

Journal of Regional & Socio-Economic Issues
Volume 14, Issue 3, September 2024
ISSN 2049-1409

Guest-Editor

Dr. Anna Terminello, Researcher – Scientific Coordinator of OTIS Atene and FFMG Attika, Peloponnese and Northern Greece & Sustainability & Ecology Network

Table of Contents

- **Political Discourse of Greek Opposition Parties on the Liberalization of Higher Education (by Maria Markantonatou and Dimitris Paraskevopoulos)**
- **AI, Sustainability Law and EU AI Act (by Dimitrios Devetzis)**
- **State Responsibility for Private Military and Security Companies under Public International Law (by Michail Kyriakakis)**
- **Smart contracts and Civil Law: Tracing the “modus interpretandi” of contracts “ex machina” (by Dimitrios Devetzis)**
- **Mental Resilience and Special Learning Difficulties (by Tryfon Nikolopoulos)**
- **Call for Papers**
- **Instructions to Authors**

Indexed by Copernicus Index, DOAJ (Director of Open Access Journal), EBSCO, Cabell's Index
The journal is catalogued in the following catalogues: ROAD: Directory of Open Access Scholarly Resources, OCLC WorldCat, EconBiz - ECONIS, CITEFACTOR, OpenAccess

JOURNAL OF REGIONAL SOCIO- ECONOMIC ISSUES (JRSEI)

Volume 14, Issue 3, September 2024

Journal of Regional & Socio-Economic Issues (Print) ISSN 2049-1395

Journal of Regional & Socio-Economic Issues (Online) ISSN 2049-1409

Guest-Editor

Dr. Anna Terminello, Researcher – Scientific Coordinator of OTIS Atene and FFMG Attika, Peloponnese and Northern Greece & Sustainability & Ecology Network

Indexed by Copernicus Index, DOAJ (Director of Open Access Journal), EBSCO, Cabell's Index

The journal is catalogued in the following catalogues: ROAD: Directory of Open Access Scholarly Resources, OCLC WorldCat, EconBiz - ECONIS, CITEFACTOR, OpenAccess

JOURNAL OF REGIONAL SOCIO-ECONOMIC ISSUES (JRSEI)

[ISSN No. 2049-1395](#)

Aims of the Journal: Journal of Regional Socio-Economic Issues (JRSEI) is an international multidisciplinary refereed journal the purpose of which is to present papers manuscripts linked to all aspects of regional socio-economic and business and related issues. The views expressed in this journal are the personal views of the authors and do not necessarily reflect the views of JRSEI journal. The journal invites contributions from both academic and industry scholars. Electronic submissions are highly encouraged (mail to: gkorres@geo.aegean.gr).

Indexed by Copernicus Index, DOAJ (Director of Open Access Journal), EBSCO, Cabell's Index International Institute of Organized Research (I2OR) database

The journal is catalogued in the following catalogues: [ROAD: Directory of Open Access Scholarly Resources](#), [OCLC WorldCat](#), [EconBiz - ECONIS](#), [CITEFACTOR](#), [OpenAccess](#)

Chief-Editor

- Prof. Dr. George M. Korres: University of the Aegean, Department of Geography, gkorres@geo.aegean.gr

Guest-Editor

- Dr. Anna Terminello, Researcher – Scientific Coordinator of OTIS Atene and FFMG Attika, Peloponnese and Northern Greece & Sustainability & Ecology Network, annaterminello@gmail.com

Editorial Board (alphabetical order)

- Dr. Alexiadis Stilianos, Ministry of Reconstruction of Production, Environment & Energy Department of Strategic Planning, Rural Development, Evaluation & Statistics, salexiadis7@aim.com
- Ass. Prof. Dr. Anagnostou Spyros, University of the Aegean, Department of Geography, spanagn@geo.aegean.gr
- Assoc. Prof. Dr. Andreopoulou Zacharoula S., Aristotle University of Thessaloniki, Faculty of Forestry & Natural Environment, randreop@for.auth.gr
- Prof. Dr. Artavani Maria Athina, Department of Military Science, Hellenic Military Academy, Greece, artmar000@yahoo.gr
- Prof. Dr. Carayannis Elias G. School of Business, George Washington University, USA, caraye@otenet.gr; caraye@gwu.edu
- Emer. Prof. Dr. Christos Frangos, University of West Attica, Athens, cfragos@teiath.gr
- Dr. Dimosthenous Alik, University of the Aegean, Department of Geography, geom08009@geo.aegean.gr
- Assoc. Professor Dr Delitheou Vicky, Department of Economics and Regional Development, Panteion University of Social and Political Sciences of Athens, ydelith@hua.gr
- Assoc. Prof. Dr. Dimelli Despina, Technical University of Crete, School of Architecture, ddimelli@tuc.gr
- Prof. Dr. Dudek Hanna Warsaw University of Life Sciences, hanna_dudek@sggw.pl
- Prof. Dr. Gkantzias George: Hellenic Open University, ggantzias@yahoo.gr
- Prof. Dr. Halkos George, Department of Economics, University of Thessaly, halkos@uth.gr
- Prof. Dr. Harris Richard Durham University, r.i.d.harris@durham.ac.uk
- Assoc. Prof. Dr. Kalantzi Olga-Ioanna, Department of Environment, University of the Aegean, kalantzi@aegean.gr
- Emer. Prof. Dr. Karagiannis Stephanos, Panteion University, stephanoskar@yahoo.gr
- Ass. Prof. Dr. Katsaiti Marina-Selini, Department of Economics & Finance, College of Business & Economics, United Arab Emirates University, UAE, Selini.katsaiti@uaeu.ac.ae
- Emer. Prof. Dr. Kitsos Christos, University of West Attica, xkitsos@teiath.gr

- **Assoc. Prof. Dr. Kokkinou Aikaterini**, Department of Military Science, Hellenic Military Academy, Greece, aikaterinikokkinou@gmail.com
- **Prof. Dr. Kourliouros Elias A.**, University of Patras, e.kourliouros@aegean.gr
- **Dr. Kyriakakis Michail**, Legal Advisor to the Ministry of National Defense, Military Schools Instructor, Researcher of International Humanitarian and Military Criminal Law, kiriakakism@hotmail.com
- **Emer. Assoc. Prof. Dr. Ladias Christos**, Panteion University, caladias@otenet.gr
- **Emer. Prof. Dr. Lagos Dimitrios**, University of the Aegean, d.lagos@aegean.gr
- **Assoc. Prof. Dr. Louca Charalambos**, Head of Business Department, Director of Research Department, charalambos.louca@ac.ac.cy
- **Prof. Dr. Manolas Evangelos**, Department of Forestry & Management of the Environment & Natural Resources, Democritