutes the essence of the constitutional framework of

¹ M. Delmas-Marty, *Critique de l'intégration normative; L'apport du droit comparé à l'harmonisation des droits*, Presses Universitaires de France, Paris, 2004, p. 17.

² Point D of the European Parliament resolution of 27 February 2014.

³ J. Schwartze, *European administrative law*, Office for Official Publications of the European Communities, Sweet and Maxwell, 2006, p. 206.

⁴ Fl. Ghencea, *Administrative Authorization. Theory. Practice. Jurisprudence*, Ed. Universul Juridic, Bucharest, 2013, p. 185.

⁵ Professor Augustin Fuerea, a renowned specialist in the field, showed that the community legal order is given, in a broad sense, by the set of norms that govern the relationships in which the European communities find themselves, and, in a narrow sense, by the relationships between the European Communities and the Member States, the relationships between natural and legal persons belonging to or not to the Member States, the relationships between the Member Communities and other international organizations, in the *European Union Handbook*, 4th ed., Ed. Universul Juridic, Bucharest, 2010, p. 133; for other definitions of community law, see D. Mazilu, *European integration, Community law and European institutions*, Ed. Lumina Lex, Bucharest, 2008, p. 54; O. Tinca, *General Community Law*, Ed. Didactică și pedagogică, Bucharest, 1999, p. 200; V. Marcu, *Community institutional law*, ed. 3rd, Ed. Lumina Lex, Bucharest, 2002, p. 32; B. Andreșan-Grigona T. Ștefan, *Community Law*, Ed. C.H. Beck, Bucharest, 2007; N. Diaconu, *European Union Law - Treaty*, Ed. Lumina Lex, Bucharest, 2008, p. 55; G.L. Ispas, *European Union-Evolution. Institutions. Mechanisms*, Ed. Universul Juridic, Bucharest, 2012, p. 55.

⁶ Currently, only two of them are still in force, signed in Rome on 25 March 1957 and in force since 1 January 1958.

⁷ Andreșan-Grigoriu B., Ștefan B., *Treaties of the European Union*, Ed. Hamangiu, Bucharest, 2011, p. 3.

the Union and, together with the principles of law, occupies the most important position in the hierarchy of sources of Community law. From this category we mention: The Single European Act¹, Maastricht Treaty of the European Union², Treaty of Amsterdam³, Treaty of Nice⁴, The Treaty of Lisbon.⁵ This category of rules is joined, as an element of the EU's primary European law, by the accession treaties of the new members to the EU, together with the accompanying annexes and protocols, which, moreover, have the same legal value as the act they accompany and, in addition, may establish additional regulations for all member states.⁶

It is appreciated in doctrine⁷ that the founding treaties perform the function of a constitution for each of the EU states, in that they provide for the relations between the institutions, their powers, as well as the cases in which they are shared between the institutions of the Union and the Member States.

The regulations contained in the founding treaties of the EU cannot be subject to any contentious review or any derogation except in situations in which there is an authorized procedure in their content to this effect⁸.

Within the European legal order, the capacity to create rules of law belongs to certain bodies which exercise this competence following a pre-established procedure, this being the main characteristic of the EU.

EU law confers on its institutions the power to adopt binding legal rules, in accordance with the European interest, which takes precedence over the national interests of the Member States. The Court has also emphasised, in a landmark case,⁹ the fact that the European institutions created by the founding treaties exercise sovereign rights derived from the Member States,

¹ Signed on 17 February 1986 in Luxembourg by 9 of the 12 Member States at that time, and on 28 February 1986 by the other 3 (Italy, Denmark and Greece) and subsequently entered into force on 1 July 1987. It carries out several major institutional reforms, officially recognizes the European Council, the Court of First Instance appears, which takes over the powers of the Court of Justice and transforms the entire Community decision-making process, by creating the new legislative cooperation procedure - art. 252 TEC. The "comitology procedure" is introduced into the Community order, according to which the Council can authorize the Commission, under certain conditions, to execute the decisions adopted by the EU Council, in P. Craig, G. de Burca, European Union Law, Ed. Hamangiu, Bucharest, 2009, p. 16.

² Adopted on 10 December 1991, signed on 7 February 1992 and entered into force on 1 November 1993, it represented the second fundamental revision of the founding treaties, through this treaty some fundamental revisions were brought to the European construction. Three pillars can be distinguished: the first, community, the second, Common Foreign and Security Policy and the third, Justice and Home Affairs, see A. Fuerea, op. cit., p. 44.

³ Signed on 2 October 1997, and entering into force on 1 May 1999, the Treaty of Amsterdam amends and supplements the Maastricht Treaty, particularly with regard to the proper place of work and citizens' rights, and the elimination of barriers to the free movement of goods and services. In this respect, each Member State is required to collaborate more concretely within Europol, giving the EU the opportunity to make its voice heard better in international courts. Institutions and procedures have also been created to ensure the smooth functioning of an enlarged Union, see J. Rideau, op. cit., p. 72.

⁴ Signed on 26 February 2001, entered into force in January 2003; the first amendment after the change of regime in Eastern Europe and the collapse of the Soviet Union, contains regulations intended to improve the decision-making mechanism, taking into account the expected enlargement of the Union to 27 states, see O. Tinca, Treaty of Nice, in Law no. 9/2001, p. 14.

⁵ Completed in December 2007, after a ratification process strewn with many emotions, it entered into force on December 1, 2009. Among the significant changes contained in this document, we mention the introduction of the "delegated acts" system which authorizes the Commission to adopt non-legislative acts of general scope, which supplement or amend certain non-essential elements of the legislative act, replacing the comitology procedure, criticized over time due to its complexity and lack of transparency, the new regulation making a clear distinction between legislative and non-legislative acts. For details on the Lisbon Treaty, see M. Voicu, European Union - before and after the Lisbon Treaty, Ed. Universul Juridic, Bucharest, 2009; E. Dragomir, D. Niță, The Lisbon Treaty, Ed. Lumina Lex, Bucharest, 2010.

⁶ The statute of the Court of Justice, the privileges and immunities of the Communities, the statute of the two European central bank systems, the role of national Parliaments, and conditions regarding the application of the principles of subsidiarity and proportionality were established.

⁷ Rideau J., op. cit., p. 240.

⁸ Rideau J., Dreptul instituțional al Uniunii și al Comunităților Europene, ediția a 5-a, LGDJ Montchrestien, Paris, 2006, p. 106.

⁹ CJUE, C-6/64, Costa c. Enel, a se vedea P. Moreau Defarges, Les Institutions euro-péennes, 6 éd., Armand Colin, Paris, 2002, apud D.C. Dragoș, Uniunea Europeană, Instituții, Mecanisme, Ed. All Beck, București, 2005, p. 97.

adopting legislation automatically, but within the limits provided for by the Union treaties.

In order to fulfil the tasks assigned to the Union institutions by the founding treaties, they adopt unilateral acts.

Thus we can say that we are faced with a legislated law, with norms adopted in and for the application of the Treaties. In the normative hierarchy of the Union, these norms are secondary sources of European law. Their secondary normative character lies in the impossibility of contravening the primary sources and the general principles of European law formulated by the Court of Justice in its case law.

This category of rules is joined, as an element of the EU's primary European law, by the accession treaties of the new members to the EU, together with the annexes and accompanying protocols, which, moreover, have the same legal value as the act they accompany and, in addition, may establish additional regulations for all member states.

It is considered in the doctrine that the founding treaties perform the function of a constitution for each of the EU states, given that they provide for the relationships between the institutions, their powers, as well as the cases in which they operate a sharing of them between the institutions of the Union and the member states.

The regulations contained in the founding treaties of the EU cannot be subject to any contentious control or any derogation except in situations in which there is an authorized procedure in this regard within their content.

Within the European legal order, the capacity to create rules of law belongs to certain bodies that exercise this competence following a pre-established procedure, this being the main characteristic of the EU.

EU law gives its institutions the power to adopt binding legal rules, in accordance with the European interest, which takes precedence over the national interests of the Member States. The Court, moreover, has underlined, in a reference case, the fact that the European institutions created by the founding treaties exercise sovereign rights originating from the Member States, adopting legislation automatically, but within the limits provided for by the Union treaties.

In order to fulfil the tasks assigned to the Union institutions by the founding treaties, they adopt unilateral acts.

We can thus say that we are faced with a legislated law, with rules adopted in and for the application of the treaties. In the normative hierarchy of the Union, these rules are secondary sources of European law. Their secondary normative character lies in the impossibility of contravening the primary sources and the general principles of European law formulated by the Court of Justice in its case law.¹ Even if these institutions have a normative power comparable to the legislative one, we do not find in the text of the institutive treaties the terms "law" or "legislation". However, the Court of Justice "changed" the customs, using notions such as the legislative system of the European Communities², legislative power of the Community". Things returned to a natural expression, with the Treaty of Amsterdam, when reference is made to the "legislative" capacity of the Council.

The Regulation is the main source of secondary Community law, which expresses the legislative power of the Communities.

The Treaty defines it in a complex manner³, stating that it has general applicability, being

¹ Fuerea A, Community Law of Business, Ed. Universul Juridic, Bucharest, 2006, p. 25; O. Manolache, Community Law, 5th ed., Ed. C.H. Beck, Bucharest, 2006, p. 23.

² CJUE, C-25/70, Köster.

³ Art. 288 (ex-art. 249 TCE).

binding in its entirety and directly applicable in all Member States¹ without the need for them to adopt national legislation transposing the regulations, their entry into force and the production of legal effects at national level being achieved independently of any measure of transposition into domestic law.

Thus, all citizens can rely on the provisions of the regulation and, as the Court has stated in its case-law, the only thing that Member States are required to do is not to impede the direct application of the regulations.²

Being comparable, in legal force, to a national law, the regulation contains general and impersonal provisions, of an abstract nature, which is why they are considered the most important legal acts that can be adopted by the EU institutions. They have general applicability, being binding in their entirety and being directly applicable in all Member States.

From a material point of view, that is to say, of the legal force of the provisions they contain, the case law of the European courts has made a distinction between basic regulations and implementing (application) regulations.³ Basic regulations are regulations adopted by the Council⁴ in accordance with the procedure laid down in the Treaty. The implementing regulations shall be adopted by the Commission⁵, authorized in this sense by the Council or can be adopted by the Council itself, their characteristic being highlighted by the fact that they can be controlled and annulled if they violate the basic regulations.

Regulations enter into force only after their publication in the Official Journal of the European Communities", the absence of publication leading to the loss of binding character without, however, entailing the illegality of the regulation.⁶

The European Directive is a two-stage method of legislation, which sets out the objectives to be achieved by the Member States, leaving it to the national authorities to choose the most appropriate means

The provisions of the Directive may be applied, becoming directly binding, if they are addressed to them,⁷ for one, several or all Member States. In order for the principles set out in the directive to produce effects at the level of the citizen, the national legislator must adopt an act, specific to each legal system of the respective State, with a clear and unequivocal content⁸, through which the content of the directive will enter its own legal circuit.

Transposition into national legislation will be adapted to the objectives defined in the directive, it being not necessary to formally take over the content, sometimes a general legal framework being more appropriate, if it achieves an application of the provisions of the directive in a sufficiently precise and clear manner.⁹

The Directive provides for a deadline for transposition into national law, but Member States have a margin of manoeuvre that allows them to take into account national specificities. If the

¹ Art. 288 (ex-art. 249 TCE), in B. Andreșan-Grigoriu, T. Ștefan, op. cit., p. 288.

² CJUE, C-43/71, Politi

³ A regulation is, for example, the community act that regulates the prices of a category of products or that imposes certain obligations on car manufacturers in the European Union.

⁴ Council Regulation (EC) No 1293/2007 of 30 October 2007 eliminating the anti-dumping duties imposed by Regulation (EC) No 1050/2002 on imports of recordable compact discs originating in Taiwan and authorising repayment or remission thereof, and eliminating the countervailing duties imposed by Regulation (EC) No 960/2003 on imports of recordable compact discs originating in India and authorising repayment or remission thereof and terminating the proceeding (OJ L 288, 6 November 2007, pp. 17-19).

⁵ Commission Regulation (EC) No 639/1999 of 25 March 1999 concerning the authorisation of a new additive in feedingstuffs (OJ L 82, 26 March 1999, pp. 6-7).

⁶ CJUE, C-185/73, Hauptzollant Bielefeld c. König.

⁷ Art. 288 of the Consolidated Version of the Treaty on European Union and of the Treaty on the Functioning of the European Union (ex-Art. 249 TEC) (OJ C 83 of 30 March 2010) (<http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2010:083:SOM:RO:HTML>).

⁸ See ECJ case, C-291/84, Commission v. Netherlands.

⁹ T. Ștefan, B. Andreșan-Grigoriu, Community Law, Ed. C.H. Beck, Bucharest, 2007, p. 120. 5 CJEC, C-26/62, Van Gend en Loos v. Administratie der Belastingen.

deadline is not met, infringement proceedings are launched against the State concerned.

It should be noted that Member States are not obliged to adopt transposition measures before the deadline, but, according to the case law of the European Court of Justice ¹, they must refrain from taking measures which would seriously compromise the result prescribed by the directive.²

Failure to implement a directive constitutes a serious breach of European law ³ and has a negative impact on the European integration process, this practice being interpreted as an opposition of the respective state to the unitary application of the law which can create discrimination between citizens by not granting the rights conferred by the directive.

It happens⁴, however, that some transpositions may be incorrect or delayed, not because of the Member States' opposition to implementation, but because of legal or administrative difficulties encountered. Even these situations constitute breaches of obligations by the Member States and may give rise to liability on the part of the Commission under the provisions of Articles 226-228 TEC.⁵

It has been found that this type of violation of the European legal order occurs quite frequently, which is why the Court has developed a case law capable of determining the states to become more diligent in the transposition of directives.

In the early 1960s, the ECJ developed two principles governing the relationship between Community legislation and the national legislation of the Member States: the principles of "direct effect" and "supremacy". These two principles derive from the nature of the Treaty of the European Communities which, according to the ECJ, established a new legal order of international law to which the Member States and their citizens are subject.

According to the principle of "direct effect"⁶, a provision of the Treaty on the European Communities or of a secondary legislative act (regulation, directive or decision) which confers rights on individuals may under certain conditions be relied on directly by them before national courts⁷. In other words, if a rule of law benefits a category of individuals, it also benefits them individually, even if the respective provision does not expressly state this⁸.

According to European case law, national judges have the obligation to effectively ensure these rights. The idea behind the principle of direct effect⁹ is primarily the protection of individual rights, a component of the principle of the rule of law. It also guarantees the effective application of European law in the national legal order by national courts and

¹ CJCE, C-26/62, Van Gend en Loos c. Administratie der Belastingen.

² CJCE, C-129/96, Inter-Environnement Wallonie ASBL c. Région wallonne (<http://curia.eu.int/en/content/juris/index.html>).

³ CJCE, C-147/77, Comisia c. Italia.

⁴ CJCE, C-1/00, Comisia c. Franța.

⁵ Art. 226 TCE: "Where the Commission considers that a Member State has failed to fulfil an obligation under this Treaty, it shall deliver a reasoned opinion on the matter, after giving the State concerned the opportunity to submit its observations. If the State concerned does not comply with this opinion within the period laid down by the Commission, the Commission may bring the matter before the Court of Justice."

⁶ The principle of "direct effect" should not be confused with the principle of "direct applicability". Direct applicability in Community law refers to the fact that no intervention by the Member States is necessary for the application of legislation; thus, a "directly applicable" measure does not have to be transposed. This obligation is clearly established for "regulations" which, according to the Treaty, are directly applicable. Regulations become applicable without further legislative action (such as the adoption of a national transposition measure), as they are already part of the legal order of the Member States. Despite the fact that regulations are not transposed, they must of course still be implemented.

⁷ CJUE, C-26/62, Van Gend en Loos c. Administratie der Belastingen.

⁸ CJUE, C-24/66, Kampffmeyer c. Comisia.

⁹ "Direct effect" can be invoked by individuals before a national court against a Member State (so-called "vertical direct effect") or against another citizen (so-called "horizontal direct effect"), and in order for individuals to benefit from the "direct effect" of regulations in EU law, there must be a guarantee that national courts will give priority to European law, not national law.

individuals wishing to enforce their rights. An EU provision can only have "direct effect" if it is clear and unconditional.¹

According to the principle of supremacy, "whenever EU legislation is adopted, it will take precedence over national laws".² The principle of supremacy applies to all EU legislation, regardless of its nature: the Treaty, secondary legislation (mainly directives, regulations and decisions), international agreements and general principles of European law. European law prevails over national law, regional and local rules, as well as the constitutions of the Member States.

In fact, in the 1960s and 1970s, the judicial contribution to the supranational dynamism of European states proved to be of particular importance.

During this period, while European political development was less active or in a state of crisis, the Court contributed in various ways to legislative development and the integration process.

An example of this is the situation in which the Court authorised an extended application of Art. 308 TEC, thereby increasing the scope of the Union's competence, and for this³ used the principle of direct effect to increase the effectiveness of European policies whose implementation was not ensured by either the Member States or the European institutions.⁴

Another characteristic of European law is that its rules create obligations for each level of national authorities: thus, the judge must invalidate a national measure contrary to European law, and the administration must not apply national measures contrary to European law. The legislature of the Member State will have to repeal such measures. And in case of doubt about the interpretation of national law, the national court must interpret it in accordance with the relevant EU directive.⁵

This obligation applies in cases where the national provisions in question were adopted before or after the EU directive, as well as in cases where the legal proceedings before the national court are "vertical" or "horizontal".⁶

It is also valid if the national measure applies only during a transitional period or if the interpretation refers to national case-law. Another category of rules based on primary law is the decision, the effect of which is binding in its entirety on the addressees to whom it is addressed.

These acts do not have a general influence, being by their nature individual acts which produce effects for one or more addressees. From the point of view of direct applicability, it may happen that a decision addressed to a Member State involves the adoption by that State of measures intended to implement it. The decision is directly applicable by its addressees, a fact that is also recognised in practice.

When a decision is addressed to one or more Member States, it may create rights or obligations for individuals. In that case, in order to preserve the effectiveness of the decision, they may invoke it before the national courts.

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² 7 CJUE, C-6/64, Costa c. E.N.E.L.

³ Weiler J., The Transformation of Europe, 1991, 100 Yale LJ 2403, p. 2431-2453, în P. Craig, G. de Burca, op. cit., p. 130.

⁴ Idem, p. 343.

⁵ CJUE, C-14/83, Van Colson et Kamann c. Land Nordrhein-Westfalen - Principiul „interpretării conforme” („principe d'interprétation conforme”).

⁶ CJUE, C-106/89, Marleasing c. Comercial Internacional de Alimentación.

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AI AND TRANSLATION TOOLS IN ROMANIAN-ENGLISH BUSINESS COMMUNICATION: OPPORTUNITIES AND LIMITATIONS

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Abstract

This article explores the integration of artificial intelligence (AI) and machine translation (MT) tools in Romanian-English business translation. It evaluates the benefits of speed, cost-efficiency, and scalability, while addressing critical limitations such as cultural nuance, legal accuracy, and data privacy. Drawing on recent studies and industry insights, the article provides a balanced view of how these technologies are reshaping multilingual business communication.

Keywords: *AI-powered translation tools, linguistic, cultural, and legal differences, EU translation guidelines*

Introduction

The rise of AI-powered translation tools has revolutionized global business communication. In Romania, where international trade and EU integration demand high-quality English communication, tools like Google Translate, DeepL, and ChatGPT are increasingly used. However, the Romanian-English language pair presents unique challenges due to linguistic, cultural, and legal differences. As noted by Vasilescu (2023), “machine translation often fails to capture the pragmatic subtleties of Romanian business discourse”.

In an increasingly globalized economy, effective cross-lingual communication is essential for businesses operating between Romania and English-speaking markets, such as the United States, the United Kingdom, and Canada. Romania’s growing role in sectors like information technology, manufacturing, and services has amplified the need for seamless Romanian-English translations in contracts, marketing materials, emails, and negotiations. The advent of AI-driven machine translation tools has revolutionized this landscape, offering automated solutions that promise to bridge linguistic gaps efficiently.

Artificial intelligence, particularly through neural machine translation (NMT) systems, has evolved from rule-based approaches to sophisticated models powered by large language models (LLMs). These tools, including platforms like Google Translate, DeepL, and specialized enterprise solutions, leverage deep learning to process vast datasets and generate translations with improved fluency. However, their application in business contexts requires careful consideration of both advantages and drawbacks.

This article examines the opportunities presented by AI and MT in Romanian-English business communication, such as enhanced productivity and accessibility, while critically analyzing limitations that could undermine trust and compliance. By synthesizing insights from academic studies and industry reports, it aims to guide businesses in adopting these technologies responsibly. The focus on Romanian-English pairs is particularly relevant given Romania’s EU membership and its bilingual business environment, where English serves as a *lingua franca*.

Methodology

This study synthesizes findings from recent academic literature, industry reports, and expert commentary. It focuses on Romanian-English business contexts, including legal, financial, and

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managerial communication. Sources include peer-reviewed journals, EU translation guidelines, and Romanian business case studies.

Results and Discussion

Advantages

- **Speed and Volume:** AI tools can translate large volumes of text in seconds. DeepL, for example, is praised for its fluency and speed in European language pairs.
- **Cost Reduction:** Automated translation reduces the need for full-time human translators, especially for routine documents. A 2022 Deloitte report found that companies using MT saved up to 40% on translation costs.
- **Terminology Consistency:** Glossaries and translation memories ensure uniformity across documents, crucial for legal and financial texts.
- **24/7 Availability:** AI tools are accessible anytime, supporting global operations and remote teams.

Disadvantages

- **Contextual Errors:** AI often misinterprets Romanian idioms or legal phrasing. For instance, “a se conforma” is frequently mistranslated as “to conform” rather than “to comply”.
- **False Fluency:** Translations may appear fluent but contain semantic errors. A study by Popescu & Ionescu (2021) found that 18% of AI-generated Romanian-English translations had misleading phrasing.
- **Cultural Mismatch:** Romanian business communication tends to be more formal; AI may default to informal English, risking professionalism.
- **Data Privacy:** Cloud-based tools may violate GDPR when handling sensitive business data. The European Data Protection Board warns against using free MT tools for confidential documents.
- **Limited Domain Expertise:** AI struggles with specialized legal or accounting terminology without human post-editing.

Romanian-English Specific Challenges

Challenge	Description
False Friends	Actual (Rom.) vs. Current (Eng.) — leads to semantic errors
Legal Formality	Romanian legal texts use passive, formal structures that AI simplifies incorrectly
Tone and Register	Romanian business writing is formal; AI often defaults to casual English
Syntax and Word Order	Romanian’s flexible syntax confuses English-trained AI models
Cultural Nuance	Idioms like “a bate apa în piuă” are mistranslated or omitted entirely

Table: AI Translation in Romanian-English Business Contexts

Category	Advantages	Disadvantages
Speed	Instant translation of large texts	May overlook context or nuance
Cost	Reduces translation expenses	Errors may lead to costly misunderstandings

Accuracy	Consistent with trained glossaries	Struggles with legal and idiomatic expressions
Cultural Sensitivity	Can mimic tone with training	Often misses formality and cultural expectations
Privacy	Easy access via cloud	Risk of data leaks and GDPR violations
Domain Expertise	Useful for general business language	Needs human review for legal/accounting content

AI translation tools often struggle with the nuanced demands of Romanian-English business and legal communication. Below is a curated list of real-world examples that highlight where and how these tools fall short — and why human oversight remains essential.

Further examples:

1. False Friends:

Romanian-English “false friends” can lead to misleading translations:

- *Actual* → AI: “Actual” → Correct: “Current”
- *Eventual* → AI: “Eventual” → Correct: “Possible”
- *Sensibil* → AI: “Sensible” → Correct: “Sensitive”
- *Subiect* → AI: “Subject” → Correct: “Topic”

These errors are common in business reports and academic writing. Identifying false friends in translated contracts or emails is essential.

2. Legal Formality and Passive Structures:

- “*Se consideră că părțile au convenit...*”
→ AI: “It is considered that the parties agreed...”
→ Better: “The parties are deemed to have agreed...”

These emphasize the importance of legal register and passive voice in Romanian legal texts.

3. Tone and Register:

- “*Vă rugăm să ne transmiteți...*”
→ AI: “Please send us...”
→ Better: “Kindly forward the required documents.”

This is an example of how tone affects professionalism in business correspondence.

4. Idiomatic Expressions:

- “*A bate apa în piuă*” → AI: “To beat water in the trough”
→ Meaning: “To waste time”
- “*A fi cu ochii în patru*” → AI: “To have four eyes”
→ Meaning: “To be very vigilant”

5. Word Order and Syntax:

- “*Contractul, după cum știți, a fost semnat ieri.*”
→ AI: “The contract, as you know, was signed yesterday.”
→ Better: “As you know, the contract was signed yesterday.”

AI often preserves Romanian syntax, which sounds unnatural in English, so this is something that has to be double-checked.

6. Gender and Politeness:

- “*Stimată doamnă Popescu*”
→ AI: “Dear Mrs. Popescu”
→ Better: “Esteemed Ms. Popescu”

Gendered forms matter in Romanian. The issues of how English handles formality and gender differently.

7. Compound Prepositions and Legal Connectors:

- “*În conformitate cu prevederile legii...*”
→ AI: “According to the law...”
→ Better: “In accordance with the provisions of the law...”

Legal connectors require precision. Literal translations often weaken legal force.

8. Verb Nuance and Aspect:

- “*A se angaja să respecte...*”
→ AI: “Commits to respect...”
→ Better: “Undertakes to comply with...”

It is very important to highlight how modal verbs and legal verbs differ in nuance.

9. Business Titles and Role Descriptions:

- “*Şef Serviciu Juridic*”
→ AI: “Chief Legal Service”
→ Better: “Head of Legal Department”

10. Politeness Strategies in Requests:

- “*Am aprecia dacă ne-aţi putea transmite...*”
→ AI: “We would appreciate if you could send us...”
→ Better: “We would be grateful if you could kindly forward...”

11. Temporal Expressions and Legal Deadlines:

- “*În termen de 15 zile lucrătoare...*”
→ AI: “Within 15 working days...”
→ Better: “Within 15 business days...”

It is useful to clarify the difference between “working days” and “business days” in legal English.

12. Negation and Emphasis:

- “*Nu este exclus ca...*”
→ AI: “It is not excluded that...”
→ Better: “There remains a possibility that...”

Literal translations of negation often sound awkward or unclear.

13. Nominalization and Bureaucratic Style:

- “*Procedura de implementare a fost demarată...*”
→ AI: “The implementation procedure was started...”
→ Better: “Implementation has commenced...”

14. Subtle Modality and Hedging:

- “*Este posibil ca termenul să fie prelungit.*”
→ AI: “It is possible that the deadline will be extended.”
→ Better: “The deadline may be subject to extension.”

Legal English often prefers indirect, hedged phrasing.

15. Redundancy and Emphasis:

- “*În mod expres și fără echivoc...*”
→ AI: “Expressly and unequivocally”
→ Acceptable, but AI may drop one term or simplify to “clearly”.

Redundancy in Romanian legal texts is often intentional.

16. Embedded Clauses and Legal Precision:

- “*Contractul va fi considerat nul în cazul în care...*”
→ AI: “The contract will be considered void if...”
→ Better: “The contract shall be deemed null and void should...”

17. Gendered Language in Professional Titles:

- “*Avocată*” vs. “*Avocat*”
→ AI: “Lawyer”
→ Better: “Female lawyer” or “Attorney-at-law (Ms.)”

Gender visibility may be relevant in legal or HR contexts.

18. Calendar and Fiscal Terminology:

- “*Exercițiu financiar*”
→ AI: “Financial exercise”
→ Better: “Fiscal year”

A discussion on how financial terms differ across systems is necessary for a relevant translation choice.

19. Legal Connectors and Conditionality:

- “*Cu excepția cazului în care...*”
→ AI: “Except the case when...”
→ Better: “Unless...”

Legal connectors require idiomatic equivalents, not literal ones.

20. Business Acronyms and Institutional References:

- “*ANAF*”
→ AI: “ANAF”
→ Better: “Romanian National Tax Administration Agency (ANAF)”

Always explain acronyms for international audiences in a translation.

Conclusion

The integration of AI and MT in Romanian-English business communication offers a balanced proposition: while opportunities in speed, cost, and scalability drive innovation, limitations in cultural, legal, and privacy domains demand caution. Industry insights suggest that successful adoption involves training staff on AI tools, selecting domain-specific models, and implementing robust privacy protocols.

Future research should focus on customizing AI for less-resourced languages like Romanian, potentially through fine-tuned models that incorporate cultural datasets. Businesses can leverage these technologies for low-risk tasks while reserving human expertise for complex ones, fostering a symbiotic ecosystem.

AI and translation tools offer undeniable benefits for Romanian-English business communication, particularly in speed and cost. However, their limitations — especially in legal accuracy, cultural nuance, and data security — necessitate human oversight. The future lies in hybrid models where AI handles volume and humans ensure quality. As Mihai (2022) concludes, “AI is a powerful assistant, but not a substitute for professional judgment in multilingual business contexts”.

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STRUCTURAL DIVERGENCES AND POLICY CHALLENGES IN THE EUROZONE: A CRITICAL PERSPECTIVE ON ECONOMIC INTEGRATION

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Abstract

The relationship between economic ideas and the formulation of economic policies was built gradually, often through tensions and inconsistencies. In the 19th century, decisions about monetary architecture were still dominated by political considerations, not rigorous economic analysis. An early example is the Latin Monetary Union (1865–1927) created by France, Belgium, Italy and Switzerland, an international monetary coordination initiative conceived in the absence of a mature theoretical framework, dependent on an already unstable bimetallic system and plagued by institutional inconsistencies. It was in the next 20th century that such a relationship between theory and monetary construction could become more structured. The Bretton Woods international Conference (1944) represented an explicit attempt to found a new international monetary system based on modern economic principles. There was, at that time, John Maynard Keynes one of the main characters. In recent decades, internationally recognized economists such as Ronald McKinnon, Nobel Prize laureates, such as Robert Mundell (1999), Joseph E. Stiglitz (2001) or Paul Krugman (2008), became really active actors in the public debate on monetary integration, including on the functioning of monetary unions, much more obviously than their predecessors of the pre- and post-war generations.

This paper will attempt an analysis of the evolution of the relationship between theory and policy, focusing on the case of Joseph E. Stiglitz's contribution, a critical one towards the design and functioning of the euro and the Eurozone.

Keywords: European Union, Common currency, Monetary policy, Fiscal policy, Economic integration

JEL classification: F42, F43, F15, F45

1. Introduction

The adoption of the euro currency in end 1999 represented one of the most ambitious projects of European integration that aimed to consolidate the common market, reduce transaction costs and strengthen economic cooperation between the EU member countries. However, the 2008 global financial crisis highlighted important structural vulnerabilities of the Eurozone, particularly related to the institutional architecture, macroeconomic adjustment mechanisms and divergences between the participating economies.

The literature analyses such difficulties from diverse points of view, highlighting the tensions between the single currency and its yet week corresponding fundamentals' development. In such context, the contribution of Joseph E. Stiglitz (2016) proves relevant by fully questioning the strategy and policies of the Eurozone, not only in crisis, but first a kind of economic formation with a historically unprecedented status. This text is intended as more than a review of the Stiglitz' post-Nobel Prize paper. It is assumed as a starting point for a broader discussion on how the institutional design of the euro area influences the economic performance of member countries. Since the Nobel Prize winner's contribution aims to critically examine how the current architecture

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of European economic governance affects the ability of these member economies to respond to macroeconomic shocks, with a focus on the role of monetary policy, fiscal constraints, and the dynamics of intra-European economic divergences, we will try to here add some completions. Specific macroeconomic data and contributions on optimal currency areas theory are assumed to base our contribution, in its turn.

Central research question: *To what extent does the institutional configuration of the Eurozone generate or, on the contrary, amplify macroeconomic imbalances between economies and what types of institutional and governance reforms could contribute to reducing these structural vulnerabilities in the long term?*

The structure of this article is as follows: the *methodological* section describes the analytical approach and the sources used; the *results* section synthesizes the main structural elements of the euro area relevant to the issue under examination; the *discussion* section compares theoretical and empirical perspectives on possible reforms; and the *conclusions* highlight the implications for the future of European economic integration.

2. Methodology

As already mentioned above, our paper focuses on the critical analysis of the economic structures and monetary policies of the Eurozone made by another author. His ideas and arguments discussed are placed in the context of relevant economic theories, including economic integration, monetary policy and the critique of neoliberalism, thus providing a solid theoretical framework for their evaluation. That analysis includes own arguments and critical reflections, and contextualizes the historical developments of the Euro currency and area, including the global financial crisis of 2008. And the aim is to highlight the advantages, but especially limitations of the policies and strategies analysed, providing a well-argued and well-founded position on their impact on European monetary stability and integration.

3. Discussions

3.1. The diagnosis

The author considers, for his macroeconomic analysis, the economy's access to development related to full employment possibilities. And these appear stacked in the Eurozone region by, first, the single (euro) currency - i.e. (i) a single interest rate imposed to a whole multi-country region with different individual development scenarios; (ii) no internal money exchange rates among the region's member countries. And second, by the European Central Bank (ECB), i.e. an independent/autonomous central bank confiscating all power in the region about crediting from all other institutions (page 49), and especially from the member States' governments – i.e. both these were supposed to be true achievements before being identified as “handicaps” (Stiglitz 2016, page 19). This is weakening all banks in such a regard, here including the EU member States' central banks.

After a certain "euphoria" in the beginning of the eurozone's experience and of the new century, the capital was leaving banks of periphery and less developed countries- e.g. Greece - for the other centre (member) countries' banks naturally in search for better/ higher profits- e.g. Germany (page 20). Then, it is just this situation stacking some - i.e. periphery - countries' development. Unemployment will be favoured by both high interest rate – i.e. just one such rate - imposed from the “centre” and the resulted lack of credit. Businesses will be hit and their employees/ jobs threatened. Foreign credit - i.e. of course, first, the one between Eurozone member countries - will be called, so there will come into being some individual countries' indebtedness

against the others. On the other hand, the central / more developed countries in the Eurozone will face roughly the contrary: more capital (against the periphery countries), a better fitted interest rate for their home country areas, a converse/ better position as cross-country (international) creditors and less pressure on business and related employment. Or, despite that there might be not as high as 100% benefit for some eurozone member countries against the other, trend against the pre-designed European / economic "convergence" becomes obvious and sufferance accumulates, as the one of the in the whole region (page 71). Sufferance and sometimes even shortages of periphery countries' productions will transmit to their exports so making and enlarging trade and current account deficits in intra-region economies. The author here sees equally the theoretical/ technical equivalence between intra-region trade deficits and countries' (equally intra-region) indebtedness – i.e. to the other countries (Stiglitz 2016, p. 93-94).

But the very "negative character" of this Noble Prize author's story is the "Troika" - i. e. the European Central Bank (ECB), European Commission (EC) and International Monetary Fund (IMF) - with its (their) role in the "arrangement" about the region and its economic integration's episode started in the eve of the 21st century. And so that means "ideology" (so) badly involved in the story / development of the Eurozone, together with such facts and even more deeply than them. The Troika's ideology - i.e. here alleged as "neoliberal" - is the one leading to what makes Joseph Stiglitz the most highly allergic: the austerity (Stiglitz 2016, p. 113-114).

The austerity devolves directly from the Eurozone's convergence criteria – i.e. banning the (high) surpluses of national budget expenses over the budget revenue for fear of inflation –, while the less developed economies, by rule, stay in need of such overspending for ensuring development bases (Stiglitz 2016, p. 91-93). While the convergence criteria were intended to help the countries converge, and the austerity imposed was intended to reduce the fiscal deficit, typically, the effects were just the opposite", argues the author at page 74.

Besides being socially frustrating and unfair in context, the austerity is economically contractionary by both its own nature and (so) by its outcomes - i.e. to be expected. Greece, Spain and Ireland proven especially hit by the crisis and Greece in the first place, while a previous crisis of this last country had more easily been solved when there was no euro and with the help of the exchange rate tool operating. Stiglitz here adds to never being omitted: "From 1995 to 2000, not only did Ireland, Spain, and Greece grow much faster than Germany (with growth rates of 10.1 percent, 4.1 percent, and 3.6 percent, respectively), but so did France (2.9 percent) and Italy (2.0 percent). Germany grew at a rate of just 1.9 percent. Among those countries, Germany also placed second to last from 2000 to 2005 (when it averaged 0.5 percent)".

It is so proven, argues the author, that it was not the Greece's fault for what happened to her in this second decade of the current century (Stiglitz 2016, page 131).

Austerity is not only socially and economically wrong - i.e. democracy then comes into question, as well "16 years after the start of the eurozone, was the antithesis of democracy" (Stiglitz 2016, p 49-51, 216).

Since people in the region hadn't been asked to vote on his/her country joining the eurozone after the Maastricht Treaty (1992) – i.e. the aspect just hidden by that inauguration fast -, the time came significantly later on for Greece to equally accept the Troika's post-crisis programme basing on (the same) austerity accepted (pages 50-51). On the contrary, emphasises Stiglitz, a northern European country, which is Sweden (page 202), economically stronger than Grece and European Union member as well, still prefers to stay out of the Eurozone arrangement, and this as the result of two successive national referendums on such an option - i.e. both faces of economy and

democracy inside and outside the Eurozone so depicted. Moreover, the US and other non-Eurozone countries and developed regions did not feel the 2008 crisis effects as highly as the Eurozone did. at page 40 the author exposes the whole list of EU member countries that are not Eurozone member countries - i.e. all of these do look better than in the Eurozone area: Denmark, Sweden, UK, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, and Romania. The problem here is that these countries stay far from a common - i.e. “block” - attitude against the Eurozone, as might here result for the reader of this paper.

Actually, the whole picture of the intra-Eurozone austerity includes the opposite privileged positions of the centre countries, e. g. Germany (Stiglitz 2016, p. 143; 147; 158; 171-172; 221) - i.e. in the author’s view, a kind of Greece’s counterweigh in the area context, here including for her influence on the ECB’s general and especially political attitudes. It might be just this explaining the way austerity is addressed to Greece (Stiglitz 2016, p. 158) and other periphery countries, to their home small business affected and to their people unemployed and getting unemployed, especially the younger; all these while the Troika’s recovery programmes do prioritize the creditor banks’ capital recovery throughout the region. *“Germany is the big winner; much of the rest of the eurozone, especially the crisis countries, are the big losers; and the Eurozone as a whole has done poorly—the losses of the losers far outweigh the gains of the winner”* (Stiglitz 2016, p.221).

Or, as compared to the above openly declared ideology – i.e. the one of convergence criteria and afferent institutions, in the author’s view – there seems to be another part of the same ideology laying beyond: the one of banks’ and bankers’ mentality of success achieved when credit gets repaid (Stiglitz 2016, p.143;168) - i.e. this starting with the ECB, as “independent”, actually fully free of acting and dominant in the whole region (Stiglitz 2016, p. 49).

Austerity more or less being the result of the EU type integration in place, this is enough for characterizing and classifying the whole afferent strategy done as bankrupt (page 158) – e.g. the core Maastricht Treaty content aims are seen by the author reversed in their reality, from the economic development to economic convergence. Besides, a decade and a half already passed may not seem like a long time to other authors, but it is long enough not to expect any further setbacks from now on.

“The euro is just a 17-year-old experiment, poorly designed and engineered not to work”, concludes (Stiglitz 2016, p. 204). But finally, as required by the status of the Nobel Prize, the author does not stop at criticizing, but offers both his solutions to the problems exposed above - and we will return to them a little below - and, even before that, a kind of “outline” of his discourse, namely a series of limitations of the criticisms of the Eurozone and Europe. On short, the Eurozone must stay what it is and not be destroyed, as a project, and Europe ever keeps its own values as indestructible for her and for the whole world around (Stiglitz 2016, p. 222).

3.2. More about ideology

Stiglitz does not stop at facts described and criticized. He extends his discourse to the economic thinking. First, Troika is alleged for its “neoliberalism” regarding both the convergence criteria concept and the ECB’s dominant position in the region – and we’ll come back to these also below. Then, there comes the turn of the classic basics – here called “liberal” (Stiglitz 2016, p. 17) – on names of Adam Smith (Smith,1759) – e.g. especially for his explicit *“invisible hand...”* (Stiglitz 2016, p. 10) -, David Ricardo (Ricardo,1817) and/or Robert Thomas Malthus (Malthus, 1798).Or, despite that market did exist at these people’s time and does exist today, it was enough different at that time - e.g. rather no government in the economy of the 18th and 19th centuries and the international (inter-countries) economy was enough different than it is today . The

discourse about market and competition is different today than at that time either. As consequences, today it is about *market failures* – e.g. and here there also comes the story of “market bubbles” (Stiglitz 2016, p. 28) -, the same about interventionism and government in the economy all over. “*In much of the world, there is a growing understanding that the ideology of the right has failed*” (Stiglitz 2016, p. 218).

The „market bubble” might be exemplary for the real estate industry, but its description works as in principle for all industries. High prices of homes do attract investments in this business and that will develop this industry, its market supply and so prices down – as down as first enough acceptable for consumers, but so then pushing the enterprises to bankruptcy, here including for jobs destructing - i.e. and this is the crisis which’s long life stays specifically related to the long usage of the industry’s products and to their high costs. The author underlines that the liberal economic thinking refuses the „bubble” concept (Stiglitz 2016, p.28). Two aspects also to be here noticed. The first is the unwritten rule that the deeper the (macro)economic problem in analysis, the sooner one gets back to the basic question of economics: how much economic freedom, free enterprise and market competition (right-liberals), versus how much interventionism, policies of all kinds, government involvement in the economy and society, along with specific over-spending and higher taxes addressed to everybody (Stiglitz 2016,p.27-28).

The other aspect - i.e. the one already noticed so far in this text - is that beyond apparent allegations of neoliberalism for others, it is this author who does not hide his own opposite leftist views. Market isn’t to be neglected, but not to be expected as a solution to all problems encountered either (page 42). The government economic entity is a reality and a necessity (Stiglitz 2016, p. 37; 108,109) - e.g. its investments are complementary to the private ones, while its all spending sustains the aggregate demand and gets possibly able to here replace, one by one, the demand for exports or sometimes even the private and the foreign investments as well. “*The changing structure of our economy and society may well call for an increasing share of public expenditures*”, adds the author (Stiglitz 2016, p.218).

Full employment is equally and in context a virtue able to promote it as an essential aim for all about economic development (Stiglitz 2016, p. 52,53) and, of course, in the Eurozone that it is about in this paper. When full employment, production is most highly currently performing, while eliminating both the specific high costs for government and social, psychological and exclusion - i.e. opposite to cohesion -consequences for the people, related to unemployment - i.e. as in the Keynesian view, Stiglitz also keeps aware of no more possible investments in a *full employment* environment. He suggests that the eurozone could easy perform the economic growth of the US and the other areas in the post-crisis period, and this would be in all its member economies and territories. Nothing should replace full employment as the primary aim for Europe to stay developed and primarily to achieve its deserved welfare – e.g. especially not fighting inflation, nor the euro’s permanent stability.

3.3. Solutions to problems. „*Europe’s problems will not be solved without growth*” (Stiglitz 2016, p.184). Accordingly, full employment should be the basis of the Eurozone’s assumed recovery. This target should even replace the current stability of the euro (Stiglitz 2016, p.108). But it looks curious that this means that, despite the author’s criticism, all over this text, against the ECB, this is the one claimed for redirecting its competences onto full employment, besides inflation - i.e. as in the US Fed’s model. On the other hand, the ECB should” give something back” to member governments and their respective central banks in terms of policies -

e.g. monetary, but also others related to the full employment of the domestic labour force, first of all- e.g. the industrial policy (Stiglitz 2016, p. 103, 158).

The current monetary policy of the single euro and belonging to ECB will turn, where the case, into monetary policies of the region's member States that will gain back something of their former exchange rate manoeuvring and/or will use what the author calls foreign „trade chits” for repaying the exporters' activity results into remaking external balances (page 198).

„*Trade chits*” would be coefficients usually favourable to exports / exporters when repaying their transactions in euros to them by the monetary authority in the home currency. The procedure is typical to countries using multiple exchange rates due to not (yet achieved) home foreign exchange market in use.

The author also offers the ideas of „a flexible euro” and respectively turning the Eurozone into several currency areas as temporary (Stiglitz 2016, p. 205,206) – i.e. that could come back into a stronger currency area on a measurable horizon of time (Stiglitz 2016, p. 71). The current euro currency yet is wrong, not as an idea in itself, but for the series of circumstances starting with being illegally imposed to the nations involved and ending with a large lack of adequate institutions and economic conditions needed for – e.g. the general development of the region, once more. Here the author also gives the Swedish again, i.e. for people democratically rejecting the euro currency.

In context, Stiglitz stays confident in the EU Organization and so he recommends a concomitant strengthening of its Institutions - e.g. the European Investment Bank (EIB), for its re-capitalizing in favour of countries in need of development and investments, but national development banks' foundation is also suggested besides by the author. Crediting might be the next factor of recovery in a multi-country region suffering from lots of capitals moving away from less developed countries - i.e. to the others. The Eurozone's current banking system so must be reconsidered from several points of view- i.e. from re-powering the national central banks to, on the contrary, adjusting the power of banks against the other companies in the area and, from this, to both keeping the capital where needed and re-directing it to home businesses, first of all to small and medium size enterprises (SME). Here the US banking system model once more, in its turn.

Capital should stop moving away so quickly from its home country- i.e. suggested by the author as together with labour, its skills and even technology migration on the same path (Stiglitz 2016,p.103) - just as home commercial banks should not be overrun by international ones through their local branches, the same for relationships between multinationals and the home SME sector- i.e. the national decision-makers should be really back on their seats. A banking union - i.e. with its three provisions taken together: (1) deposit insurance, (2) common regulations and (3) a resolution procedure - comes to be one of the essential suggestions of JE Stiglitz for the Eurozone (Stiglitz 2016,p. 96,97) - i.e. all banks working in the region would be secured, first, by being registered / databased and classified and their liquidity would be better managed in context. Besides, a common bank deposit system throughout the region and some form of common borrowing, such as the Eurobond, would be welcome (page 29).

The idea is that rejecting austerity comes as synonym with a higher liquidity needed by / in the economy (Stiglitz 2016, p. 122) - i.e. the author here promotes the concept of “quantitative easing”: all secondary technical procedures-instruments - e.g. usually, valuable / negotiable papers / titles - that could be used in such an aim by central banks / monetary authorities. Financial markets - i.e. besides crediting and banking - might, in context, come under control themselves, and that at the European level, while some great potential inefficiency in having „duplicative regulatory regimes” in cases of differentiation of specific „sensitivities” in different countries. These would replace the neoliberal belief that it could be just market that makes the competition and „real-

objective economic laws”, connections and rules - i.e. „stuff happens” on market, writes the author; market is formed by real entities, including banks, and their relationships amongst; banks, including central banks, stay in the likelihood of the financial market’s influence - i.e. instead of here admitting the central bank’s „purely technical” description of what it does for the monetary policy. Indebtedness also lies in the conceptual vicinity of banks, crediting and even financial markets, but here it is the Eurozone itself, according to Stiglitz, that equally associates it to the intra-Zone trade balances that apparently comes specifically closer to the real economy - e.g. to exports and imports, to productions and productivity, to division of labour and so on. While referring to what he believes most clearly demonstrates the failure of the Euro project-e.g. regarding the convergence - the author indicates, as primary solution, the review and management of the surpluses of external balances in the area- i.e. on the centre / developed economies’ side, while, states the author, all such pluses are supposed to drag their corresponding minuses (of partner countries) after. On the fiscal side, the individual debt requires to get identified and so followed directly on individuals, together with their possible migration throughout the whole region or even off. Creating euro-bonds - i.e. common regional obligations in favour of individual countries in difficulty - would be a direct solution that, according to the author, would then help the indebted country to pay lower interests and debt services in favour even of a further presumable expansionary fiscal policy (Stiglitz 2016, p. 100,101).

Despite these, Europe still keeps far from the US federation case, in which member States might (since theoretically) even get depopulated by emigration with no consequences on them or on their migrant individuals - e.g. No one in Europe can ever imagine the complete depopulation of Greece and the spread of its citizens to other European countries. where they could so live at their best together with the other nations. Back to investments, from above – i.e. in which, for the sake of generalized development and growth, there would be involved the ECB, EIB, national governments and central banks, together with commercial banks – the author argues besides for the complementarity between private and public investments (Stiglitz 2016, p. 102) - e.g. the latter in the infrastructure of all kinds – and for what he calls automatic stabilisers (Stiglitz 2016, p. 173,174). In such a concern the author reiterates the example of “flexible exchange rates” – i.e. that has been lost in exchange of the euro and Eurozone –, contrary to “stringent enforcement of capital adequacy standards for banks”, here found as “an automatic destabilizer”.

Last, but not least, the Eurozone convergence criteria are to be changed according to the above new requirements in the area and to what the author notes as „*a common framework for stability*” (Stiglitz 2016, p. 170,171).

A brief synthesis of structural reforms proposed by the author comprises: 1) a banking union; 2) mutualization of debt; 3) a common framework for stability; 4) toward a structural realignment – a true convergence policy; 5) macroeconomics - a Eurozone’s structure that promotes full employment and growth in the whole Europe; 6) a commitment to share prosperity.

3.4 Criticism

Last, but not least, let us recall - i.e. together with the Stiglitz’s interesting opinions - the very current aspects related to the euro currency and to the afferent European Central Bank (ECB). That the euro currency is here under discussion, with its present and its future, it comes directly from the title of this highly distinguished author’s paper. Or, let us explain how just we see a possible suspension of the European common currency - i.e. so beloved by JE Stiglitz. This would come hand in hand with the other two suspensions - i.e. that of the Eurozone in the total EU area for no more distinction among these Union’s member countries, and that of the ECB’s activity - i.e. at least partly. The final results here might be the shift from the ECB’s and Germany’s

privileges to a Germany's renewed „responsible hegemony” - i.e. as already de facto and in the McKinnon (1993)'s view. A new situation that might finally compete for a new economic development of the region also basing on new possibilities of the rest of countries' regaining some monetary, industrial and other policies. A new development and possible convergence remade in the area might clear the way for a future taking over of the euro (new euro) currency - i.e. in a presumably more proper economic and political moment, but not too much differently than previously, in 1999.

On the contrary, whether not possible such experience, the integration will see itself forced to go on towards *the federative state formula* through the fiscal union approach and more political integration - i.e. no more with a so strong and no democratic ECB and a so weak EU government.

4. Conclusions

Last but not least, alongside Joseph E. Stiglitz's insightful views, it is important to recall the ongoing and relevant issues concerning the euro currency and the role of the European Central Bank (ECB). That the euro currency is here under discussion, with its present and its future, it comes directly from the title of this highly distinguished author's paper. Or, let us explain how we see a possible suspension of the European common currency - as passionately discussed by Stiglitz. This would come hand in hand with the other two suspensions – i.e. that of the Eurozone in the total EU area with consequence of no more distinction among these Union's member countries, and that of the ECB's activity - i.e. at least partly. The final results here might be the shift from the ECB's and Germany's privileges to a Germany's renewed „responsible hegemony” the above McKinnon's way. A new situation that might finally compete for a new economic development of the region also basing on new possibilities of the rest of countries' regaining some monetary, industrial and other policies. A new development and possible convergence remade in the area might clear the way for a future taking over of the euro (new euro) currency – i.e. in a presumably more proper economic and political moment, but not too much differently than previously, in 1999. On the contrary, whether not possible such experience, the integration will see itself forced to go on towards the *federative state* formula through the fiscal union approach and more political integration - i.e. no more with a so strong and not democratic ECB and a so weak EU government.

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ANALYSIS OF THE COMPANY'S PROFITABILITY USING THE RATE METHOD

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Astract:

Return ratios show the netoperating result of the combined effects of liquidity, asset management and debt management. The usefulness of these ratios is justified by the fact that they enable comparisons between companies in terms of certain industry averages or averages by certain fields of activity, aswell as time comparisons for the same company.

Assessing the quality of the company's financial activity requires comparing the indicators at different balance sheet closing dates, or comparing them at the same date with the indicators of the efficient enterprises from the same field of activity. The inventory assessment and the depreciation methods can distort the comparisons between companies; thus, if working with rented equipment, based on leasing contracts, in the accounting records the assets have a lower value than the sales, due to the fact that the leased equipment is not included in the balance sheet and the obligations associated with the leasing contract may not appear as debt. Thus, both the asset turnover and the leverage ratio are improved artificially.

The return on assets and, consequently, the return on capital employed are affected by the variability of the profit or loss, thus the risk faced by the company. Financial risk, resulted in increased vulnerability of the treasury, increases economic risk and generates difficulties regarding the company's solvency, meaning that it increases the risk of insolvency.

The increased complexity of the current business environment generates new strategic stakes relative to the performance of the enterprise, the central objective of its management being to achieve the level of efficiency and competitiveness that will ensure its penetration into the world market. In order to survive and prosper in the new globalized economy, enterprises must improve their performance and in this context, it is necessary, first of all, to analyze the factors generating performance and the effects exerted by these human, strategic, conjunctural, structural and technological factors on the efficiency of the economic activity of the enterprise and, secondly, to identify ways to improve performance.

The objectives of the enterprise's performance target several levels: the individual (worker, consultant, decision-maker), the work group (team, administrative unit), the organization (enterprise). At the same time, performance can be approached from multiple perspectives: functional (marketing, production, accounting and finance) and process (supply chain management, customer relations, innovation management). Performance can be measured quantitatively (financial results, productivity indicators) or qualitatively (strategic flexibility).

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In economic terms, flexibility expresses the company's ability to adapt to changing environmental conditions, taking into account the fact that the main challenge for the company's survival is its permanent adaptation to changes, namely the reduction of global risk.

The most relevant way of expressing the company's performance level consists in comparing the effects of the results with the efforts made to obtain them. Measuring the entity's financial performance through the rate system therefore represents a form of synthetic measurement of the efficiency of economic activity by evaluating the ratio between effect and effort and involves the use of profitability rates in this regard.

Performance criteria are increasingly numerous and depend strongly on the observer's perspective: the shareholder, the employee, the customer or other interested parties. A company is performing if it satisfies the interests of all its partners, each category of business partners being concerned with quantifying the company's performance through specific indicators that are significant for the manner in which the results obtained by the company meet their expectations:

- the company's owners are interested in the ratio between the profit of a given period and the capital employed in that period, a significant indicator in this regard being the financial profitability rate (Return on equity). The shareholder pursues sustainable growth, thanks to solid risk management and special attention paid to each stakeholder.
- the company's manager is concerned with the level of profitability of the capital employed in current activities; the profitability of the total capital employed (global profitability rate) being significant in this regard. It prioritizes the efficiency of procedures and guarantees profitable growth for the shareholder. It offers its customers a good quality-price ratio.
- financial institutions assess the attractiveness of financial investments in the company based on the profitability of borrowed capital.

Performance criteria and their evaluation may also vary for the same stakeholder, depending on societal expectations, the level of competition and, more generally, the company's context. Table 1 provides some examples in this regard.

Table 1 Performance criteria for stakeholders

Shareholders' expectations	Growth	Profitable growth	Sustainable growth
Customer expectations	Performance-price ratio	Quality-price ratio	Global and personalized service
Employee expectations	Equity and social protection, employment	Job retention	Development
Third party expectations	Regulatory compliance	Transparency	Sustainable development

In Bernard Colasse's understanding, profitability reflects the company's ability to achieve a result and is measured by the ratio between this result and the company's investment. Profitability indicators expressed in relative amounts complete the company's financial diagnosis and facilitate comparisons over time and space and in relation to certain standards.

Operating return ratios

The efficiency of economic capital used in productive activity is expressed using the rate of return on assets, also known as the rate of return on investments, which allows the evaluation of the performance obtained within the current activity (production and commercial), by reflecting the efficiency of operational management:

$$ROI = \text{Profit} / \text{Total assets}$$

In financial practice, economic profitability is usually expressed in terms of the economic capital (assets employed in the operating process and the necessary operating working capital). The most commonly used models for calculating the economic return ratio are:

- *Return on economic capital employed:*

$$Re = EBE / \text{Economic capital}$$

$Re = \text{Operating profit} / \text{Economic capital}$
Gross operating surplus = (Added value + Operating subsidies) - (Personnel expenses + Taxes and similar liabilities).

A gross operating surplus that is large enough will enable the company to renew its assets through depreciation, to cover the risks based on provisions and to ensure its financing.

- In case the assets include the depreciation and provisions, we use the gross economic capital; otherwise, we use the net economic capital. *The gross and net economic return ratios* are determined based on the gross and net operating profit or loss:

$$\text{Gross } Re = EBE / \text{Operating profit}$$

$$\text{Net } Re = \text{Operating profit} / \text{Net economic capital}$$

Gross economic return ratio measures the ability of the economic capital to ensure capital renewal and its remuneration. Gross economic return is used for comparisons between companies as it is not affected by the decisions regarding depreciation.

The assessment of the capital employed at the net value regards a patrimonial approach, based on current values from the financial theory. If it is not possible to determine a market value of the assets, the net book values, updated for inflation, are to be used.

- *Return on capital employed :*

$$Re = EBE / i + (Ct + Cs) / Kr$$

Kr = working capital turnover ratio, i = assets;

Ct = third party expenses; Cs = personnel expenses.

- For the enterprise to be able to fully benefit from the efforts made for the proper development of the activity, economic profitability must be higher than the inflation rate. The economic return ratio must ensure the remuneration of the capital employed in real terms at the level of the minimum return ratio in the economy, namely the average interest rate, and must cover the economic and financial risk of the investors, shareholders or creditors. In the context of increased inflation, which characterizes the Romanian economy, the *real economic return* (Rr), calculated using the Fisher formula, is substantially lower than the nominal return (Rn).

$$Rr = (Rn - Ri) / 1 + Ri$$

For inflation values within normal limits (below 10%), the real rate is determined as follows:

$$Rr = Rn - Ri$$

The previous relationship can be broken down into two components to highlight the influencing factors of the economic rate of return:

$$Re = EBE / \text{Turnover} \times \text{Turnover} / \text{Economic capital},$$

Gross margin ratio RMB = EBE / Turnover, quantitative factor that influences the economic

return ratio

Capital turnover ratio $RCE = \text{Turnover} / \text{Economic capital}$, qualitative factor that influences the economic return ratio

The relationship highlights that there are two strategies for increasing the economic rate of return:

- high gross margin, therefore high price policy and low sales volume or
- low price policy correlated with accelerated capital turnover and a large sales volume.

Table 2 is prepared based on data taken from a company's balance sheet and systematizes the data used to calculate the economic rate of return.

Table 2 Determining the economic rate of return of a company for the period 2022-2024 (RON)

Indicators	2022	2023	2024
Gross assets	1182536	6518280	7673804
Net assets	1064253	6003625	6656775
Current assets	1079783	1628353	2263286
Total revenues	1203941	2611421	4102826
Total expenses	1094545	2394354	3854149
Equity	1402813	6457140	7751068
Value added	533870	1202510	2470789
Personnel expenses	424313	1012828	1477875
Taxes	31645	47538	63298
Net profit	54815	86705	526142
Gross operating surplus (EBE)	77912	142145	929617

Table 2 shows the breakdown of the company's economic profitability indicator.

Gross economic return (in nominal terms) = $EBE / (\text{Gross assets} + \text{Necessary Working Capital})$

Net economic return (in nominal terms) = $EBIT - \text{Earnings before interest and taxes } (1-t) / AE0$

$EBIT = \text{Total revenues} - \text{Total expenses (except interest and current income tax)}$

$AE0 = \text{Net assets} + \text{Necessary Working Capital}$

Table 3 Economic return ratios for the period 2022-2024

Indicators	2022	2023	2024
Gross economic return:	0.028	0.039	0.123
- In nominal terms	-0.312	-0.028	-0.121
- In real terms			
Net economic return:	0.062	0.071	0.087
In nominal terms	-0.03	-0.25	-0.09
In real terms			
Gross economic return, decomposed into:	0.031	0.047	0.197
Gross margin ratio	0.912	0.829	0.624
Capital turnover ratio			

Gross economic return, decomposed into:	0.082	0.093	0.209
Value added margin ratio (a)	0.871	0.682	0.612
Fixed assets productivity (b)	0.392	0.615	0.961
Level of capital immobilization (c)			

Nominal gross economic return is characterized by an upward trend during the period 2022-2024; in real terms, this trend is due to high inflation. The nominal growth from 2,8% to 12,3% is due to the increase in the gross margin and the capital turnover slowdown. Fixed assets productivity is characterized by a downward trend; however, this trend is balanced by the significant increase in the value added margin and the level of capital immobilization.

The slow growth in the net economic return compared to the gross return is explained by the influence of the depreciation expenses and the interest on the gross operating surplus. The results of the analysis are presented in table 3.

Table 4 Highlighting the factors that determine economic profitability

Indicators	%
Economic return in 2024 year (R_{e1})	3,9
Economic return in 2023 year (R_{e0})	2,8
The variation of the economic return ratio (ΔR_e) due to:	1.1
• The influence of the gross margin ratio (ΔR_{MB})	1,46
• The influence of the capital turnover ratio (ΔR_{CE})	-0,36

$$R_e = R_{MB} \times R_{CE}$$

$$\Delta R_{MB} = (R_{MB1} - R_{MB0}) \times R_{CE}$$

$$\Delta R_{CE} = (R_{CE1} - R_{CE0}) \times R_{MB1}$$

From table 4 it results that economic profitability can be increased by accelerating the asset turnover or by increasing the margin.

These two options are being turned to advantage by the managers in different ways, depending on the object of activity of each enterprise. Thus, the sphere of distribution is characterized by a higher margin ratio (10-14%), while the asset turnover ratio is lower (2-3 rotations/year); in the field of commerce, the situation is reversed, meaning that the low margin (1-2%) is offset by a quick asset turnover (7-8 rotations/year).

The results of the factorial analysis of the economic profitability show that during the period 2022-2024 the economic profitability of company had an upward trend, although it had little significance in terms of value (2,8% in year 2022 and 3,9% in year 2023). This can obstruct the company's possibilities to meet both the shareholders' expectations, which have to be remunerated for their risk capital, as well as the company's requirements in terms of economic growth.

The 39.29% increase in gross margin in 2023 compared to the previous year resulted in a 39.29% increase in gross margin in the same period.

The decrease in the capital turnover had a negative impact on the economic profitability (the economic return ratio decreased by 0,36%); the influence of this factor was surpassed by the positive effect of the gross margin. In order to ameliorate the negative influence, it is necessary to accelerate the capital turnover by:

- optimizing the structure of the economic capital
- reducing the duration and cost of investment in progress
- reducing the claims and the average collection period
- reducing the inventories and the duration of the manufacturing cycle for the work in progress

In this context, the conditions for improving the economic rate of return can be systematized as follows:

$IEBE > IVA$, increasing the share of the gross operating surplus in the value added

$IVA > IAF$, increasing the value added obtained for the value unit of the fixed assets

$IAF > ICE$, the growth rate of the fixed assets must be higher than the modification of the capital employed.

Margin rates are significant financial indicators for the company's profitability level and show the share of profit in the company's total revenue after covering costs (gross, net, operating). They reflect the company's operational efficiency and its ability to generate profit from sales.

The commercial margin ratio expresses the commercial profitability of the company; it is used for comparisons between companies from the same area of activity or from different areas.

Commercial margin ratio = (Sales of goods - Purchase price of the goods sold)/Sales of goods

Sales of goods - Purchase price of the goods sold = Commercial margin

⇒ Commercial margin ratio = Commercial margin /Sales of goods

The commercial margin rate is an indicator of the commercial strategy promoted by the company.

Gross operating surplus ratio reflects the ability of the operating activity to generate profit and shows the level of the gross operating profit or loss independently of the incidence of the company's investment, financial or fiscal policy.

$REBE = \text{Gross operating surplus} / \text{Turnover}$

An increase in this rate indicates an increase in productivity, provided that it is not the consequence of an increase in the commercial margin ratio. A decrease in this rate under conditions of a constant commercial margin ratio highlights the increase in operating costs.

Companies with rapid technological processes that make sustained investment efforts are concerned with increasing gross operating surplus in relation to value added.

The gross operating surplus rate after financial expenses reflects the impact of external financing on the enterprise.

$RRE = \text{Operating profit} / \text{Turnover}$

The operating profit rate highlights the efficiency of operating activity in industrial, administrative and commercial terms.

The *net margin ratio* expresses the overall efficiency of the enterprise, its ability to achieve net profit and to withstand competition.

$RMN = \text{Net profit} / \text{Turnover}$

The net margin indicator does not require prior data processing and is successfully used for small businesses for short periods of time due to the fact that net profit is not exclusively the result of operational activity, financial and exceptional operations also contribute to it.

The *self-financing margin ratio* is characterized by low sensitivity towards the firm's depreciation policy, compared to the net margin ratio.

$RMAF = \text{Self financing capacity} / \text{Turnover}$

The self-financing margin ratio measures the surplus of resources in the control of the

enterprise for its development and the remuneration of the capital contributors.

The operating cash surplus indicator reflects the monetary surplus resulting from operational activity, surplus used for enterprise development, mandatory expenses, shareholder remuneration, and repayment of borrowed capital.

In table 5 we systematized the beneficiary margin ratios and return on assets ratios of company during the period 2022-2024.

Table 5 Beneficiary margin ratios and return on assets ratios of company during the period 2022-2024 (%)

Indicators	2022	2023	2024
Degree of vertical integration (VA/CA)	44,44	46,08	60,24
Degree of external dependence (CA/VA)	2,25	2,17	1,66
Gross operating surplus ratio ($REBE = EBE/CA$)	6,47	5,44	22,65
Net margin ratio ($RMN = \text{Net profit} / CA$)	4,55	3,32	12,82
Self-financing margin ratio ($R^{MAF} = \text{Self-financing capacity} / CA$)	7,78	8,03	11,65
Return on investment ratio ($ROI = \text{Operating profit} / \text{Total assets}$)	2,15	2,81	4,26
Operating profit ratio (Operating profit / CA)	6,51	5,40	10,39
• Asset turnover ratio (CA / Total assets)	0,33	0,52	0,41
Return on assets ratio ($ROA = \text{Net profit} / \text{Total assets}$)	1,51	1,71	5,07
Net margin ratio ($RMN = \text{Net profit} / CA$)	4,55	3,32	12,82
Asset turnover ratio (CA / Total assets)	0,33	0,52	0,39

The decrease in the degree of external dependence can be observed (from 2.25% in the 2022 financial year to 1.66% in the 2024 financial year). The upward trend of the self-financing margin ratio reflects the company's low debt level.

The self-financing margin ratio had an upward trend in the period 2022-2024 due to the fact that the growth rate of self-financing capacity was higher than the growth rate of turnover. The increase in resources available for shareholder remuneration is noted, a fact also highlighted by the increase in the gross operating surplus after interest ratio.

The company's overall efficiency is expressed by the net margin ratio which increased during the analyzed period, the company using the increase in selling prices to cover increasing costs;

The return on investment (ROI) ratio shows an upward trend, meaning that it increases during the 2023 financial year compared to the previous year from 2.15% to 2.81% and to 4.26% during the 2024 financial year, the evolution being influenced by two factors:

- operating profit or loss ratio
- asset turnover ratio

In the 2023 financial year, the relative decrease in total asset turnover was outpaced by the significant increase in operating profit.

In the 2024 financial year, the relative increase in return on investment (ROI) is observed by 51.6%, an evolution due to the increase in operating profit cumulated with the relative increase in the asset turnover ratio.

The efficiency of using the return on total assets (Return on Total Assets) records a similar evolution: the downward trend in 2023 compared to the previous year is explained by the change in the same direction of the net margin indicator (due to the increase in the asset turnover period) and the asset turnover indicator.

During the 2024 financial year, the unfavorable effect of the increase in the asset turnover period is offset by the significant increase in the net margin (from 4.55% to 12.82%), the consequence being the increase in the return on assets indicator from 1.51% to 5.07%.

At this company, the values of the return on assets indicators exceed the industry average of 3%, a fact explained by the high profit margins in relation to turnover that neutralize the negative effect of the low efficiency of asset use at the company level (0.33 in 2022, 0.52 in 2023 and 0.39 in 2024).

Financial Return Ratios

Financial return ratios express the company's ability to generate net profit through the equity employed. In the case of joint stock companies, return on equity is expressed using the following model:

The net financial return $R_f = \text{Net profit} / \text{Equity}$ or

The return on equity (the profitability of the shareholders' placement in the shares issued by the company) $R_f = \text{Dividends} / \text{Equity}$

Financial profitability rewards shareholders in the form of dividends at the end of the financial year or by increasing reserves due to the fact that their incorporation into the capital determines the increase in the intrinsic value of the shares.

If, in addition to equity, the invested capital also includes medium and long-term loans, then financial profitability is determined according to the relationship:

Financial return on permanent capital = Net profit / permanent capital

The source of invested capital, which varies depending on the financial structure of the company, influences the size of the financial profitability indicator.

To highlight the factors that influence the return on equity of the company, we will use the following relationship:

$$R_f = (\text{Net profit} / \text{Turnover}) \times (\text{Turnover} / \text{Equity})$$

$$\Rightarrow R_f = RMN \times RCP$$

RMN = net margin ratio

RCP = equity turnover

$$R_f = (\text{Net profit} / \text{Turnover}) \times (\text{Turnover} / \text{Total assets}) \times (\text{Total liabilities} / \text{Equity})$$

$$\Rightarrow R_f = RMN \times RAT \times RIG$$

Total leverage ratio $RIG = \text{Total liabilities} / \text{Equity}$

$\Rightarrow$ financial profitability = economic profitability $\times$ total leverage ratio

Therefore, financial profitability is influenced by the following factors:

- quantitative factor - net margin ratio that measures the company's profitability, an essential indicator of the company's industrial policy
- qualitative factor - total asset turnover, an important indicator of the company's commercial policy
- qualitative factor - total debt ratio, an indicator that highlights the company's financial structure.

$$RIG = \text{Total liabilities} / \text{Equity} = (\text{Equity} + \text{Total debt}) / \text{Equity} = 1 + L_f$$

Lf is the financial leverage of the company's debt. The multiplier effect of this shows that loans represent a financial leverage effect that influences the profitability of the company's equity. The higher the financial rate of return compared to the average market interest rate, the more investments in that company become compared to bank deposits, because the amount that exceeds the interest rate is proportional to the risk premium brought to the investor by the company's economic environment.

The profit used to determine economic profitability in English literature is called gross surplus before interest and taxes (EBIT – earnings before interest and taxes) and is calculated as follows:

$$EBIT = \text{Total revenues} - \text{Total expenses (excluding interest and income tax)}$$

$$\Rightarrow Re = EBIT (1-t)/AE0, \quad t = \text{average income tax rate}$$

The results of the factori al analysis of the financial return ratio are presented in table 6.

Table 6 The financial profitability of the company and its influencing factors during the period 2022-2024

Indicators	2022	2023	2024
Return on equity (%) ($R_f = R_{MN} \times R_{CP}$)	1,53	2,51	1,92
Return on equity, decomposed into:	4,55	3,32	12,82
Net margin ratio (RMN)	0,33	0,76	0,15
Equity turnover (RCP)			

The upward trend in the financial profitability from 1,53% to 1,92% reflects the high degree of equity capitalization during financial year 2024 equity; this influence will be explained in detail within the chapter regarding the analysis and assessment of financial risk. Despite its upward trend, the financial return ratio is lower than the interest rate in the money market.

Positive financial leverage generates a large part of the return on shareholders' invested funds. A favorable economic context characterized by fiscal relaxation and lower interest rates leads to higher returns on these shareholders' capital. At the same time, a higher return on equity is sustainable in the long term to the extent that it is the result of an optimal capital structure and oriented towards investments in assets with a high operating profit margin capable of outstripping financial expenses and taxes.

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RECENT DEVELOPMENTS IN PUBLIC SPENDING IN ROMANIA AND THE NEED TO REDUCE THE BUDGET DEFICIT

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Abstract

Our country has only rarely experienced periods in which the budget deficit has fallen within the Maastricht criteria, but now we are moving further and further away from it. The fiscal measures adopted to increase budget revenues, in particular the VAT increase, have not brought about the expected balance and have even increased the tendency towards tax evasion. In the future, growing public resource needs, especially to cover pensions and investments in national defense, will only accentuate the public deficit. Therefore, this paper proposes a realistic analysis of the situation of public spending this year and in the future.

Keywords: *taxation, fiscal policies, public expenditures, public revenues*

JEL Classification: *E60, E62, E63*

The importance of public spending in the economy

Public spending is one of the fundamental pillars of the economic and social policy of any modern state and represents the totality of payments made by public authorities from resources mobilized through various financial means—mainly tax revenues, domestic and foreign loans, but also other legal sources—with the aim of satisfying collective needs.

Public spending, as an integral part of the distribution function within public finances, comes into play after public funds have been established.

Public expenditure expresses economic and social relations in monetary form, which manifest themselves between the state, on the one hand, and natural and legal persons, on the other, when the state's financial resources are distributed and used for the purpose of fulfilling its functions.

The concept of "*public expenditure*" is closely linked to the fundamental functions of the state. In modern economic theory, state intervention in the economy is justified by the existence of public goods, the need to correct market imbalances, and to ensure a fair distribution of resources.

The definition of public expenditure differs slightly depending on the perspective from which it is approached:

- the economic perspective sees it as a form of redistribution of financial resources in the economy;
- the legal perspective considers it to be legal obligations assumed by the state to fulfill functions provided for by the Constitution and laws;
- the social perspective associates it with a mechanism for ensuring general welfare and social balance.

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The perspectives from which the importance of public expenditure can be analyzed are as follows:

1. *Economic perspective* – public spending influences the level of aggregate demand, investment, employment rates, and, implicitly, gross domestic product (GDP). For example, public investment in infrastructure stimulates related sectors such as construction, materials industry, and transportation.
2. *Social perspective* – it ensures the population's access to essential public services (education, health, social protection). Without this spending, a large part of the population would be excluded from these services for financial reasons.
3. *Political and strategic perspective* – public spending can be directed towards long-term development goals (e.g., digitization of administration, energy transition) or strategic priorities (national defense, cybersecurity).
4. *Administrative perspective* – it ensures the functioning of public institutions, the payment of staff, and the maintenance of administrative infrastructure.

In Romania, the period 2020–2024 demonstrated the importance of these functions, particularly in the context of the COVID-19 pandemic and the energy crisis, when the state was forced to adopt support programs for the population and the business environment.

According to data from the Ministry of Finance, between 2023 and 2025, Romania's public expenditure averaged 39–41% of GDP, a level comparable to that of other Eastern European EU member states. The trend is one of moderate growth, fueled by projects financed by European funds and increased social spending.

Public spending is the second stage in the allocation of public finances. It reflects economic and social relationships, expressed in monetary terms, that arise between the state and various entities—individuals or legal entities—in the process of distributing and using state financial resources. Its main purpose is to support the functions of the state.

Public expenditure takes the form of payments made by state authorities to achieve the objectives set out in public policies, such as the provision of public services, support for social and cultural areas, national defense, maintenance of public order, or stimulation of economic activity.

The total volume of public expenditure, as well as how it is allocated by category of destination and group of beneficiaries, is determined by the need to satisfy collective interests and needs.

Public expenditure policy refers to the use of budgetary instruments to influence macroeconomic variables (balance of payments, inflation, GDP per capita). The budgetary instruments used include subsidies, transfers, and loans.

The state's public expenditure policy establishes, on the one hand, the optimal size, destination, and structure of public expenditure so that it meets the objectives to be achieved in a given period and specifies the ways, methods, and instruments to be used to commit a minimum of financial effort.

The dimensioning of public expenditure consists of establishing the total volume of public expenditure required. Determining the destination of public expenditure requires starting from the priority social needs that must be met using public financial resources. Objectively identifying the options and priorities characteristic of each stage can influence the pace of economic growth and the degree to which living needs are met.

2. Analysis of the level of public expenditure in Romania

The distribution of state budget expenditure is based on its importance and urgency. Factors contributing to the increase in budget expenditure include demographic growth and the population's growing demands for public services at the level of society, increased military spending, the growth of the state apparatus, the development of the network of public institutions (education, health, and culture), the organization and development of the insurance, social assistance, and social protection systems, economic recession, infrastructure development, and the occurrence of unforeseen events.

Depending on their purpose, public budget expenditures are divided into sectors of activity as follows: expenditures for education, health, culture, social protection, expenditures for the national economy, etc. The legal grouping of public expenditure by category is mainly carried out through annual budget laws and, secondarily, through other normative acts that provide for special financing resources.

In simpler terms, budget expenditures consist of payments made by the state from budget revenues for the purchase of goods or the provision of services necessary to achieve state policy objectives.

According to the budget execution published by the Ministry of Finance, between 2023 and the first half of 2025, the structure of public expenditure in Romania was as follows:

- social protection – between 38% and 40% of the total;
- general public services – 13–14%;
- health – 10–12%;
- education – 9–10%;
- public order and defense – 8–9%;
- infrastructure investment – 6–8%.

The share of public expenditure in GDP ranged between 39% and 41%, which places Romania close to the regional average, but below the EU-27 average, which is close to 48%.

An important element of the analysis of public expenditure is the link between it and the level of social welfare. Increased spending in areas such as health and education leads, in the long term, to improved human capital and increased economic competitiveness. However, inefficient allocation can lead to waste of resources and negative effects on economic growth.

- *Road and rail infrastructure* – in 2024, Romania allocated over 24 billion lei for motorway and railway modernization projects, partly financed by the PNRR and EU cohesion funds.

- *Education* – funding for pre-university and university education ensures free or subsidized access to education, reducing social inequalities.

- *Public health* – investments in regional hospitals, diagnostic centers, digitization of the single medical record.

- *Pensions* – represent over 25% of the consolidated general budget expenditure.

- *Social assistance* – for low-income families, people with disabilities, and the unemployed.

- *Subsidies* – for energy, transport, agriculture, with the aim of keeping prices affordable.

In 2024–2025, social spending increased, mainly due to the increase in the pension point and the expansion of support programs to compensate for energy prices.

- *COVID-19 pandemic* (2020–2021) – support packages for SMEs, technical unemployment, investments in the healthcare system.

- *Energy crisis* (2022–2023) – energy price caps, subsidies for suppliers and vulnerable consumers.

- *Post-pandemic period* (2024–2025) – stimulating public investment to counteract the effects of falling external demand and global inflation.

3. Budget deficit and public debt

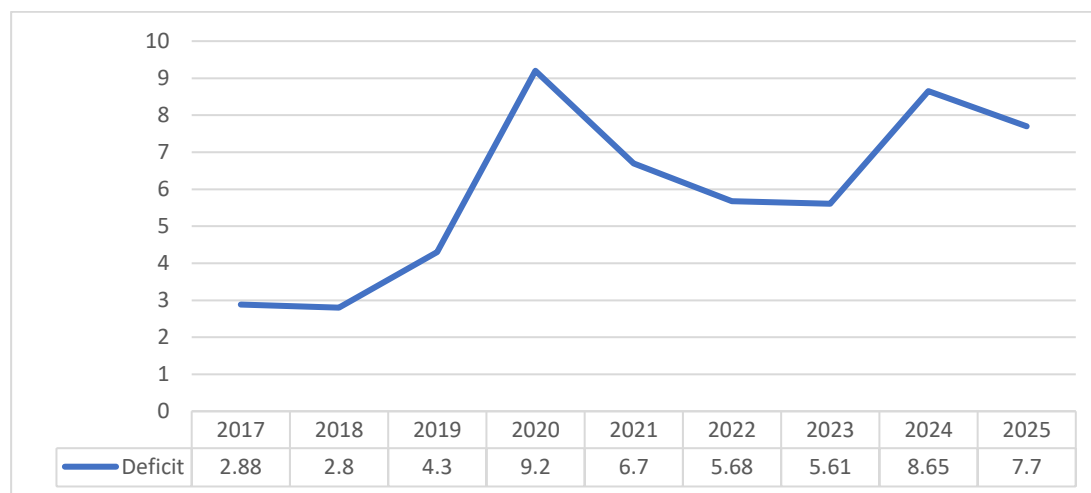
Romania remains subject to the excessive deficit procedure (EDP) launched in April 2020, but the European Commission has recommended a gradual adjustment, with the aim of reducing the deficit to below 3% of GDP by 2028, in line with the new European fiscal framework.

In 2024, Romania recorded a budget deficit of around 5.4% of GDP, above the 3% limit imposed by European criteria, which led to the continuation of the excessive deficit procedure. However, public investment reached a historic high, contributing 1.2 percentage points to GDP growth.

In 2025, Romania is still under the excessive deficit procedure, with an estimated deficit level of 5.2% of GDP.

Graph no. 1

Romania's budget deficit (% of GDP)

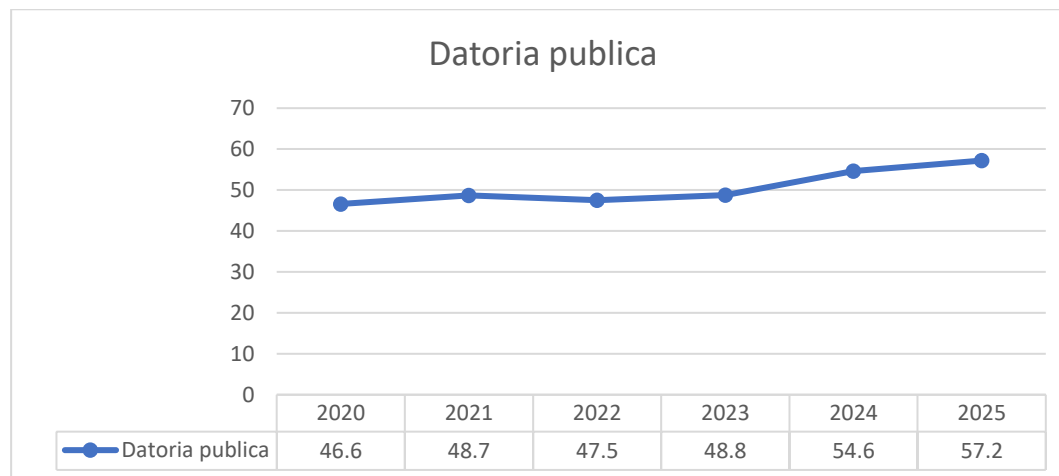


Source: based on Romania Insider, Country Economy, Actmedia, and European Commission (2017–2025)

Public debt rose from 35.3% of GDP in 2019 to 54.7% in June 2025, raising concerns about fiscal sustainability.

Graph no. 2

Public debt as % of GDP in 2020-2025



Source: own processing based on data from the Ministry of Finance and Eurostat.

3. Challenges and prospects

In Romania, the main challenges to the sustainability of public expenditure include:

- rapid growth in social spending, particularly pensions, against the backdrop of an aging population;
- the need for massive investment in infrastructure, education, and health;
- the low efficiency of some government programs and the lack of rigorous impact assessment.

In the medium term (2025–2027), the European Commission's forecasts indicate the need for fiscal consolidation, combined with structural reforms, to maintain budgetary balance and ensure the financing of strategic investments.

Revenues in the consolidated general government budget continued to grow, but the pace of collection was not sufficient to offset the significant increase in public expenditure. The budget execution for the whole of 2024 showed a very high public deficit — around 9.3% of GDP, according to ESA methodology, the highest in the European Union that year — reflecting substantial increases in expenditure on wages, pensions, and interest payments, as well as the costs of social programs and accelerated state-funded investments. This deterioration in the budget balance in 2024 prompted European authorities and bodies to warn of medium-term fiscal risks and triggered EU-level monitoring procedures.

In the first months of 2025, the execution continued to show a significant deficit: the government reported a deficit advance in the first half (H1 2025) of 3.68% of GDP, or 69.8 billion lei, caused in particular by wage increases, interest costs, and accelerated investment expenditures.

Analysts and independent bodies warn that without significant fiscal adjustments, the deficit for 2025 could exceed the initial target of 7%, with the risk of rising to 8%. Thus, in its dialogue with the European Commission, Romania is under increased fiscal monitoring, and the authorities must integrate alternative scenarios and sensitivity analyses into public projects, given the volatility of expenditure and financing costs.

The European Commission has intensified its dialogue with the Romanian authorities and recommended additional corrections to comply with EU budgetary rules related to the excessive deficit procedure previously triggered. These signals warrant caution in formulating the macro-fiscal assumptions used in public project analyses (including in the CBA), given the volatility of expenditure and financing costs.

In the draft National Medium-Term Budgetary and Structural Plan 2025-2031, the Ministry of Finance based its budget revenue forecast on five main assumptions: budget revenue growth will be correlated with nominal GDP growth during the 2025-2031 fiscal adjustment period; the tax reform will be implemented in accordance with milestones 207, 208, and 237 of the National Recovery and Resilience Plan (PNRR), with an estimated impact of at least 1.1% of GDP for 2025, excluding the effect of the increase in the non-taxable ceiling for pensions; specific fiscal measures have been established based on scenarios developed by the World Bank and approved by the Government in the first quarter of 2025; measures will be implemented to improve revenue collection, including digitization projects, modules to combat tax evasion, and legislative changes regarding insolvency, which will lead to an increase in budget revenues of 0.5% of GDP by the end of 2026; non-tax revenues will be optimized by updating royalties for natural and mineral resources exploited under licenses granted to economic operators; also, the Neptun Deep project will be operationalized, ensuring the collection of excise duties and royalties related to natural gas extraction starting in 2027.

Thus, current budget revenues are projected to grow moderately in the coming period, against the backdrop of tax reform and improved collection. They are expected to rise from 29.4% of GDP in 2024 to 30.2% in 2025, reaching approximately 31.1% of GDP in 2026.

Tax revenues are projected to increase in 2026 by approximately 0.6 percentage points as a share of GDP compared to 2025, reaching 17.8% of GDP, as a direct effect of new measures to broaden the tax base and reduce tax exemptions. In the medium term, by 2028, a further increase of 0.5% of GDP is anticipated, so that tax revenues could exceed 18% of GDP by the end of the forecast period.

On the expenditure side, the updated projections indicate a gradual consolidation of the budgetary structure. A gradual reduction in the share of personnel expenditure in GDP is estimated, from 9.2% in 2025 to 8.5% in 2026, with the implementation of the new law on unitary pay and performance criteria in the public sector. Expenditure on goods and services will remain at around 4.8–5% of GDP, while social expenditure will decline slightly, from 12.7% in 2025 to 11.9% in 2026, as a result of the new pension law and the phased recalculations provided for therein.

Public investment remains high in 2025–2026, at around 7.6% of GDP, due to projects carried out under the PNRR and funds related to the 2021–2027 financial framework. Subsequently, after the completion of the NRRP implementation, a gradual reduction in public investment is expected, but it is estimated to remain above 5% of GDP in 2027–2028, reflecting a balance between public investment and fiscal consolidation.

At the same time, interest expenditure will continue to increase in the short term, from 2.2% of GDP in 2025 to 2.6% in 2026, due to higher financing costs on the domestic and international markets.

Total budget expenditure is estimated at 41.1% of GDP in 2025, followed by a gradual decline to 39.2% of GDP in 2026, as the pace of investment and current expenditure slows.

Regarding public debt, the European Commission estimates an increase to 59.8% of GDP in 2026, approaching the 60% threshold set by the Stability Pact, in the context of continuing

reforms and the implementation of infrastructure projects. After 2027, debt is expected to stabilize and gradually decline as the ESA deficit falls below 4% of GDP.

Externally, the current account deficit is projected to narrow from 7.1% of GDP in 2024 to 6.3% in 2025 and 5.7% in 2026, due to growth in net exports and an improvement in the services balance, but remains under surveillance.

In conclusion, our country continues to face several problems, including:

- underfunding of investments in infrastructure and research and development, with a negative impact on economic competitiveness;
- fragmentation of social assistance programs, leading to overlaps and inefficient allocations;
- the lack of ex-post evaluations for many public projects, which prevents the measurement of their real impact;
- dependence on European funds to finance major projects, which limits budgetary flexibility in times of crisis.

The fiscal situation confirms an environment of increased budgetary pressure: therefore, any analysis using historical data (e.g., revenue or expenditure growth over a previous period) should be supplemented with alternative scenarios (pessimistic, baseline, optimistic) and sensitivity analyses to reflect the risks of budgetary slippage and any necessary adjustment measures.

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OPPORTUNITIES GENERATED BY THE SAFE PROGRAMME IN THE DEFENCE INDUSTRY IN ROMANIA

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Abstract:

The geopolitical situation in Romania's neighbourhood is complex, volatile and unpredictable, marked by military conflicts, strategic competition between major powers and a profound reconfiguration of global security balances. In this context, Romania is compelled to modernise its defence industry in order to be able to cope with a potential military conflict, as well as a means of deterrence. Currently, the Romanian defence industry faces structural, technological and institutional problems that significantly limit its production, export and integration capacity into Western value chains. The SAFE programme is a great chance to grow the national defence industry, with Romania getting €16.68 billion, with a 10-year grace period for repayment. In this regard, the European Union's SAFE programme represents an extraordinary opportunity for Romania to modernise its defence industry, as well as a very important step towards full integration into the strategic infrastructure of the EU and NATO, which will enable it to regain its role as a regional producer of modern military equipment. Another very important aspect is the transfer of modern technology from Euro-Atlantic countries to Romania, which will enable our country to develop its defence industry in order to meet current regional and global challenges.

Keywords: defence industry, military equipment, weapons, ammunition, SAFE, European funds.

JEL classification: I6.

1. Introduction

The geopolitical situation in Romania's vicinity, namely Eastern Europe and the Wider Black Sea Region, is extremely complex, volatile and unpredictable, marked by military conflicts, strategic competition between major powers and a profound reconfiguration of global security balances. Romania finds itself in a geopolitical border area between the Euro-Atlantic bloc (NATO and the EU) and the Russian Federation's sphere of influence, which includes highly unstable areas in Eastern Europe and the Caucasus. This positioning gives Romania major strategic importance for NATO, but also specific vulnerabilities, especially in the context of the war in Ukraine and geopolitical tensions in the Wider Black Sea Region.

The conflict in Ukraine triggered by the Russian Federation in 2022 remains active, with a stabilised front line in eastern and southern Ukraine. The Russian army continues to control the Crimean Peninsula, Donbas and part of the Zaporizhia and Kherson regions. In this context, Ukraine, supported mainly by the US and EU member states, has shifted to an active defence strategy, focused on maintaining territorial control and strengthening air defence systems.

The wider Black Sea region is one of the most important in terms of strategic competition between NATO and the Russian Federation. In this context, Russia maintains a strong naval presence in Sevastopol and the occupied Crimean Peninsula, although its fleet has been affected by systematic attacks by the Ukrainian army. To counter the Russian Federation's actions in the Black Sea, NATO, particularly Romania, Turkey and Bulgaria, have intensified maritime patrols

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and aerial surveillance. Within NATO, Romania and Turkey play complementary roles, with Romania being an important land and logistical gateway for NATO, and Turkey holding strategic control of the Bosphorus and Dardanelles Straits.

At the same time, in Romania's vicinity, the Republic of Moldova is the most vulnerable state, and the pro-European government in Chişinău and the president, Maia Sandu, are pushing forward reforms and increasing cooperation with the EU, but are facing hybrid pressure and threats from the Russian Federation, either directly or through various non-governmental entities. Another risk is generated by the presence of Russian troops in the Transnistria region, disinformation and sabotage campaigns supported by the Moscow authorities, as well as economic vulnerabilities generated by partial energy dependence and economic fragility. In this context, Romania plays an important role as an unofficial security guarantor for the pro-European authorities in Chişinău, and Romania supports the integration of the Republic of Moldova into the EU, but this process will be difficult and lengthy.

Another area of interest in Romania's vicinity is the Western Balkans, where regional instability is marked by the Serbia-Kosovo disputes and the stagnation of Serbia's European integration. In fact, Serbia maintains strategic relations with the Russian Federation and China, while the rest of the region (Albania, North Macedonia, Montenegro) is oriented towards NATO. In this context, Romania has an interest in the stability of the Western Balkans, with the aim of avoiding ethnic conflicts in the region and increasing migration flows, and the strategic nature of the region is given by NATO's logistics corridor to south-eastern Europe.

Another important dimension is the economic one, including the energy component. In this context, the natural gas deposits in the Black Sea (Neptun Deep) offer Romania the potential to become a regional energy supplier. At the same time, the energy connection with Greece and Azerbaijan, through the vertical gas corridor and the IGB and BRUA interconnectors, substantially reduces energy dependence on the Russian Federation. In the energy sector, there is a risk of cyber attacks and sabotage on critical energy infrastructure, as well as tensions related to the exploitation of offshore resources.

The Russian Federation is conducting aggressive disinformation, propaganda and influence campaigns in Romania, the Republic of Moldova and Bulgaria, with the main objectives being to undermine the confidence of the population of these states in NATO and the EU, to exploit social tensions and to manipulate anti-Western discourse. Although Romania is more resilient than its neighbours, it remains exposed through online networks and alternative media.

In terms of military and security, Romania is one of the most militarised countries on NATO's eastern flank, with US bases in Mihail Kogălniceanu and Deveselu, F-16 fighter squadrons and the planned acquisition of F-35 aircraft. There is also talk of creating a permanent NATO brigade with multinational elements, but the internal military infrastructure (ammunition depots, strategic roads) requires rapid modernisation to allow for the rapid movement of weapons and ammunition.

In conclusion, Romania is at the centre of a region of intense geopolitical competition, its strategic advantage being the solid support of NATO and the EU, as well as its position as a regional pivot. The major challenges are related to the insecurity in Ukraine, the vulnerabilities generated by the war and hybrid threats from the Russian Federation, as well as the permanent risk of local destabilisation, especially in the East (Ukraine, Republic of Moldova) and South (Western Balkans region).

Given these geopolitical developments in Romania's neighbourhood, as well as the Russian Federation's aggressive policy, Romania needs to develop its military capabilities and invest

heavily in the development of its own defence industry. The development of the defence industry can benefit from EU support through the SAFE mechanism, through which Romania borrows EUR 16.68 billion on a long-term basis, at a very favourable interest rate and with a 10-year grace period. This could lead to the modernisation of the national defence industry through strategic cooperation with major defence companies in the Euro-Atlantic area.

2. Characterisation of the defence industry in Romania

The Romanian defence industry has significant potential inherited from the communist period, when Romania was one of the main arms exporters in Eastern Europe, occupying important positions in the arms markets in Africa and the Middle East. Currently, the defence industry faces numerous structural, technological and institutional problems, which significantly limit its production, export and integration capacity in Western value chains.

Thus, from a technological point of view, most Romanian arms factories in the ROMARM SA network operate with equipment from the 1970s and 1980s, with few modernised arms production lines. At the same time, the lack of substantial investment over the last 30 years has led to the physical and moral wear and tear of production equipment, making it necessary to make substantial investments to modernise it. Furthermore, many military products manufactured by the Romanian defence industry are still made to Soviet standards (calibres, design, processes), which are not compatible with modern systems produced by NATO member states.

The capacity for innovation in the national defence industry is limited, and military research centres (e.g. the Agency for Research in Military Technology and Techniques - ACTTM) have greatly reduced budgets that do not allow for complex research projects leading to the development of modern military products. In conclusion, few patents for inventions or new prototypes have been developed recently, and there is a high dependence on external partners for cutting-edge technology (e.g. modern radars, drones, missiles, optical equipment).

A particularly important aspect is represented by management and corporate governance issues, given that ROMARM SA and its subsidiaries have chronic losses or insignificant profits, even though the overall volume of arms and ammunition sales has increased massively in recent times. Furthermore, investment decisions are often delayed by excessive bureaucracy and a lack of strategy and vision for the development of Romania's defence industry, and company managers are appointed on political rather than meritocratic grounds, without a clear mandate based on transparent and quantifiable performance criteria. At the same time, many of the contracts for the purchase of weapons by the Romanian armed forces are not completely transparent, raising suspicions about the fairness of these contracts and their effectiveness for the Romanian army. These issues are exacerbated by the lack of independent audits and public performance plans for companies in the defence industry. Another very important aspect that has led to inefficiency in the Romanian defence sector is the cases of corruption that have affected this area of strategic interest, as large Euro-Atlantic companies are unwilling to invest in non-transparent and corrupt systems. Thus, a culture of "administrative survival" has emerged among companies in the Romanian defence industry, rather than commercial competitiveness and the application of market economy principles.

In terms of security funding, the budget allocated to the defence industry has been underfunded relative to actual needs until 2022. Thus, major investments in the acquisition of modern military equipment came after the defence budget was increased (2.5% of GDP), but most of the funds were allocated to foreign purchases, especially from the US (Patriot systems, HIMARS missiles, F-16 and F-35 aircraft), and the funds given to the national industry for the

development of domestic military products were relatively insignificant. It can be concluded that there is a lack of predictable and transparent multi-annual modernisation programmes, which discourages private investment in the Romanian defence industry.

Recently, Romania has had access to European defence programmes (EDF, EDIDP), but participation has been modest, mainly due to a lack of co-financing and a lack of mature projects. In this context, the SAFE programme offers an important opportunity for the modernisation of the domestic defence industry, with Romania being allocated EUR 16.68 billion, but it is necessary for the projects to be implemented quickly and in strict compliance with EU standards, which represents a major administrative challenge.

Another critical issue is the shortage of human resources working in the Romanian defence industry, with many specialists opting for retirement, migration to the civilian sector or to companies abroad. There is also a lack of educational and training programmes for young engineers in the defence sector. Another important issue is the low pay in the defence industry, which has led to the loss of highly qualified human resources. In this context, companies in the domestic defence industry have major problems recruiting highly specialised personnel (in fields such as precision mechanics, optics and defence electronics).

Currently, Romania mainly produces tactical military equipment, not integrated weapon systems. At the same time, there is no internationally recognised national defence brand at the national level, such as PGZ in Poland, CSG in the Czech Republic, and France has Dassault, and industrial cooperation with major companies in the Euro-Atlantic area, such as Rheinmetall, Airbus, and General Dynamics, is in its early stages, often limited to providing maintenance services or local assembly of military equipment.

In terms of legislative and bureaucratic shortcomings, it should be noted that the approval process for military exports is time-consuming, and internal tenders take months or even years, which significantly reduces the competitiveness of the defence industry. Furthermore, there is no strategic document that coherently and transparently defines the directions for development in this field (e.g. which are the strategic priority areas – drones, ammunition, artificial intelligence, missiles), and the legislation on public-private partnerships in the defence sector is ambiguous and rarely used.

At the same time, most of the critical components needed for arms production (e.g. electronics, guidance systems, sensors, engines, armour) are imported, mainly from Euro-Atlantic countries, and Romania produces ammunition and weapons, but not complete integrated systems (e.g. modern tanks, sophisticated missiles, attack drones). Thus, in terms of image and international competitiveness, Romanian arms exports have fallen significantly from the 1980-1990 period (over USD 1 billion/year) to approximately EUR 150 million in 2022. This downward trend is due to the fact that Romanian military products are perceived as cheap but technologically outdated. Furthermore, in terms of promoting Romanian defence products, there are no promotional campaigns or consistent participation in major international trade fairs (e.g. IDEX, Eurosatory, DSEI).

In conclusion, the Romanian defence industry has solid development potential, namely infrastructure, experience, and human resources with potential, but critical and chronic deficiencies in technology, management, financing, and European integration. Through the proper implementation of development programmes, such as SAFE, and cooperation with major companies in the defence industry in the Euro-Atlantic area, Romania can, within 5-10 years, become a relevant player in the regional production of military equipment, especially if measures are taken to urgently modernise the factories belonging to ROMARM SA, attract private

investment, implement valuable technology transfers and create a national strategic framework for the Romanian defence industry.

3. SWOT analysis of the Romanian defence industry

In order to carry out a comprehensive analysis of the Romanian defence industry, a SWOT analysis is necessary to objectively highlight the strengths, weaknesses, opportunities and threats specific to the field under analysis.

Strengths	Weaknesses
1. Solid industrial tradition ○ Romania has over 80 years of experience in the production of weapons, ammunition and military equipment. ○ Existing industrial infrastructure (network of 15 Romarm factories + private companies). 2. Diversified industrial capabilities ○ Various products: ammunition, small arms, armoured transporters, anti-tank systems, aviation components and military optics. 3. Strategic integration with NATO and the EU ○ Access to the European defence market () and research funds (EDF, PESCO, SAFE). ○ Participation in Western value chains (e.g. General Dynamics, Airbus, Rheinmetall). 4. Favourable geostrategic position ○ Location on NATO's eastern border – major strategic interest for allies. ○ Potential to become a regional hub for military maintenance and logistics.	1. Outdated technology ○ Old equipment and production lines (1970s–1980s). ○ Few products comply with modern NATO standards. 2. Economic inefficiency and politically regimented management ○ ROMARM SA and its subsidiaries have recurring losses, weak governance, and delayed decisions. ○ Frequent political appointments to management positions. 3. Limited innovation and poorly funded research ○ Few patents, limited research and development projects. ○ Dependence on external partners for modern technology s (drones, missiles, sensors). 4. Ageing and insufficient workforce ○ Lack of young specialists and migration of skilled personnel. 5. Bureaucracy and lack of a coherent strategy ○ Cumbersome procedures, lack of an integrated vision for the period 2030+.

5. Growing political and financial support ○ Defence budget >2.5% of GDP, with prospects of approximately 5% in the future. ○ Over EUR 16.68 billion through the SAFE programme for the modernisation of military industry and infrastructure.	○ Rigid and deficient legislation on public-private partnerships.
Opportunities	Threats
1. SAFE funds (EU) ○ Enables complete modernisation of factories and development of own industrial capacities. ○ Funding for dual infrastructure and applied research. 2. Increased European demand for military products ○ The rearmament of EU member states after 2022 opens up markets for ammunition, parts and maintenance. ○ Romania can become a regional supplier. 3. International industrial partnerships ○ Expanding cooperation: Rheinmetall, Airbus, Lockheed Martin, General Dynamics. ○ Technology transfer and local co-production (transporters, drones, missiles). 4. Development of European value chains	1. Strong regional competition ○ Poland, the Czech Republic, Slovakia and Croatia are attracting massive investment and have superior technological advances. 2. Delays in SAFE implementation ○ National bureaucracy may lead to loss of funding. ○ Lack of mature projects for fund absorption. 3. Dependence on external suppliers ○ Critical imported components; vulnerability in supply chains. 4. Political or legislative instability ○ Frequent changes in government and political priorities can block industrial reforms. 5. Geopolitical risks ○ The spread of the conflict in Ukraine may affect logistics, supply and production safety.

○ Romania can supply components, subassemblies and logistics for the EU's common defence industry.	
5. Digitalisation and automation ○ Introduction of modern lines, digitally assisted production, military AI.	

In conclusion, the Romanian defence industry is at a strategic juncture, and if it makes the most of the opportunities offered by the SAFE programme and partnerships with NATO and the EU, Romania can once again become a regional industrial player. but if structural problems persist (management, excessive bureaucracy, lack of vision among leaders responsible for the defence industry), it risks remaining a secondary producer, dependent on imports of modern weapons and foreign orders for military equipment.

4. Opportunities generated by the implementation of the EU's SAFE programme

The Security Action for Europe (SAFE) programme is a new EU financial instrument, adopted on 27 May 2025 by the Council of the European Union, with the aim of providing support to EU Member States wishing to invest in industrial defence production through joint public procurement, with the aim of strengthening the EU's defence capabilities and the European industrial technology base. Approximately EUR 150 billion will be made available to EU Member States for this purpose.

This instrument was created in view of the turbulent geopolitical context, characterised by increased tensions, the need for Europe to be better prepared and have greater autonomy in the field of defence, against the backdrop of the recent US policy of rethinking the distribution of American armed forces worldwide. At the same time, it is necessary to remedy certain shortcomings in military capabilities, namely modern military equipment, ammunition and military systems that some EU Member States do not have. It is therefore considered that if several EU Member States make joint purchases, costs can be lower and military equipment can be interoperable.

Under the SAFE programme, financing is provided through long-term loans at competitive rates, benefiting from the fact that the EU can obtain very favourable financial terms. To be eligible, EU Member States are required to submit a national investment plan, and, in principle, purchases must be joint (at least two EU Member States) in order to reduce fragmentation of the industrial base. However, given the emergency situation generated by the international geopolitical context, purchases made by a single Member State will also be accepted on a temporary basis. Funds will be allocated to EU Member States on a demand basis and on the basis of plans validated by the EU's governing bodies. For example, approximately EUR 16.68 billion has been allocated to Romania, with a repayment period after a 10-year grace period.

In terms of the range of weapons, the following priority areas have been identified: ammunition, missiles, artillery systems, precision strike capabilities, military mobility, critical infrastructure protection, and cyber security. At the same time, the aim of the SAFE programme is

to stimulate the European defence industry and substantially reduce dependence on external sources of weapons and ammunition. EU Member States can participate in the programme, but it also allows for association with third countries, such as Ukraine, EEA-EFTA countries, candidate countries or partners in the field of security and defence.

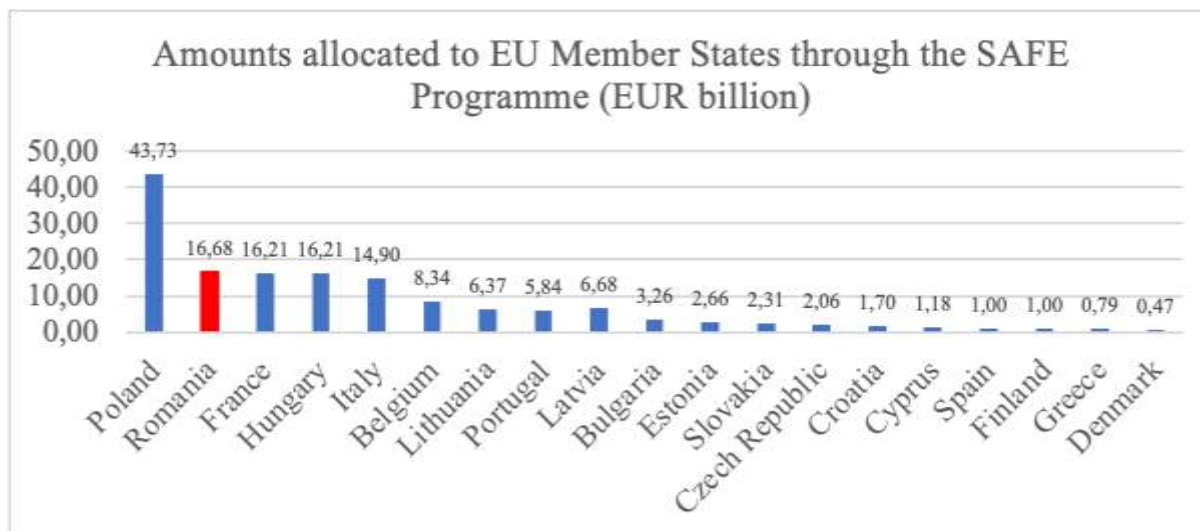


Chart 1 – Amounts allocated to EU Member States through the SAFE Programme

From Romania's point of view, our country has received a significant allocation (approximately EUR 16.68 billion), with favourable interest rates for the purchase of military equipment, the development of defence infrastructure and the modernisation of defence systems. Participation in the SAFE programme is voluntary, as not all Member States are required to participate. Loans granted through the SAFE programme benefit from favourable terms, namely low interest rates and long maturities (e.g. a 10-year grace period for Romania).

A number of technical, administrative, industrial and political difficulties may arise in the implementation of the SAFE programme, namely:

- fragmentation of the defence industry at EU level, with national manufacturers operating on different technological bases and technical standards;
- lack of interoperability between weapon systems produced in different Member States (e.g. ammunition, different calibres, electronic equipment);
- fierce competition between companies in France, Germany, Poland, Italy, etc., which hinders the formation of joint consortia, leading to delays in multinational projects and the risk that SAFE will finance isolated national projects rather than genuine European cooperation;
- EU procedures for accessing funds from the SAFE Programme are complex and slow (detailed feasibility studies, technical and financial audits, multiple institutional approvals – European Commission, EDA, EIB), and certain EU Member States, such as Romania, do not have dedicated administrative structures to manage this programme, which may lead to delays in the absorption of funds and the loss of allocations in the absence of complete technical and economic documentation;

- technologically outdated industrial infrastructure in certain EU Member States (e.g. Romania, Bulgaria, Slovakia, Croatia), mainly due to a lack of investment in modern equipment, automated assembly lines and specialised personnel. In this context, it is possible that Western EU countries (Germany, France, Sweden) will benefit from the rapid implementation of the SAFE Programme, thus perpetuating industrial gaps;
- although the SAFE Programme offers substantial grants, many projects require national or private co-financing (20-40%), and certain EU Member States, such as Romania, may encounter difficulties in securing complementary funds, with the risk that some approved projects may not be fully implemented or may be postponed or delayed;
- the defence industry suffers from a chronic shortage of qualified engineers, technicians and operators. Thus, even if funding for certain projects is secured, they may be delayed due to a lack of skilled personnel;
- military projects funded through the SAFE Project involve sensitive technologies (radar systems, artificial intelligence with military applications, smart ammunition) that require strict cybersecurity and classified data and information protection standards, and in some EU Member States the digital infrastructure is not secure enough for the exchange of classified information;
- the overlap between the SAFE Programme and other European programmes, such as the EDF (European Defence Fund), ASAP (Act in Support of Ammunition Production) and InvestEU Defence Window, leads to a lack of a unified vision, creating administrative confusion and difficulties in prioritising projects, which leads to inefficiency and duplication of funding in certain strategic areas;
- tensions in the Wider Black Sea Region, the military conflict in Ukraine triggered by the Russian Federation and pressure on supply chains may delay deliveries of basic raw materials (powders, rare metals, microchips). Europe still depends on imports of raw materials from the US and Asia for key components of the defence industry, creating structural vulnerabilities in the supply chain and risks of delays in the production of weapons and ammunition.

Participation in the SAFE programme requires compliance with EU regulations on loans and the budget, although the programme has special facilities, and the procurement and delivery of weapons will be coordinated between EU Member States. Finally, the EU will assess how these funds are used, in terms of whether they will have the desired effect at EU level. EU control is absolutely necessary to ensure the success of the SAFE programme in terms of strengthening defence capabilities at Community level, while at the same time deterring the Russian Federation from initiating military conflict on EU territory. The amounts allocated under the SAFE Programme are substantial and will enable the defence industry in EU Member States to strengthen their capabilities to produce modern military equipment with a high degree of interoperability. For this reason, the programme focuses on cooperation between EU Member States, avoiding fragmentation of the European defence industry, increasing interoperability between industries in Member States, and supporting Ukraine and the European Union's partners.

In conclusion, the SAFE Programme is not only a financial instrument, but also a European strategy for autonomy and resilience. For Romania, it represents the greatest opportunity for

industrial modernisation in the last three decades, as well as an important step towards full integration into the strategic infrastructure of the EU and NATO, and a means of regaining its role as a regional defence manufacturer.

5. Conclusions

The SAFE Programme is one of the most important and relevant European initiatives launched after 2023, aimed at strengthening the security of the European Union's defence industry, particularly in the context of the military conflict in Ukraine and the need for strategic autonomy. This project contributes decisively to strengthening NATO's eastern flank and security in the Wider Black Sea Region and enables the creation of European strategic stocks of ammunition and military equipment at European Union level. At the same time, one of the objectives of the SAFE Project is to improve rapid response capabilities in crisis situations (military, energy or humanitarian).

The advantages for Romania are obvious, in the sense that the SAFE Programme will enable the complete modernisation of the arms factories owned by the Ministry of Economy, Digitalisation, Entrepreneurship and Tourism, through ROMARM SA, and will allow technology transfers from EU Member States with relevant defence industries (e.g. France, Germany, Poland). Another important benefit is the creation of new highly skilled jobs in technical and engineering fields, the revitalisation of mono-industrial cities (e.g. Cugir, Sadu, Plopeni, Reșița) and the creation of new value chains. Another major advantage of the investments to be made on the basis of funds provided through the SAFE Project is the increase in exports of military products and the enhancement of the innovation capacity of the Romanian defence industry, as well as the development of logistics infrastructure (roads, railways, military depots).

The SAFE programme is compatible and complementary to the EDF (European Defence Fund) and supports research in areas such as military artificial intelligence, the development of composite materials and armour, autonomous drones and technologically advanced anti-aircraft systems, and cyber security. Romania can also become a regional hub for the production of ammunition and metal components, given its strategic position and existing industrial resources. This innovative EU-level instrument stimulates cooperation between Member States instead of isolated competition.

Unlike the usual structural funds, the SAFE Programme benefits from an accelerated approval process, geared towards achieving concrete results based on efficiency. In this context, this project allows Romania to finance dual projects that are useful for both civilian (e.g. logistics infrastructure, energy, IT) and military purposes. The SAFE project will implicitly lead to the modernisation of the Romanian defence industry through the development of the production lines of the factories belonging to ROMARM SA, the development of new industrial capacities (production of ammunition, explosives, drones, electronic components) and the complete re-engineering of renowned factories in Romania (e.g. Cugir, Plopeni, Moreni). Another major advantage is the introduction of advanced digital technologies, automation and technological processes in line with NATO standards, as well as the strengthening of public-private partnerships and foreign investment in the Romanian defence industry.

Although the SAFE Programme has significant strategic potential, its implementation may be slowed down by bureaucracy, fragmentation and lack of industrial capacity, differences in vision

between EU Member States and internal structural challenges (human resources, infrastructure, co-financing). For Romania, success depends on creating a national mechanism to coordinate the SAFE Programme, active involvement in European research and production consortia, and reforming state-owned defence companies by attracting private partners.

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PERFORMANCE MEASUREMENT IN ACCOMMODATION MANAGEMENT

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Abstract. *Key Performance Indicators (KPIs) are essential managerial tools in the hotel accommodation sector, providing measurable benchmarks for evaluating operational efficiency, service quality, and financial performance. They enable hotel managers to monitor critical areas such as occupancy rates, average daily rate (ADR), revenue per available room (RevPAR), guest satisfaction, and employee productivity. By systematically analyzing these indicators, management can make informed decisions to improve profitability, optimize resource utilization, and enhance guest experiences. Furthermore, KPIs support strategic planning, performance appraisal, and continuous improvement initiatives, ensuring that managerial actions align with organizational goals and market demands. This paper emphasizes the managerial importance of KPIs in driving competitiveness, operational excellence, and sustainable growth within the hotel accommodation industry.*

Key-words: KPI, Balanced Scorecard (BSC), hotel management, sustainability KPIs

JEL Classification: M10

1. Introduction

Key Performance Indicators (KPIs) are measurable values that reflect the extent to which a business is functioning properly. Regular monitoring of performance indicators is a component of the managerial control function, which consists of continuously verifying and evaluating the company's results and performances, so that, if deviations from the initially established objectives or standards occur, the necessary corrections are applied. At the same time, their use is closely linked to the planning function, since it is at this level that the parameters are established according to which the extent to which the initial business objectives have been achieved will be decided.

Defining a set of performance indicators is very useful in the case of an entrepreneurial business because their calculation allows, on the one hand, to identify potential dysfunctions before they produce major negative effects and, on the other hand, allows to identify those components of the activity that generate the dysfunctions that have occurred.

As far as hotel management is concerned, KPIs are vital because they provide a structured, data-driven approach to improving performance, maximizing revenue, enhancing guest satisfaction, and driving long-term success. Without KPIs, hotel management would rely on assumptions rather than actionable insights.

Although numerous approaches to measuring organizational performance have been focused on the financial measures, it is evident that this is a limited approach. Performance management research, hence, has highlighted the prevailing limitations of measuring organizational performance using single constructs. Given this in mind, a renowned performance measurement tool, Balanced Scorecard (BSC), has gained quite a lot of prominence since its induction by Kaplan and Norton in 1992. The Balanced Scorecard (BSC) is a strategic management framework created in response to the limitations of traditional performance measurement systems, which relied almost exclusively on financial indicators. While financial metrics are important, they often reflect past

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performance and fail to capture the underlying factors that drive long-term success. The Balanced Scorecard addresses this gap by providing a comprehensive and integrated approach to evaluating organizational performance. It translates a company's vision and strategy into actionable objectives across four interconnected perspectives: financial performance, customer satisfaction, internal business processes, and learning and growth.

This paper proposes a BSC structure that can be used in the context of hotel management.

2. Balanced Scorecard (BSC) for hotel management

2.1. *The financial perspective*

The financial perspective of the BSC focuses on profitability, cost management, revenue growth, and return on investment. These metrics remain essential for any organization because financial performance is often the ultimate indicator of sustainability. However, the Balanced Scorecard recognizes that financial outcomes alone do not guarantee future success. They are lagging indicators—results of past decisions and activities. By incorporating financial measures as only one component of a broader system, the BSC encourages organizations to consider long-term value creation rather than short-term gains.

As in any other type of business, in the hotel business, profit growth is the indicator that defines financial performance. To ensure a positive evolution of profit, the entrepreneur must make decisions that ensure:

- *Productivity growth*, which can be achieved by reducing operating costs and optimizing the use of resources.

- *Revenue growth*, which can be effectively obtained by increasing sales volume or by developing new sources of income.

Thus, in order to understand the financial aspects that characterize the hotel's activity, the following indicators can be calculated:

1. **Occupancy rate (OR)** – is an indicator that influences revenue and reflects the number of accommodation nights sold out of the total accommodation nights available in a certain period of time.

It is calculated as follows:

$$\text{Occupancy rate} = \frac{\text{No.of rooms sold x No.of nights for which they were sold}}{\text{Total no of rooms x Total no of nights of the period for which the indicator is calculated}} \times 100$$

In the hotel industry, the average value of this indicator is between 65% - 75%; a value >70% is considered excellent.

Although it is an important indicator, the occupancy rate has some limitations in terms of the information it transmits to management:

- It does not provide information about the rate at which the rooms are rented;
- It can be misleading if evaluated in isolation, without considering financial aspects;
- It may fluctuate due to external factors, such as economic recessions or local events, which are beyond the manager's control.

2. **Average daily rate (ADR)** – is an indicator that measures the average revenue generated by rented rooms over a given period of time.

It is calculated as follows:

$$\text{ADR} = \frac{\text{Total revenue from renting rooms}}{\text{No. of rented rooms}}$$

At European level, the average of this indicator varies between €150 – €300 for hotels in urban areas and between €200 – €500 for hotels in holiday resorts.

The limitations of the information generated by this indicator are:

- It does not highlight occupancy levels, which can lead to a distorted perspective of overall performance;
- The focus on ADR can lead to the neglect of other important indicators, such as guest satisfaction or sustainable practices;
- It can provide insignificant information if the hotel operates with a varied room inventory from one period to another.

3. ***Revenue per available room – RevPAR***) – The indicator combines both rates and occupancy, being one of the most relevant indicators to reflect the financial health of a hotel. The indicator is calculated in two ways:

$$\text{RevPAR} = \frac{\text{Total revenue obtained from renting rooms in a certain period of time}}{\text{No of rooms available in that period of time}}$$

$$\text{RevPAR} = \text{ADR} \times \text{OR}$$

The limitations of this indicator are:

- It does not consider the facilities and services that can affect the profitability of a hotel.
- It does not provide information on guest satisfaction or tourist retention rates.

4. ***Cost Per Occupied Room (CPOR)*** - To calculate CPOR, the total operating costs of the hotel are divided by the number of rooms occupied in a certain period. The result is influenced by the occupancy rate, so a high occupancy rate generates a reduction in the costs per available room.

$$\text{CPOR} = \frac{\text{Total operating costs}}{\text{No of occupied rooms}}$$

By monitoring CPOR, hoteliers can identify the trend of increasing costs and can make reductions or adjustments before this increase affects profitability.

2.2. *The customer perspective*

The customer perspective emphasizes how well an organization meets customer needs and expectations. In increasingly competitive markets, customer satisfaction and loyalty are critical for survival. The BSC helps organizations evaluate how they are perceived by their customers through

measures such as satisfaction surveys, retention rates, and market share. This perspective encourages companies to focus on delivering value, improving service quality, and understanding customer preferences. When customer needs are prioritized, organizations build stronger relationships that ultimately support financial success. Hotel customers refers to both hotel guests/tourists and various hotel partners. Customer satisfaction metrics should help hotel management identify solutions to increase profitability through decisions that impact hotel customers.

To understand how customers appreciate the hotel's activity, the following indicators can be calculated:

5. GSS – Guest Satisfaction Score - is a KPI that measures how well a hotel meets the expectations of its guests. It reflects the quality of the guest experience and can include aspects such as quality of service, cleanliness, amenities and overall satisfaction. This value is often calculated from surveys and feedback forms completed by guests after their stay. A component of this indicator is the hotel's Booking Score.

The indicator is calculated as follows:

$$\text{GSS} = \frac{\text{No of satisfied guests}}{\text{No of guests who responded to the questionnaire}} \times 100$$

In the hospitality industry, a GSS > 75% is generally considered Excellent, while scores below 50% may indicate significant issues. Many successful hotels aim for scores between 80% and 90% to ensure a positive reputation and sustained business growth. Statistics show that 97.7% of customers read online reviews from other travelers, 92% trust reviews from their family and close friends, 53% will only book a hotel with positive reviews, and 77.9% believe that reviews are extremely important in deciding on a hotel.

Monitoring this indicator offers various benefits such as:

- Informs decisions on measures to ensure the loyalty of hotel guests, as satisfied guests are more likely to make repeat purchases;
- Informs decisions to improve online reputation, which influences potential guests' purchasing decisions based on reviews;
- Helps identify areas for improvement in hotel services and operations
- Helps increase hotel revenue through repeat purchases and referrals that influence new guests.

Despite the benefits it brings, GSS can have some disadvantages:

- Customer feedback can be biased, as statistics show that only very satisfied or very dissatisfied guests provide opinions about their travel experience;
- Does not necessarily correlate with financial performance, as a satisfied guest does not always equate to higher spending at the hotel;
- Requires ongoing effort to collect and analyze feedback, which can be resource-intensive.

6. Average Length of Stay (ALOS) - refers to the average number of nights guests stay during a given period. Maximizing this indicator increases Occupancy and Revenue per Room.

It can be calculated as follows:

$$\text{ALOS} = \frac{\text{Total Room Nights Rented}}{\text{Number of Reservations}}$$

There is no “ideal value” for ALOS that fits all hotels. Factors such as the hotel category (luxury vs. budget), its geographic location, seasonal trends, and consumer segment can influence what constitutes a satisfactory value for Average Length of Stay at a given hotel. Therefore, while Average Length of Stay serves as a valuable indicator of hotel performance, it is not an indicator that management can use on its own. It is imperative that hoteliers contextualize this indicator within the market segment, location, and business model. And, as with all indicators, it is useful when considered alongside other KPIs to create a holistic picture of a hotel’s success.

7. ***Customer retention rate*** – refers to the number of tourists who return to the hotel.
It is calculated as follows:

$$\text{Customer retention rate} = \frac{\text{No of customers returning to the hotel}}{\text{Total number of customers}}$$

8. ***Cancellation rate*** - is a KPI that reflects the percentage of canceled reservations out of the total number of reservations received.
It is calculated as follows:

$$\text{Cancellation rate} = \frac{\text{Number of canceled reservations}}{\text{Total number of reservations}} \times 100$$

The cancellation rate is usually influenced by factors such as season, room types and even sales channels. Reservations through direct channels, for example, have lower cancellation rates than online reservations.

2.3. The internal business process perspective

The internal business process perspective examines the efficiency and effectiveness of an organization’s operations. This includes evaluating production processes, service delivery, innovation, and overall workflow. The goal is to identify and strengthen key processes that create value for customers and support strategic goals. By focusing on internal operations, organizations can reduce inefficiencies, improve quality, and innovate more effectively. This perspective highlights the importance of continuous improvement and ensures that the organization’s internal capabilities align with its strategic vision.

According to this section, can be used indicators to measure the efficiency of loyalty programs, indicators regarding the level of room equipment, indicators related to brand image, indicators related to the website, the way reservations are carried out, the level of employee involvement, the response time to customer requests, etc. Next, we present a series of examples.

9. ***Loyalty Program Performance Indicators*** – Various indicators can be used to measure the performance of the hotel loyalty programs. By analyzing customer preferences, consumption behavior, and interactions with the loyalty program, hotel management can obtain important

information about customer needs. This information can inform decisions about rewarding customers, formulating offers, and designing personalized communication that resonates with customers, stimulating a stronger emotional connection and increasing loyalty.

Examples of loyalty program performance indicators are presented below:

9.a. Loyalty Program Enrollment Rate - measures the percentage of customers who enroll in the program compared to the total customer base. A high enrollment rate indicates strong customer interest and engagement.

$$\text{Loyalty Program Enrollment Rate} = \frac{\text{Number of Enrolled Customers}}{\text{Total Number of Customers}} \times 100$$

A low enrollment rate provides indications of a number of internal processes that are not working properly, such as: ineffective marketing strategies; lack of attractive enrollment incentives or promotional offers; low visibility or awareness of the loyalty program.

9.b. Redemption Rate - highlights the performance of the program. A high redemption rate indicates that customers find value in the rewards, which leads to increased engagement and satisfaction. At the same time, a decrease in redemption rate can be attributed to a lack of relevant rewards or a complicated redemption process.

$$\text{Redemption Rate} = \frac{\text{Rewards Earned by Customers}}{\text{Rewards Used by Customers}} \times 100$$

9.c. Average Customer Relationship Value - estimates the total value a customer brings to the company over the course of the entire relationship. This indicator considers the revenue generated, the frequency of purchases and the duration of the customer relationship.

$$\text{Average Customer Relationship Value} = \frac{\text{Average Transaction Value} \times \text{Average Number of Repeat Customer Transactions}}{\text{Average Duration of Customer Relationship}} \times 100$$

10. Indicators regarding the level of room amenities – highlights the extent to which rooms have the appropriate amenities in relation to classification standards, customer preferences, and the amenities provided by the competition.

11. Brand reputation metrics – these highlight how familiar the target audience is with the brand. This is generally considered the first and most important step in the buying process – without awareness, consumers will not consider the brand for purchase. These metrics are mainly monitored online. Examples of such metrics are:

11.a. Hotel Website Traffic - involves analyzing organic, direct, and referral traffic to the hotel website. This metric provides insight into the extent to which physical and/or social media marketing efforts are driving people to the website

11.b. Hotel Brand Search Frequency - Search volume is another critical metric that reflects the level of brand awareness. This metric shows how many people are searching for the hotel by name. Such potential customers reflect a high intent to purchase the services offered.

12. Average response time to customer requests – is a KPI that reflects the efficiency of internal processes. It measures the period of time that passes from the moment a customer submits a request until that request is resolved.

2.4. The learning and growth perspective

The learning and growth perspective address the long-term drivers of success: people, technology, and organizational culture. No strategy can be executed effectively without skilled employees, modern systems, and a supportive workplace environment. This perspective emphasizes staff training, professional development, employee satisfaction, and technological readiness. It recognizes that an organization's ability to adapt and innovate depends on the strength of its human and intellectual capital. By investing in learning and growth, companies build a foundation for sustained improvement and future performance.

KPIs included in this category:

13. Employee engagement level – is an indicator that reflects the premises for ensuring the smooth functioning of the activity. It can be determined using specific tests provided by the specialized literature, and depending on the results, employees can be structured as follows:

- Highly engaged - Employees are satisfied, feel supported by management and are passionate about their work.

- Employees who do not feel appreciated - Employees are involved in the company's activity, but do not feel appreciated by management, which could reduce job satisfaction and cause a lack of interest.

- Detached employees - Employees are involved at a minimum level necessary to fulfill their job duties, although they do not have major dissatisfactions

- Uninvolved employees - Employees are not satisfied with the activity they carry out, which translates into low productivity.

The level of employee engagement can also be captured by indicators such as:

13. a. Employee turnover rate - represents the number of employees who leave an organization in a certain period of time, usually in a year, out of the total number of employees

$$\text{Employee turnover rate} = \frac{\text{Number of employees leaving the company in a year}}{\text{Total number of employees}} \times 100$$

13.b. Sudden decreases in productivity

3. Proposals on the KPIs for measuring business sustainability

In an era defined by environmental challenges, social inequalities, and increasing stakeholder expectations, the adoption of sustainability values has become a crucial strategic priority for organizations. No longer considered merely a philanthropic gesture, sustainability is now recognized as a fundamental driver of long-term success, resilience, and competitiveness. One of the primary reasons sustainability values are important is their impact on environmental conservation. But, beyond environmental factors, sustainability enhances an organization's social responsibility. Modern customers, employees, and communities expect companies to act ethically and contribute positively to society.

More than the aspects related to the responsibility, laws, regulations and legislative amendments have been adopted by the European Commission, that require increased transparency from companies and financial institutions regarding their sustainability impact and the way they manage related risks. Although their introduction is being phased in, which means that some of the provisions are of a recommendatory nature, in view of the year 2027, their compliance and expansion to various fields of activity will be required.

In this context, sustainability has become a central strategic priority within the global hospitality sector. As hotels are substantial consumers of energy, water, and materials, their operations exert significant environmental, economic, and sociocultural impacts. For these reasons, we propose a series of KPIs to determine the degree of sustainability of the hotel business.

14. Energy efficiency ratio - is an indicator that evaluates the efficiency of a hotel's energy consumption in relation to its production, primarily in terms of the services it offers to guests. In a sustainable hotel business it serves as a crucial indicator to evaluate how efficiently resources are used, while minimizing the impact on the environment. Energy efficiency generates a number of advantages such as: lower costs, a reduced negative impact of hotel activity on the environment, it can be used as an element of promoting hotel activity. On the other hand, it has some disadvantages generated by the fact that collecting data accurately is a complex process, since it requires sophisticated monitoring systems, and the initial costs for implementing energy-efficient technologies may require significant investments.

15. Value of water consumption / guest – can be calculated seasonally, annually and data can be analyzed comparatively, from one period to another.

$$\text{Value of water consumption / guest} = \frac{\text{Total amount of water consumed by a hotel}}{\text{Total number of tourists}}$$

This indicator is very important for a sustainable hotel business, as it has a direct impact on operational costs and environmental sustainability. By monitoring water use, hotels can implement strategies to conserve water and minimize their ecological footprint.

Statistics reflect that, on average, a tourist consumes between 190 liters – 380 liters / night of accommodation, while in hotels where water efficiency measures have been implemented, the average consumption is reduced to 115 – 150 liters / night of accommodation.

16. Waste Recycling Rate - assesses the percentage of waste generated by the hotel's operations that is diverted to recycling centers. It is a key indicator for understanding the effectiveness of sustainability initiatives.

$$\text{Waste Recycling Rate} = \frac{\text{Amount of Waste Recycled}}{\text{Total Amount of Waste}} \times 100$$

In the hospitality industry, a waste recycling rate of 30% to 50% is considered a good benchmark for sustainable hotels. However, top-notch establishments can achieve rates of over 70%, reflecting their commitment to reducing their environmental impact.

17. Average Hotel Carbon Footprint - is a measure of the total greenhouse gas emissions produced by a hotel for each individual guest during their stay. It includes emissions from energy consumption, water use, waste generation and other operational activities.

$$\text{Average Hotel Carbon Footprint} = \frac{\text{Total CO2 Emissions}}{\text{Total Number of Tourists}}$$

In the hospitality sector, the average carbon footprint is estimated to be around 15 to 30 kg CO2/night, depending on the hotel's sustainability practices. Green hotels often strive to achieve a carbon footprint of 10 kg CO2/night.

18. Return on Sustainability Investment - quantifies the profit generated by sustainable practices and investments in sustainability. This indicator highlights how effective sustainable initiatives are in generating additional revenue or cost savings, thereby boosting profitability while promoting green practices.

$$\text{Return on Sustainability Investment} = \frac{\text{Total Profit} - \text{Sustainability Costs}}{\text{Sustainability Costs}}$$

Hotels that demonstrate effective sustainability efforts can see a return on investment of up to 150% over five years as operational costs decrease and revenues increase through increased guest loyalty and new market opportunities.

Conclusions

The set of KPIs presented can be made into an improved dashboard by adding indicators for evaluating the sustainability of the hotel business. Thus, the hotel management has at its disposal a complete tool for measuring the organization's performance.

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MANAGERIAL APPROACHES TO THE TRAINING AND EMPLOYABILITY OF PRE-UNIVERSITY EDUCATION GRADUATES

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Abstract

In the contemporary context, the relationship between pre-university education and graduate employability is a sensitive issue. This study, based on responses from both high school graduates and employers, aims to identify the connection between the learning outcomes acquired at school and those required by the real economic environment, particularly for the qualification of “technician in economic activities,” with a focus on practical skills and transversal competencies. The study proposes that modern managerial strategies, such as the development of school–employer partnerships, the integration of key competencies into the curriculum, the enhancement of practical training, and the promotion of educational leadership, can increase youth employability and transform schools into active actors in local community development, through educational management that plays a crucial role in facilitating the transition from school to the labor market.

Keywords: employability, educational management, leadership, key competencies, school–employer partnerships.

JEL Classification: M53/J24

1. Introduction

The pursuit of higher education is the dominant pathway among high school graduates. The employment rate immediately after graduation remains relatively low compared to progression to tertiary education. Romania lags behind other European countries in terms of an efficient transition from high school to the labor market (6 out of 10 high school graduates participate in economic activities, according to the Ministry of Education and Research report “*The State of Pre-University Education 2022–2023*”).

A study conducted by the Organisation for Economic Co-operation and Development (OECD) indicates that in 2023, 17.3% of young people in Romania who had completed upper secondary education were neither employed nor engaged in any form of education or training, a finding that raises significant concerns regarding the effectiveness of the transition from school to the labor market.

2. Relevance and Importance of Research

The aim of this article is to examine the extent to which managerial principles and practices can contribute to improving the employability of graduates of pre-university education by fostering an effective alignment between educational provision and labor market demands.

3. Theoretical approaches

Human Capital Theory posits that education increases an individual’s productivity by enhancing their knowledge, skills, and competencies, thereby improving employability and labor market outcomes (Becker, 1993). Investments in education are thus treated as capital investments that yield economic returns in the form of higher employment prospects and earnings. In contrast, Signalling Theory suggests that education primarily functions as a signal of unobservable personal attributes such as intelligence, motivation, and perseverance, enabling employers to differentiate among candidates (Spence, 1973). Contemporary research suggests that education often combines

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both functions: it develops productive capabilities while also signaling qualities valued by employers (Tomlinson, 2017).

4. Materials and Methods

The investigative approach concerning managerial strategies related to the training and employability of pre-university education graduates employed a complex research strategy, based on three focus groups as follows:

- **High School Teachers Group:** 10 teachers from Colegiul Economic Ion Ghica (2 foreign language teachers, 1 ICT teacher, 1 mathematics teacher, 2 Romanian language teachers, and 4 teachers from the Technology curriculum area teaching 12th-grade students, specializing as technicians in economic activities).
- **High School Students Group:** 15 12th-grade students, distributed as follows: 5 students specializing as technicians in economic activities, 5 students specializing as technicians in economic activities with intensive English, and 5 students specializing as technicians in economic activities with intensive ICT.
- **Employers and Organization Representatives Group:** 10 participants representing employers and organizations such as CECCAR, CCIA Dâmbovița, ITM Dâmbovița, and AJOFM Dâmbovița.

4.1. The objectives of the research are:

O1 - To identify the key competencies required by high school graduates for successful integration into the labor market.

O2 - To assess employers' perceptions regarding the preparedness of young graduates.

O3 - To establish collaborative models between educational institutions and employers aimed at enhancing youth employability, based on managerial strategies designed to strengthen the school–industry connection.

4.2. The investigative approach concerning the enhancement of entrepreneurial competencies in educational management was guided by the following hypotheses:

H1 – Graduate employability is directly influenced by the relevance of the competencies acquired during their studies.

H2 – Continuous collaboration between schools and the business environment increases young graduates' employment prospects.

4.3. Documentary Analysis

The investigative approach concerning managerial strategies related to the training and employability of pre-university education graduates employed data collection methods focusing on studies of employers' expectations regarding high school graduates' competencies and employability, their labor market status, and continuation of studies in higher education. School management plays a crucial role in facilitating students' transition to the labor market and is continuously concerned with updating competencies to meet the demands of the real economic environment (Manea, 2013).

4.4. Selecting the Sample

According to data published by the National Institute of Statistics (INS), in the 2024–2025 school year, high school students accounted for approximately 17.3% of the total school population, or roughly 602,000 students. Existing data indicate that in the 2024–2025 school year,

the Ministry of Education and Research estimated that over 123,000 students were enrolled in the 12th grade, of whom 94,400 registered for the Baccalaureate exam in the summer session.

A total of 75,662 candidates from the current cohort passed the exam, corresponding to a success rate of approximately 81.9%.

For Dâmbovița County, participation and results in the 2025 Baccalaureate session are presented as follows:

Table 1. Overview of the 2025 Baccalaureate Examination – Current Session

Number of Participants Current Cohort June Session	Pass Rate – Current Cohort	Number of Participants Current Cohort August Session	Pass Rate – Current Cohort
2076	75,33%	434	35%

Source: Prepared by the author based on publicly available data from the Dâmbovița County School Inspectorate (ISJ Dâmbovița)

The integration of graduates into the labor market in 2025 requires a complex set of competencies combining technical, digital, and transversal skills with professional attitudes. Employers are placing greater emphasis than ever on flexibility, autonomy, adaptability, and the ability to leverage technology across all fields.

In the current school year, **Ion Ghica High School** has a total of 233 students enrolled across various specializations: 128 in Economic Activities Technician, 26 in Procurement and Contracting Technician, 24 in Commerce Technician, 27 in Tourism Technician, and 28 in Gastronomy Technician. The distribution of students in the Economic Activities Technician specialization by class is as follows:

Table 2. 12th Grade – Students in the Economic Activities Technician Program

Number	12th Grade – Class A	12th Grade – Class B	12th Grade – Class C	12th Grade – Class D	12th Grade – Class E
128	26	21	28	28	25

Source: Prepared by the author based on the database of Ion Ghica High School

From these, 15 students were selected: 5 Economic Activities Technicians – Intensive English, 5 Economic Activities Technicians, and 5 Economic Activities Technicians – Intensive ICT.

Out of a total of 78 teachers at **Colegiul Economic Ion Ghica**, including 45 teaching the 12th-grade classes mentioned above, 15 were selected: 2 foreign language teachers, 1 ICT teacher, 1 mathematics teacher, 2 Romanian language teachers, and 4 teachers from the Technology curriculum area.

Additionally, 10 employers and representatives from organizations such as CECCAR, CCIA Dâmbovița, ITM Dâmbovița, and AJOFM Dâmbovița were selected, as detailed in the table below:

Table 3. Representatives of Economic Operators and Partners for the Economic Field

No	Representative Employers and Partners	No of Participants
1.	Dâmbovița Chamber of Commerce, Industry, and Agriculture	1
2.	Dâmbovița Chamber of Chartered and Authorized Accountants	1
3.	Dâmbovița County Employment Agency	1
4.	Dâmbovița Labor Inspectorate	1
5.	Employers – Accounting Offices	6

Source: Prepared by the author

The questions posed were differentiated by focus groups as follows:

High School Students Group:

- How would you describe your overall level of preparation upon finishing high school?
- Which competencies do you believe employers consider essential for young graduates?
- What types of activities would help you be better prepared?

High School Teachers Group:

- How would you describe the overall level of preparation of graduates from Colegiul Economic, specifically for the classes under analysis?
- How would you assess the level of:
 - Linguistic competencies (Romanian, English)?
 - Digital competencies?
 - Logical thinking / mathematics?
- Where do you observe the greatest gaps?

Employers and Representatives of Various Professional Organizations Group:

- How would you describe the overall level of preparation of high school graduates?
- To what extent are graduates prepared in terms of:
 - ✓ Oral and written communication.
 - ✓ Collaboration and teamwork.
 - ✓ Problem-solving.
 - ✓ Creativity and initiative.
 - ✓ Responsibility, ethics, and discipline.
 - ✓ Organization and time management.

- ✓ Adaptability and continuous learning.
- Which of the competencies listed above are most frequently lacking?
- What does the high school system do well?
- What should be improved to develop key competencies?

4. Discussions:

Based on the responses provided by the three focus groups, a **Competency Profile** was developed for graduates of the **Economic Activities Technician** program

Table 4. Competency Profile of the Economic Activities Technician Graduate

Digital competence		
Field of competence	Subskill	Result
General use of IT	Using Microsoft Office	Creating documents
	Online collaboration	Use of platforms for communication and shared files
Digital literacy	Digital security	Data protection, secure passwords, phishing avoidance
Use of AI tools	Digital security	Use of AI for generating professional texts
	Data analysis	Using AI to perform basic economic data analysis
Transversal competence		
Professional communication	Oral	Explaining clear information professionally, adapted to the context
	Professional written communication	Writing emails and documents
Teamwork	Cooperation	Actively participates in the team, takes responsibility for tasks
	Conflict management	Maintains a positive environment, finds constructive solutions
Critical thinking	Situational analysis	identifică probleme și propune soluții
	Decision-making skills	Chooses the optimal option based on available data”
	Meeting deadlines	Completes tasks on time
Organization	Planning	gestionează sarcini, stabilește priorități
Adaptability	Flexibility	se adaptează rapid la schimbări tehnologice și procedurale
	lifelong learning skill	caută soluții de dezvoltare și perfecționare
Lingvistic competence		
English language	Professional use	Understands and uses basic economic terms

	professional communication skills	Basic Communication Skills
Foreign language 2	Basic competencies	Managing simple communication solutions

Source: prepared by the author based on responses to questions in focus groups

Very important were highlighted the **socio-professional competencies and professional attitudes**, for example: **professional ethics, data confidentiality, entrepreneurial competencies** such as initiative and entrepreneurial thinking.

Although it is often said that employers train employees on the job, the participants also emphasized certain **professional competencies**, including: **economic operations and basic accounting, use of software applications, data processing in Excel, administrative activities, sales, and promotion.**

This finding supports **H1**, which stated that **the employability of graduates is directly influenced by the relevance of the competencies acquired during their studies.**

At the level of **modern managerial strategies**, integrating the school into the dynamics of the labor market and transforming it into an **active actor within the local community** simultaneously targets students and the curriculum, particularly the one associated with the **Professional Training Standard**, part of the **School-based Curriculum (CDEOS)**, developed by the educational institution in partnership with **economic operators and/or local public administration authorities**, in order to adapt students' vocational training to the **local needs of the labor market** and to strengthen the relationship with the **socio-economic environment** (Duică & Duică, 2014).

Creating a **functional link between schools and the labor market** involves key actions such as **concluding contracts for practical training, organizing internships and mentoring programs for students, and developing a curriculum grounded in the realities of the economic environment.** Through direct collaboration with employers, schools generate **relevant educational programs** and can facilitate students' transition to the labor market, thereby ensuring **increased institutional performance and enhanced graduate employability** (Popa, 2004).

5. Conclusion:

All these **modern managerial strategies** increase young people's **employability** by providing **relevant competencies and practical experience.** They strengthen the link between education and real economic activities, turning schools into **active agents of local development** that positively influence the community (Dumitrescu, 2002).

The **modern managerial strategies**, identified through **focus group discussions**, are presented in the table below:

Table 5. Managerial strategies for increasing youth employability

Strategy	Objective	Implementation method	Indicator
Establishing partnerships for practical training internships	Student labor market integration	Signing protocols/contracts with companies and institutions	Number of partnerships Number of students
Professional mentoring	Development of practical and social skills	Provision of a practical mentor/tutor	Positive feedback from

			students and employers
Integration of digital competencies into the curriculum	Increasing graduates' competitiveness	Digital management tools, AI applications	Competency exams grades
Ongoing feedback between school and employer	Adapting the curriculum to market requirements	Meetings with employers to identify competency needs	Updating the curriculum
Active career guidance	Career support for students	Career counseling sessions, interviews, and attendance at job fairs	Number of counseled students Level of satisfaction and career guidance
Regular competency evaluation	Monitoring employability progress	Practical tests , Simulations, Assessments	Increasing the pass rate in end-of-cycle exams

Source: prepared by the author based on responses to questions in focus groups

Effective educational management that is oriented toward the labor market enhances graduates' employability, facilitates their adaptation to local economic demands, and strengthens the connection between education and the socio-economic development of the community (Nicolescu & Verboncu, 2007).

The implementation of modern managerial strategies in schools, as demonstrated above, transforms the school from a mere place of knowledge transmission into a space for professional and community development, preparing students for the transition from the educational environment to the real economic context. This supports Hypothesis **H2**, which posits that ongoing collaboration between schools and the business sector increases young people's employment opportunities.

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INFORMATION TECHNOLOGIES AND THE ACCOUNTING PROFESSION

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Abstract

The IT trends that mark the beginning of the 21st century promise to bring fundamental transformations across the business environment, public institutions, the educational system, and even everyday life. Globalization, together with the connectivity facilitated by the Internet, contributes to the rapid dissemination of the latest and most efficient IT solutions. Among these innovations, Cloud Computing stands out as a model that leverages the capabilities of the online environment and delivers them as services. In this model, users no longer purchase IT products but instead access computing resources—such as processing power, storage capacity, or software applications—via the Internet. This paper focuses on an essential aspect of the modernization of the accounting profession, particularly the observance of deontological principles in professional conduct. Since credibility is a fundamental condition for exercising this profession, we have examined the ethical dimension of accounting and emphasized the consequences of unethical behavior in business. The way in which the accounting profession is perceived by other actors within the economic environment, as well as by the public, plays a decisive role in shaping its future development.

Keywords: information technology, accounting information systems, digital products, Cloud Computing technology

JEL Classification: G3; G32; G34

1. Introduction

By adopting a proactive approach to anticipating future business challenges, individuals and organizations can avoid unforeseen situations that require reactive responses. The current economic environment is characterized by a high degree of dynamism, amplified in recent years by the rapid and continuous evolution of information technologies. As a result, new risks and challenges are constantly emerging, while those already known are undergoing continuous transformation.

The transition from the traditional “pen and paper” approach to electronic systems represents a major transformation across numerous fields of activity. This shift reflects not only technological progress but also the growing need for efficiency, accuracy, and accessibility in information management. The main reasons why the digital alternative is increasingly preferred can be summarized as follows:

✓ **Ecological perspective** –the reduction in the consumption of materials derived from non-renewable resources. The increasing demand for consumable materials such as stationery and office supplies—particularly paper—has contributed to large-scale deforestation, resulting in significant imbalances within natural ecosystems and elevated levels of carbon emissions. From this perspective, the environmental impact represents one of the strongest justifications for adopting paperless alternatives.

✓ **Increasing efficiency** by transitioning from physical documents to electronic formats. An important aspect favored by the digital version concerns the reduced storage space of information, compared to the option of organizing and classifying it in the form of files and archives.

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- ✓ **Accessibility to documents** – Accessing and transferring documents in electronic form significantly reduces the effort and time required for this process.
- ✓ **Document storage for an extended period of time** – By using digital documents, it becomes easier to extend the duration of information retention and ensure long-term data preservation.
- ✓ **Reduced costs** – Electronic documents involve significantly lower expenses compared to their physical counterparts.

2. The Need for Information Technology for the Accounting Profession

All these considerations lead to the conclusion that the digital alternative is preferred, especially in accounting. On the other hand, we note that with the transition to the knowledge society, the border between the physical (real, material) and the digital (virtual) space is becoming less and less perceptible. For the accounting professional, who operates with a huge volume of data and documents, choosing the electronic version, with specific digital tools, represents an advantageous solution, especially if we consider the arguments previously listed.

The next step following the dematerialization of accounting documents is the transition to online work tools. In fact, with the development of the Internet, and because of the phenomena of globalization and the promotion of sustainability, representatives of the business environment have begun to focus on various solutions to streamline economic activities and manage resources.

There are several examples that confirm the spread of information technologies in almost all sectors of activity, as well as in everyday life. Thus, the emergence of e-commerce, the development of the mobile industry, or later, the success of social networks reflects some of the most important technological milestones that have directly influenced the business world. We can say that the boundary between information technologies and the economic environment is fading faster and faster.

If we consider the current business environment, we find that it is characterized by unpredictability and radical transformations, which occur at an accelerated pace. To "survive" in such a fluctuating environment, economic entities must have flexibility and agility. The ability to adapt to market changes and consumer demands (or preferences) is essential for avoiding unfavorable situations and capitalizing on opportunities.

The role of information technologies is to provide advantageous, operative solutions that generate competitive advantages for companies. Interestingly, the technological progress observed in recent years is stimulated by user needs and market demands, while simultaneously serving as a key factor that enhances the dynamism of the business environment. Thus, the IT field directly affects the evolution of the economic environment.

As a result of the connectivity facilitated by digital products and the virtual environment, the transfer of information takes place in real time, trends are increasingly surpassed, and businesses can rise or fall unexpectedly. In fact, the economy of the 21st century can be considered a global, digital and interconnected economy through the online environment. A few decades ago, businesses could only function with the help of a digital computer and a telephone. Today, the telephone has become a complex device, and the battery-powered computer has become a simple application. Currently, the business world cannot operate without the assistance offered by information technologies.

Accounting, as a fundamental instrument for business management, is also marked by trends and innovations specific to the IT field. It is also worth emphasizing that, over time, information

technologies have had a positive impact on the work of accounting professionals. We must recognize that the classic "pen and paper" tandem, although indispensable for the accounting field a century ago, has been gradually replaced by electronic alternatives.

The IT field has brought several benefits to the accounting field, including:

⇒ The growing efficiency of IT equipment, including servers, computers, scanners, printers, and fax machines, ensures greater storage capacity and faster data processing, combined with ease of use and affordability.

⇒ The capacity to create, manage, and update data backups in real time, ensuring the possibility of data recovery in case of system failure or disaster.

⇒ Data security (authorized access, account and password-based login, Firewall or antivirus applications, encryption and cyberattack rejection solutions);

⇒ IT solutions and accounting software packages or suites, including spreadsheets, specialized applications, integrated systems, databases, and automated data processing capabilities.

⇒ Connectivity facilitated by Internet access, which enables remote device management, online payments through Internet banking systems, online reporting, the use of XBRL, and Cloud Computing technologies.

Accounting information systems represent an association of interdependent elements, each essential to the optimal functioning of the whole. These systems typically comprise five components that operate in an integrated and coordinated manner within an entity's accounting framework: physical resources, IT products (such as software applications), procedures, data, and human resources. It is important to emphasize that, although each of these components is individually significant, it is their interaction that ensures the coherence, efficiency, and overall performance of the accounting information system.

Especially in recent years, accounting information systems have increased the speed and efficiency with which financial and accounting data is collected, recorded and processed, thus offering accounting professionals significant advantages. Through so-called digital "products", the financial and accounting department can carry out increasingly complex activities and respond to user requirements in a timely manner.

For example, we mention some operations facilitated by information technologies:

➤ automatic processing of a very large volume of data (some of which is confidential);

➤ preserving, respectively archiving, accounting documents in electronic format for long periods of time;

➤ efficiency in the electronic operation of accounting data by reducing the time required for data processing (increasing work speed);

➤ reducing the volume of manual work, thus contributing to reducing the risk of human error and therefore increasing accuracy;

➤ the ability to quickly organize and sort data and documents according to various criteria.

➤ using predefined formulas for processing accounting data or for different types of accounting documents;

➤ the automatic execution of sequences of operations or instructions (based on algorithms);

➤ the automatic generation of accounting entries for various categories of accounting operations, as well as the creation of forms, reports, or statements based on specific criteria;

- the automatic verification of consistency and correspondences between accounts, as well as between the fields contained in accounting documents and registers;
- the automatic calculation of indicators or rates specific to financial accounting analysis;
- the integration of multiple modules within the same entity, such as the financial, procurement, personnel, and management modules;
- facilitating the audit process of accounting data and documents;
- the possibility of updating work procedures and processing of financial and accounting data, depending on the legislation in force;
- remote access to the application and related information (in the case of applications available online);

Of course, there is a wide range of information technologies used by accounting professionals, each with specific functionalities and advantages. Over the past fifty years, the advances in the IT sector have gradually been assimilated into the accounting field. It is worth noting that the common advantage shared by all accounting tools is the streamlining of accounting activities. To better understand how the accounting profession has been influenced by digital innovations and emerging trends, a brief overview of the evolution of information technologies in accounting is presented below.

3. The adoption of information technologies in the accounting field

Over time, information technologies have offered practical and innovative solutions for simplifying or streamlining certain activities. Starting from the first forms of representation of information technologies until today, we have witnessed a process of gradual introduction of IT solutions in the accounting field. To better understand the usefulness of IT applications for the accounting profession, we consider it necessary to present in summary the historical course of this process.

4. The first computing systems in human history

Looking at it from a chronological perspective, evidence of the existence and use of computers has been discovered since ancient times. A conclusive example in this regard is the Antikythera mechanism, a device over 2000 years old (built around 200 BC), discovered on board a shipwreck in the early 1990s, near the Greek island of Antikythera. It has been considered the first mechanical computer in human history (performing sophisticated astronomical calculations). Although it has not yet been possible to establish who could have invented such a highly advanced mechanism for the ancient period (the complexity of the device has been compared to that of a 19th century Swiss watch).

Another "calculator" with archaic origins is the abacus, a device used by ancient civilizations (Babylonian, Chinese, Roman, Greek) as early as 3000 BC. Variants of this device have also been found in pre-Columbian cultures in Central America (Inca, Aztec, and Mayan). In fact, some people in Asia (Japan, China, and Russia) still use the abacus to perform calculations today, and in Japan there is even a national soroban championship (the name of the Japanese abacus).

In a competition held in Tokyo in 1946, a Japanese man with an abacus faced an American soldier operating an electric calculating machine (the most advanced device at the time). The abacus triumphed in four out of five tests (addition, subtraction, division and a complex problem with all mathematical operations) – only in the multiplication test did the calculator surpass the “rudimentary” abacus. And if in Asia there is a tradition of using the abacus, in Europe its use was gradually abandoned, especially with the spread of Arabic numerals and paper. It should be noted

that the verb “to calculate” came from the name “calculi” (associated by the Romans with the abacus stones), as well as its derivatives, calculation and calculator. Also, in England, the board of this device was called a “counting board” or “counter” (from which the term “counter” comes).

Starting from the abacus, people have searched over time for different ways and devices to simplify calculation techniques. In 1623 and 1624, in a private correspondence, the German astronomer and mathematician Wilhelm Schickard mentioned to Johannes Kepler that he had designed and built an "arithmetical instrument" ("arithmeticum organum"). The device was described as a "calculating clock" ("Rechenuhr") because it worked on the basis of a mechanism with gear wheels, usually used to build clocks.

Twenty years later, in 1642, the French mathematician Blaise Pascal (then aged 19) invented another mechanical calculator (based on the same system of gears). For almost three hundred years Pascal was considered the inventor of the first mechanical calculator. However, the authors of the biography of the German astronomer Johannes Kepler (Michael Gottlieb Hansch, Max Caspar and Franz Hammer) have shown that the two letters – sent by Schickard to Kepler in 1623 and 1624 – contained sketches of the first mechanical calculator. In 1957, at a conference on the history of mathematics in Oberwolfach, Germany, Hammer popularized the idea that Schickard's mechanism predates Pascal's calculator by almost two decades. Since then, it has become known that Schickard is the inventor of the first mechanical (automatic) calculator capable of performing all four mathematical operations.

Pascal's calculating machine, known as the "Pascalina" or "Pascal's calculator", could add and subtract 6-digit numbers. The purpose for which Pascal invented this calculator was to simplify the effort of calculating for his father, who was a tax collector. So, in Pascal's case, the necessity arising from accounting practice was the factor that determined technological progress. Over the years, Pascal continuously improved the initial model of the Pascaline, reaching almost fifty prototypes of the device. Although his calculator began to be produced for sale, only a few machines were sold. The reasons were varied - the high price, the preconceptions of the time (that the device would cause the layoff of the workforce), but also the fact that the device used the decimal system, which was not applicable to the French monetary system of the time - a pound was divided into 20 sols, and the sols were divided into 12 dinars. There were, of course, other attempts to build a functional modern computer, but most were unsuccessful. The next notable advance was the "arithmometer", patented in 1820 by the French inventor and entrepreneur Charles Xavier Thomas de Colmar. The working mechanism borrowed elements from Pascal's calculator and Leibniz's "step calculator". The arithmometer was manufactured between 1851 and 1915 (during World War I), making it the first widely marketed computer, and it launched the mechanical computer industry.

5. Accounting applications and integrated systems

In parallel with the progress made in information technologies (confirmed by the rapid succession of computer generations), considerable results have also been achieved in terms of computer applications and communications technology. Over time, more IT-specific elements have spread and thrived in increasingly diverse environments and sectors of activity. The main explanation for this phenomenon is that technological innovations have facilitated the optimization of activities and have substantially improved the quality of life.

Almost every field, but especially the business environment, has taken over and exploited a series of IT resources and tools, such as computing and data storage systems, as well as a wide range of applications. Inevitably, accounting practice has also been influenced by these trends in

the economic sphere. Since the advent of the first modern computers and, later, with the widespread expansion of the Internet, accounting activities have been greatly simplified using IT solutions.

For the accounting profession, the evolution of information technology has had—and continues to have—a significant influence. The spread of personal computers (in the 1950s) and the development of the first accounting applications (starting in 1955) simplified, streamlined and modernized accounting by automating repetitive operations or procedures. In fact, one of the reasons why the first "models" of computers were purchased was to automate the accounting function. In practice, for most organizations, the accounting department has been the largest user of IT resources. However, it should be noted that small businesses used computers for accounting much later, in the 1980s (after the launch of personal computers).

The automation of primary accounting through spreadsheet programs and accounting applications (Peachtree in 1978, VisiCalc in 1979, SuperCalc in 1980, Multiplan in 1982, Lotus 1-2-3 in 1983, Microsoft Excel in 1985) led to the streamlining of activities, the elimination of repetitive operations and, implicitly, the reduction of working time. Even today, operations carried out by newly established companies, micro-entities, small businesses or organizations (including non-profits) whose activity is relatively small, are processed and centralized by accounting professionals using spreadsheet programs (e.g., the Excel application from the Microsoft Office package).

With the increase in the complexity or volume of operations performed by an entity, the accounting department must resort to specialized applications. A distinct category of applications, also used by accounting professionals, are integrated systems, known in the literature and practice as ERP (Enterprise Resource Planning). The commercialization of the first integrated ERP systems began in the 1990s, and with the passage of time and the evolution of information technologies, these systems have become increasingly efficient and complex (especially since the 2000s). Today, many companies (especially large companies, corporations or multinational groups of companies) use ERP systems because they facilitate collaboration through a single platform, accessible to all users within the organization.

Integrated systems emerged from the need to automate, collaborate and integrate the most important processes within an (economic) organization. Of all the modules that make up the integrated system, the financial-accounting module is considered fundamental for the entire application and implicitly for the company that uses the respective system.

Although the advantages of an ERP system are undeniable, the associated costs, complexity and extended duration (in some cases, several years) of the implementation process represent significant impediments for many companies (especially small and medium-sized businesses).

Another important development in information technology for the accounting field is the use of a standardized language for financial reporting. The acronym XBRL (eXtensible Business Reporting Language) refers to a language designed to standardize the transfer of financial information in the online environment. The development of this technology, which began in 1997–1998, was supported by the American Institute of Certified Public Accountants (AICPA).

The XBRL International Consortium, established in 1998, includes over 170 members (companies, national professional bodies, application providers, government representatives and non-profit organizations) from around the world and has the role of facilitating the transfer of financial information by promoting the adoption of XBRL standards and ensuring compatibility between representatives of different industries or sectors of activity.

As for the audit activity, specialized applications have been developed in this field as well, to assist audit missions. The purpose of these IT solutions is to automate specific stages of audit engagements and to enhance the efficiency of auditors. These programs enable auditors to plan their activities, design the structure of the audit file according to the type of engagement, and effectively manage both the audit team and the engagement budget. In addition, intelligent systems based on fuzzy logic and data mining techniques have proven to be highly useful for reviewing and processing large volumes of data, as well as for detecting irregularities during audit engagements. Some applications for conducting internal audits even offer the possibility of making corrections to incorrectly recorded operations.

6. Cloud Computing Technology and the Perspectives of the Accounting Profession

The digital revolution that began with the advent of the Internet led to a continuous and accelerated development of technological innovations. The next significant progress in terms of impact and notoriety, especially for the business environment, was represented by Cloud Computing technology. Originating in the private sector, Cloud Computing emerged in response to the unprecedented expansion of information volumes and the growing demand for IT resources, serving as a means to optimize and streamline costs.

The first companies to offer (financial) applications over the Internet, under the name "Software as a Service", were NetSuite (founded in 1998), Kashflow (1998), Salesforce.com (1999) and Intacct (1999). They were, in fact, the first manifestations of the technology later called Cloud Computing. Later, in 2002, Amazon launched the Amazon Web Services package, which offered IT resources (infrastructure and storage capacities) accessible via the Internet.

In fact, the term "*Cloud*" was first used by the same company, which launched the service called *Amazon Elastic Compute Cloud* in 2006. Although the technology was developed over a period of over 15 years, the popularization of the term "*Cloud*" was due to large companies that promoted applications based on this technology.

It should also be mentioned that initially, this technology was disregarded, as usually happens in the case of any paradigm shift. Among the reasons that initially generated contradictions and confusion, we mention the novelty of the concept and the diversity (typology) of this technology. However, over time, Cloud Computing technology has evolved, and the way it is perceived and applied has also undergone significant transformation.

The 2000s brought to the forefront a new phase in the field of information and communications technologies, the transition from local information storage to storage in virtual environments (although this concept had appeared in a rudimentary form as early as 1996).

The Cloud Computing model, designated by some authors or professionals as "the most representative progress since the advent of the Internet", has produced a change of perspective, both for IT specialists and for information technology users. In a few words, Cloud Computing solutions can be described as applications that are not installed on your own computer but are accessed from any device connected to the internet (the Cloud being considered a metaphor for the internet). All information is stored on the server of a specialized provider (Cloud Service Provider), and access is achieved through the browser. According to the Cloud Computing model, the Internet has become the medium for data storage, transfer, and access.

In the last decade, mobile technologies and *Cloud Computing* solutions have spread to almost every field (even in everyday life). *Internet banking* applications, accessing electronic mail from various portable devices (laptop, smartphone, tablet), online document storage or transfer

sites (such as Dropbox or Google Drive) are also based on the Cloud model. Of course, the accounting sector has also discovered several advantages associated with this technology. In fact, there is no doubt that currently, *Cloud Computing* technology is irreversibly marking the *accounting software* market. In this context, the concept of *Cloud Accounting* (or *online accounting*) has emerged in practice and accounting literature.

Cloud accounting applications offer the same functionalities as traditional accounting software, with the distinction that they are not installed locally on the user's computer. In other words, users of the accounting application pay for its use/access (the service provided by the provider) and not the application itself (the IT product). This results in considerable savings in terms of investments in infrastructure and IT products, which are replaced by a subscription. Therefore, *the Cloud* offers a competitive advantage, especially for small and medium-sized companies that can access state-of-the-art technologies and information resources that they otherwise cannot afford. Because *Cloud Computing* technology offers flexibility to businesses, they can adjust their IT resource requirements according to their needs and the economic context.

Cloud accounting offers several benefits for business representatives and accounting professionals. Since the (financial) data is available on an online platform, all users of the solution can simultaneously access the information (which is updated in real time), regardless of their location. The application provider is responsible for ensuring a high level of data and access security using complex security protocols, as well as for performing regular data backups.

An essential feature of *Cloud Computing* technology concerns the way this technology is accessed: **as a service**. Since *the Cloud* user does not purchase an IT asset, but only the "right" to use it, it is a service offered by the technology provider. In fact, based on this feature of *the Cloud*, the responsibility of providing the "turnkey" technology falls entirely on *the Cloud* provider. It must possess the necessary infrastructure and carry out the required investments, upgrades, and maintenance (including the remuneration of specialized personnel) so that, ultimately, the client obtains an IT resource—such as a data center, *server*, or application—in the form of a service. Although *Cloud Computing* is generally discussed as a single technology, in practice there are different forms of manifestation of the *Cloud* model, each with a series of specific characteristics.

Thus, in the literature and specialized practice, there are two forms of classification of *Cloud Computing* technology: types of services and implementation models.

Without going into technical details, we mention that the types of services dedicated to *Cloud Computing* technology are:

- Infrastructure as a Service (IaaS),
- Platform as a Service (PaaS),
- Software as a Service (SaaS).

In the case of the first two types of services, the *Cloud* provider is responsible only for managing the devices or equipment (hardware resources) required by the user, whereas in the third case, the *Cloud* user simply needs to access the application managed by the provider. Therefore, under the contract negotiated between the two parties, the provider is obligated to deliver a "turnkey" application to the client (whether an individual user or a legal entity).

Depending on the category of *Cloud* users, depending on their requirements/needs, there is a differentiation in the types of services offered. Thus, IaaS services are particularly sought after by IT specialists—such as network administrators, engineers, and system architects—who require only hardware resources (servers, storage capacities, virtualization, etc.). PaaS services are preferred by developers and programmers, as they also require a platform for designing and developing applications, such as an operating system. SaaS services, on the other hand, are

primarily used by individual users and small or medium-sized enterprises, who directly access the necessary applications through an internet-connected device such as a smartphone, tablet, or laptop.

Since the subject of this chapter focuses on accounting applications, these clearly fall within the third category of *Cloud Computing services*—*SaaS*. Among the features included in an *Application as a Service* (SaaS) offering are system and application maintenance (updates and technical support), periodic backups (according to user requirements), and the ability to restore data to its most recent version.

Another way to classify *Cloud Computing* technology is based on its implementation model. From this perspective, the *Cloud* can be public, private, or hybrid.

The main distinction between the public and private *Cloud* models lies in the manner in which IT resources are allocated to users. Thus, in the case of a public *Cloud*, multiple customers of the same provider (whether individual users or companies) share the same infrastructure, such as a server or data center. In the case of a private *Cloud*, by contrast, each client is allocated a dedicated data center. The main advantage of the public *Cloud* model lies in the significant cost savings on IT infrastructure, as it eliminates the expenses associated with maintaining an in-house data center. Given this, the public *Cloud* model is particularly recommended for individual users, small and medium-sized enterprises, or newly established companies.

As for the private *Cloud*, it provides enhanced security for data stored in the online environment (particularly when handling sensitive information). In most cases, the private *Cloud* model is preferred by large corporations, corporate groups, or public institutions that possess the financial resources required to manage their own *Cloud*-based data centers.

Obviously, the hybrid *Cloud* includes a combination of the two types mentioned above. This type of *Cloud* is primarily chosen by large organizations, corporations, or government institutions that seek to benefit from both the cost savings offered by the public model and the enhanced security characteristic of the private *Cloud*. Thus, certain data and operations are managed through the public component, while confidential data requiring a higher level of protection and control is handled through the private component of the hybrid *Cloud*.

Considering users' needs, as well as the two ways of classifying *Cloud Computing* technology (by service type and implementation model), the following observations can be made:

- ✚ in general, **individual users** benefit most from SaaS-type services (applications accessed as *Cloud*-based services) and from the public *Cloud* model;

- ✚ **small and medium-sized enterprises** also prefer SaaS-type services (Applications as a Service), but they may sometimes opt for IaaS (Infrastructure as a Service) in order to use their own systems and applications. Regarding the chosen implementation model, in most cases this is the public *Cloud*;

- ✚ **large companies, multinational organizations** (corporations, groups, or conglomerates), as well as **public institutions** seeking to benefit from *Cloud Computing* technology, adopt all the previously mentioned types of services and implementation models—or combinations thereof (in varying proportions) depending on specific areas of activity or types of data.

In the accounting field, *Cloud Computing* technology is referred to as *Cloud accounting applications*, *Cloud accounting*, *online accounting*, or *e-accounting*.

Although the first online accounting applications were launched as early as 1998–1999 (by companies such as NetSuite, KashFlow, Salesforce.com, and Intacct), interest in these applications increased significantly with the growing popularity and adoption of *Cloud Computing* technology.

Starting in the 2000s, *Cloud* technology also spread to integrated systems such as ERP (*Enterprise Resource Planning*), giving rise to the concept of “ERP in the *Cloud*” (*Cloud ERP*, *ERP in the Cloud*, *Extended ERP*). This virtualized form of an integrated system combines, on the one hand, the benefits of traditional ERP systems and, on the other, the advantages of *Cloud Computing* technology. The market for *Cloud*-based integrated systems has been expanding, either due to the solutions promoted by established ERP vendors (SAP, Sage, Epicor, Microsoft, Oracle, Intuit, SYSPRO), which, anticipating the impact of *Cloud Computing*, began offering online alternatives to their existing products, or through the emergence of new niche companies such as Tecnica (2001, now known as Openbravo), Workday (2005), Xero (2006), Acumatica (2008), ERPNext (2008), and BigSun Technologies (2008), among others.

Based on the research conducted, we can state that *Cloud Computing* technology has triggered (and continues to generate) radical changes in the business environment, the field of information technologies, and the accounting profession. Considering its effects, the *Cloud* can be regarded as a “*disruptive technology*” or a form of “*creative destruction*.” It is important to emphasize, however, that these concepts do not necessarily imply negative consequences, but rather a shift in perspective—one that reflects progress and transformation.

Regarding the views of accounting professionals (perceived as judicious and cautious individuals) they examine with great scrutiny both the benefits and the impact of accounting applications based on *Cloud Computing* technology. It may be said that the accounting profession shows a certain degree of reserve (partly justified) toward the *Cloud* model. The most plausible explanations for this attitude relate to the novelty of the technology for the accounting field, the risks associated with the online environment, and the lack of information regarding the implications of *Cloud* solutions for users.

7. Conclusions

Considering the usefulness of *Cloud Computing* technology, as well as the relatively rapid pace of technological advancement within organizations worldwide, we can propose a scenario regarding the (gradual) diffusion process of this model:

1. In the first stage, the adoption of this technology will occur at the **individual** level. We can observe that, at present, an increasing number of individuals are regularly using the *Cloud* (in everyday, recreational, or social activities), especially for personal data storage.

2. In a subsequent phase, we will witness the expansion of the *Cloud* phenomenon at the **microeconomic** level. In fact, not only companies but also public institutions and other non-governmental organizations will turn to the *Cloud* to gain competitive advantages, achieve economic benefits, or simply keep up with the latest technological advancements. This stage will also involve changes for accounting professionals, who will shift toward *Cloud*-based accounting applications and will specialize in order to adapt flexibly to this technology.

3. Finally, *Cloud* technology will spread at **macroeconomic** level. As this technology “matures,” its adoption will become a widespread phenomenon. Adoption by business partners, as well as the online and real-time reporting of financial and accounting information, will create the premises for a new stage of technological development—the *digitalization of business*. As part of this process, the methods and procedures specific to the accounting field may undergo a series of necessary transformations, aimed at improving efficiency and simplifying accounting operations and activities overall.

We can anticipate that *Cloud Computing* technology will become a common tool both in the economic sphere and in everyday life. At present, more and more industries and fields of activity

are shifting toward this modern approach, characterized by proactivity, collaboration, and flexibility. Accounting, the formalized language of business, has the role of providing essential information for economic decision-making. Given the foreseeable impact of Cloud Computing technology on the business environment, representatives of the accounting profession must consider the opportunities and advantages offered by this IT solution, in order to contribute to the efficiency and optimization of economic activity as a whole.

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THE EVOLUTION OF ROMANIAN CRIMINAL LAW IN THE CONTEXT OF OUR COUNTRY'S MEMBERSHIP IN THE EUROPEAN UNION

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Abstract:

Criminal law is not subject to legislative unification at the European level, as it continues to be regarded as an expression of the national sovereignty of each member state. Within the practice of European institutional relations, there has emerged not only the need for continuous convergence between the national criminal provisions of the member states, but also *the necessity of establishing European criminal law provisions* aimed at enhancing the effectiveness of the fight against crime at both European and global levels.

Keywords: *European criminal law, national sovereignty*

JEL Classification: *K 38*

Although in principle, criminal law is not subject to legislative unification at European level, criminal law being still considered the expression of the national sovereignty of each of the member states, in the practice of European institutional relations, it has been highlighted, in addition to the need for continuous approximation between the national criminal provisions of the member states, the need to establish criminal provisions of European law, through which to make the fight against crime more efficient at European and global level.

A first attempt to develop a European criminal code can be considered the initiative of the European Commission, from 1995 to 1996, to develop the Corpus Juris project (1997 first version under the coordination of Ms. Mireille Delmas-Marty).

The European normative project of criminal law and criminal procedural law called Corpus Juris had as its practical purpose the transposition into the legislation of the EU member states of the primary objective of establishing a territorial area of freedom, security and justice, enshrined in the Treaty on European Union. A group of experts worked on this project during 1995-1996 and was published in 1997 in a bilingual English-French version. The project was the subject of numerous specialist conferences, both at the level of the Member States and of the Union. This document consists of three chapters - criminal law, special part (I), criminal law, general part (II) and criminal procedure (III). By the Resolutions of the European Parliament of 12 June and 22 October 1997, the European Commission was tasked with carrying out a study at the level of the 15 Member States (at that time) on the feasibility of Corpus Juris. The study was structured around two fundamental themes, namely: the analysis of the provisions of Corpus Juris in relation to the national legislation of each Member State and, respectively, horizontal cooperation between Member States and vertical cooperation between States and the European Union.

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The results of the study were the subject of a wide doctrinal debate, representing the basis for the modification of the draft, through the appearance of the Florence 2000 version. Keeping the same number of articles (35), the Corpus Juris 2000 version brings as a novelty changes in the content of some provisions, as well as a reversal of the effective order of the articles in the content of the draft. The reason for the appearance of the new form of the draft consists in taking into account the positions reported by the national rapporteurs of the Member States in relation to some inconsistencies between the provisions of the initial version and national legislation, as well as the possibility of future problems related to horizontal and, respectively, vertical cooperation, as we will try to show below.

Although significant efforts were made, the draft did not materialize in a legislative document applicable at Union level.

The premises for the approach of criminal law at the level of the Union institutions are created by the institutional reform carried out by the Maastricht Treaty (Klip, 2012). The Third Pillar of the Maastricht Treaty (JHA) attributed to the European Union some competences in the field of criminal law, which, it is true, were not exercised exclusively, but jointly with the Member States.

At present, the European Union has received prerogatives through which it exercises normative influences both on substantive criminal law/criminal procedure and on the field of cooperation between Member States (or both).

The main characteristic of this system is that its rules were formulated at the European level, but their implementation, their implementation, takes place at the national level. The exceptions are the areas in which the European Union directly implements criminal law: namely competition law and the European Public Prosecutor's Office.

It is certain that a European criminal justice system is active, despite the fact that it is fragmented and lacking in consistency in many aspects.

Forms of joint action by states such as the approximation of legislation by establishing equivalent standards through the harmonisation of legal systems or the unification of the criminal law regulations of the Member States through standard model provisions have already been implemented for almost a decade. The creation of equivalent standards implies, according to the Hague Programme and the Tampere Programme, "an alignment of legal acts", which requires the initiation and implementation of measures leading to the approximation of national criminal law systems.

The harmonisation of criminal law systems could be considered as the second stage of the approximation of criminal law systems, in which an attempt is made to make them compatible by improving cooperation in criminal matters and criminal procedure. The most significant step in this direction is the Framework Decision no. 584/13.06.2002 on the European arrest warrant. The effect of this Framework Decision is that the extradition procedures carried out until then between Member States governed by the usual provisions of the Treaties have been completely eliminated. The cumbersome extradition procedure has been replaced by a rapid procedure, similar to the arrest procedure carried out by the national judicial authorities

The Treaty on the Functioning of the European Union confers on the Union the competence to issue common rules in the following areas:

- minimum rules relating to Euro crimes. Article 83 of the Treaty provides that such minimum rules may be adopted for the so-called "Euro crimes", included in a list of particularly serious

criminal acts with a cross-border dimension: terrorism, trafficking in human beings and sexual exploitation of women and children, illicit drug trafficking, illicit arms trafficking, money laundering, corruption, counterfeiting of means of payment, computer crime, and organised crime. -common minimum rules on the definition of criminal offences and sanctions, i.e. rules establishing which conduct is considered a criminal offence, where these rules are essential for ensuring the effectiveness of a harmonised EU policy, as well as the type and level of sanctions applicable to such acts.

The harmonisation of criminal law systems could be considered as the second stage of the approximation of criminal law systems, in which an attempt is made to make them compatible by improving cooperation in criminal matters and criminal procedure. The most significant step in this direction is represented by Framework Decision No. 584/13.06.2002 on the European arrest warrant. The effect of this Framework Decision is that the extradition procedures carried out until that moment between the Member States governed by the usual provisions of the Treaties have been completely eliminated. The cumbersome extradition procedure has been replaced by a rapid procedure, similar to the arrest procedure carried out by the national judicial authorities

Article 86 (1) of the TFEU provided for the following procedure for the establishment of the European Public Prosecutor's Office: The Commission shall draw up a draft regulation and submit it to the Council, which shall act unanimously after obtaining the consent of the European Parliament. If there is no unanimity, a group of at least nine Member States may request that the draft regulation be sent to the European Council for examination. In 2013, the Proposal for a Regulation on the establishment of the European Public Prosecutor's Office was launched (COM 17.7.2013). As this proposal did not meet with unanimity in the Council, 16 Member States: Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Germany, Greece, Spain, Finland, France, Lithuania, Luxembourg, Portugal, Romania, Slovenia and Slovakia, notified the three institutions of their intention to launch enhanced cooperation to establish a European Public Prosecutor's Office (EPPO). At the institutional level, European structures have been created to implement European criminal law: the establishment of the European Public Prosecutor's Office with the powers to investigate, prosecute and bring to justice the perpetrators and co-perpetrators of fraud against the interests of the European Union and related offences, as provided for in Article 86 of the Treaty of Lisbon, in respect of which the proposal for a regulation on the functioning and rules of procedure of this institution is currently under discussion.

As regards the European Convention on Human Rights, it has pre-eminence, not only by virtue of the principle of the primacy of international law, but also because it is enshrined in a constitutional norm (article 11 paragraph 2 and article 20 of the Constitution). This ensures effective and concrete guarantees for the application of the Convention's rules in national law, both in terms of the quality of national law and in its interpretation and application, the jurisprudence of the European Court of Human Rights having an important directing role (Voicu, 2001).

The European Convention on Human Rights, considered to be the most complex and advanced international legal instrument on the protection of fundamental rights and freedoms, also has the role of standard in the interpretation of constitutional texts on the field of human rights, a role that the Constitutional Court has increasingly confirmed in more and more of its decisions (Tudorică, 2003).

The situation of the European Convention on Human Rights in the national law of the states implies a great diversity. Thus, in countries such as Ireland, these norms are not part of the domestic

law, because international norms are considered to have legal value only in terms of interstate relations (Sudre, 2006).

In other member states of the Council of Europe (Malta, Finland, Sweden, Norway, Denmark, and the United Kingdom), the provisions of the Convention have been applied indirectly, after the transposition into the internal order by a special law. Furthermore, in countries such as Germany, Bulgaria, Spain, France, the Netherlands, Portugal, Belgium, the European Convention is incorporated directly, automatically into the domestic legal order through the effect of national constitutional provisions (Sudre, 2006).

Regarding the rank of the European Convention in relation to the Romanian legislation, it results from the corroboration of the provisions of article 11 and article 20 with those of article 1 paragraph (5) of the Romanian Constitution, the latter consecrating the supremacy of the fundamental law over all other laws. Therefore, in terms of legal force, the provisions of the European Convention cannot be located above the provisions of the Romanian Constitution; however, it would have the character of a law that is located immediately after the fundamental law and before the other categories of normative acts (Muraru, 2007).

The causes for which the dynamics of the process of incorporation into the national law of fundamental rights and freedoms have been slow, especially at the level of ordinary courts, are different in nature. First of all, the difficulty of applying the Convention arose due to the lack of any official information system on the Court's jurisprudence, the judges confining thus themselves sometimes to asserting the conformity of the acts of national law with the text of the Convention. Secondly, there was a strong reluctance of the judges towards a court and a supranational legal text. The phenomenon is not unique, manifesting at different intensities in other member states of the Council of Europe (Chiriță, 2008).

The European Convention has had and continues to have a great influence on the Criminal Code, the Criminal Procedure Code, the special laws with criminal content, as well as on the content of the organic and ordinary laws. This influence is clearly observed in the New Codes (Criminal and Procedure Codes), as well as the changes made by the jurisprudence of the European Court of Human Rights.

The universal declaration of human rights acquires binding legal force in the Romanian domestic law pursuant to article 20 paragraph 1 of the Constitution and is integrated into the block of constitutionality, having the same legal force as the international human rights treaties to which Romania is a party.

Human rights remain a problem of the national competence of each state, being more and more the object of international cooperation (Diaconu, 2001).

Conclusions

The applicability of the international legal instruments in the domestic law has been an intensely debated issue in the literature. The vast majority of these debates were based on article 20 paragraph 2 of the Constitution, where it is mentioned that if there are inconsistencies between the pacts and treaties regarding the fundamental human rights, to which Romania is a party, and the internal laws, the international regulations have priority.

In order to identify the preferable norm to the circumstances of the case in question, it a prior operation should be performed, valorising all the international norms in the matter, approved by the Romanian state.

With regard to the European Convention on Human Rights, it has priority, not only by virtue of the principle of the primacy of international law, but also because it is enshrined in a constitutional norm (Article 11 paragraph 2 and Article 20 of the Constitution).

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DEFINING AND FEATURING GEOECONOMICS

Sorin-George Toma¹

Abstract: *The past decades witnessed a major shift in the world economic order due to the weakening of the American domination and the rapid emergence of China, today's second world economic superpower. Consequently, the battle for conquering the sales and supply markets among various economic actors has become much rougher worldwide since then. With various states and blocs of states fiercely competing for supremacy in a highly turbulent global environment, geoeconomics has emerged as a new discipline and a field of research since the past century. The purposes of this study are to define the concept of geoeconomics and highlight its main characteristics. In this respect, the author employed a qualitative research method, based on a broad literature review. The results show that geoeconomics represents a complex, dynamic, multidimensional, and cross-disciplinary concept and provides a plethora of perspectives for the study of both economics and geography. Also, it aims at obtaining a sustainable competitive advantage during the time.*

Keywords: geoeconomics, geopolitics, geography, America, China

JEL Classification: Z00

1. Introduction

Since the Fall of the Berlin Wall, the last decades have witnessed the expansion of specific practices in international relations. One is related to the fact that powerful countries, such as the United States of America, the Popular Republic of China and the Russian Federation, increasingly use their strengths, either military, economic or political, to „extract economic and political surplus from other countries around the world” (Clayton et al., 2024a, p.2). In this respect, they utilize numerous instruments and methods such as technology transfer, supply chain blockages, financial constraints, or commercial tariffs, in a globalized world (Toma, 2005; Toma, 2013; Marinescu and Toma, 2015). In fact, the year 2025 was „a year in which the world's largest economy hiked its tariff rates to the highest level in a century, cryptocurrency usage surged across the globe, sanctions evaders found new ways to avoid detection, global public debt climbed ever higher, and low-income countries backtracked on gains made over decades” (Geoeconomics Center Experts, 2025, p.1).

Emerged after the end of the World War II, the relatively long period of the so-called „Pax Americana” („American Peace”), based on democratic values, economic openness and military trustworthiness, has come to an end since the erosion of the American superpower and the rise of another superpower, China (Toma and Săseanu, 2019). On the one hand, the credibility of the American military power has been significantly diminished and, on the other hand, the American economic leadership has been undermined since the collapse of the Bretton Woods system (Overhaus, 2025) combined with the spectacular increase of the Chinese economy (Toma and Tohănean, 2018a; Toma et al., 2021; Toma, 2023a). Thus, the old American hegemonism has been deeply contested in recent years by other countries, especially by China and Russia (Toma et al., 2017; Toma and Grădinaru, 2018; Toma et al., 2019a). Moreover, the making of a new world economic order (Toma, 2024a), based on multilateralism instead of unilateralism, requires economic cooperation and security in a highly fractured world (Clayton et al., 2024b; Woolner, 2025) which is characterized by economic fragmentation.

The late 20th century and the beginning of the 21st century brought the rapid expansion of globalization (Toma and Săseanu, 2007) and, therefore, a fierce competition not only among

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geographic regions, unions of countries/blocs of states, countries (Toma et al., 2008) and cities (Toma and Săseanu, 2018; Toma et al., 2018) but also among corporations, enterprises (Toma et al., 2016a; Toma, 2023b; Toma, 2024b), and banks (Toma and Grădinaru, 2017; Toma et al., 2019b; Toma and Modreanu, 2022) all over the world. Consequently, the battle for conquering the sales and supply markets among various economic actors has become much rougher worldwide since then.

In order to better understand the new realities, identify the main opportunities and threats, and find solutions for obtaining competitive advantages, policy makers, other practitioners and researchers called on different topics such as geopolitics, strategy, history or geoeconomics. More and more the field of geoeconomics has gained prominence since its emergence, especially in today's turbulent global environment (Toma and Marinescu, 2015; Toma and Tohănean, 2018b; Catană et al., 2021).

The purposes of this study are to define the concept of geoeconomics and highlight its main characteristics. In this respect, the author employed a qualitative research method, based on a broad literature review.

The research has the following structure: the next section displays the literature review. The research methodology is illustrated in the third section of the paper. The results and discussion are presented in the fourth section. Conclusions are shown at the end of the research.

2. Literature review

Since its appearance, the term of *geoeconomics* has called on attention of numerous researchers and practitioners. In its beginnings, Arthur Dix (1875-1935), a German geopolitician, asserted that geoeconomics could be incorporated by grafting as an offshoot of the geography (Murphy, 1997). In his masterpiece headed „Geoökonomie: Einführung in erdhafter Wirtschaftsbetrachtung” („Geoeconomics: Introduction to Earthbound Economic Contemplation”), Dix looked at geoeconomics as „an applied and instrumental combination of spatial-economic analysis and future-oriented policy” (Mallin and Sidaway, 2022, p.7). He saw a complementarity between geopolitics and geoeconomics and stated that the establishment of an economic statecraft should begin with the analysis of the energy and trade flows (Dix, 1925). Also, Wilhelm Röpke (1899-1966), a German economist, argued that business cycles, a topic specific to economics, should be spatial correlated (Röpke, 1922).

In the same period of time, the concept of geoeconomics was used under the title of *geonomics*, a term launched by Ray Hughes Whitbeck (1871-1939), an American geographer (Finch, 1939). In the mid of 1920s, he published an article entitled „A science of geonomics” where geonomics was defined as „a branch of science which deals with the economic activities of man as influenced by his geographic environment” (Whitbeck, 1926, p.119). In other words, Whitbeck considered that geonomics referred to the application of the principles and laws of geography to economy.

In the 1940s, Richard Montgomery Field (1885-1961), an American geologist, opposed geoeconomics, as a peaceful alternative, to the geowar concept. In his view, geoeconomics studies the natural resources and their distribution at a global level (Field, 1941). During the Second World War, Lewis Levitzki Lorwin (1883-1970), an American economist, made the distinction between geoeconomics and geopolitics. He asserted that geoeconomics provides the best ways of using natural resources by relating them with the increasing social needs of a rising population (Lorwin, 1943). On his turn, George Thomas Renner (1900-1955), an American geographer, used the term geonomics after the war (Renner, 1952).

Much later, Edward Nicolae Luttwak (1942-present), an American strategist, popularized the concept of geoeconomics after the end of the Cold War. In his opinion, military conflicts were replaced by economic competition in an increasingly turbulent world. Especially since the end of the communist regimes from Central and Eastern Europe, the number of articles and books on geoeconomics has continuously increased. There is a plethora of definitions of geoeconomics in the literature (Table no. 1).

Table no. 1. Definitions of geoeconomics

No.	Year	Definition
1	1990	„the admixture of the logic of conflict with the methods of commerce” (Luttwak, p.19)
2	2012	„the relationship between economic policy and changes in national power and geopolitics (in other words, the geopolitical consequences of economic phenomena)” or „the economic consequences of trends in geopolitics and national power” (Baru, p.47)
3		„the study of spatial, cultural, and strategic aspects of resources, with the aim of gaining a sustainable competitive advantage” (Soilen, p.8)
4	22013	„a set of discursive constructs and a platform for devising political and economic strategies and policy” (Essex, p.3)
5	2016	„the use of economic instruments to promote and defend national interests, and to produce beneficial geopolitical results; and the effects of other nations' economic actions on a country's geopolitical goals” (Blackwill and Harris, p.20)
6		„the geostrategic use of economic power” (Wigell and Vihma, p.606)
7	2017	„the dynamic economic relationships of countries shaped by a multitude of intervening factors such as geography, politics, and business” (Munoz, p.1)
8	2018	„the application of economic means of power so as to realise strategic objectives” (Scholvin and Wigell, p.10)
9	2020	„the use of economic tools to advance geopolitical objectives” (Schneider-Petsinger, p.1)
10	2022	„a combination of international economic and political factors relating to or influencing a nation or region” (The American Heritage Dictionary, p.1)
11		„using economic tools and geography to benefit through international trade and other means of interstate economic cooperation” (Husain, p.1)
12	2023	„often used in the sense of ‘using the economy for geopolitical aims,’ with more emphasis on policy implementation than analysis of the current situation “ (Amano, p.3)
13	2025	„the combination of economic and geographic factors relating to international trade” (Merriam-Webster, p.1)
14		„economics in its relationship to such geographical conditions as locations and natural resources” (Collins, p.1)
15		„the study or application of the influence of geography on domestic and international economics” (Dictionary.com, p.1)
16		„the study of how economic power and relationships shape, and are shaped by, political and strategic interests on the global stage” (Atlantic Council, p.1)

17	„the reciprocal application of security arguments and military actions with economic goals” (Sparke, p.103)
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Source: author's reviews

The above-mentioned definitions of geoeconomics allow their analysis and the identification of its main features in the fourth section of the paper.

3. Research methodology

In order to attain the purposes of this study, the author used a qualitative research method based on a laborious desk research. He begun to identify and collect the needed information from various sources such as articles and books. Afterwards, the author deployed a a comprehensive literature review. Then, he analysed and synthesised the data. In the end, the author elaborated the study.

4. Results and discussion

This section of the paper illustrates the findings of the study altotogether with a their analysis. Based on the literature review exhibited in the second section of this study, geoeconomics has the following main features:

- The history of geoeconomics is rather short.
- Since its emergence, the concept of geoeconomics has evolved and gained prominence and new meanings.
 - In every period of time, researchers tried to define the concept according to new realities.
- There is no unanimously accepted definition of the concept of geoeconomics.
- Geoeconomics represents a complex, dynamic, cross-disciplinary, and multidimensional concept.
- Since its appearance, geoeconomics has become both a discipline and a field of research.
- The concept of geoeconomics is related to other concepts such as geography, geopolitics, trade, power, resources, business and economics.
- Although somehow related, the concepts of geoeconomics and geopolitics are not synonyms.
- Geoeconomics comprises specific economic tools and instruments (e.g., tariffs).
- Geoeconomics represents a platform for elaborating political and economic strategies, and defending national interests.
- Through the study of resources from multiple lens, geoeconomics aims at obtaining a sustainable competitive advantage in a global hypercompetitive environment.

Thus, geoeconomics plays a key role in achieving various strategic objectives, either political or economic. This is why every state around the world needs a wise leadership (Toma et al., 2020a; Toma et al., 2020b) capable of designing and implementing competitive and durable strategies (Toma and Grădinaru, 2016; Toma et al., 2016b; Toma et al., 2016c; Toma, 2023c).

5. Conclusions

Since its advent, geoeconomics has increasingly become a theme of interest for various scholars and practitioners worldwide. In recent decades, geoeconomics has begun to represent a key topic for policymakers and governments at a global level.

This study renders in short the evolution of the subject of geoeconomics and facilitates a better understanding of this concept. By taking into account its numerous definitions, the results of the research show that, despite the lack of a universally valid definition, the features of geoeconomics indicate that it is a complex, multidimensional dynamic, and cross-disciplinary concept aiming at obtaining sustainable competitive advantages. Also, it provides a plethora of perspectives for the study of both economics and geography.

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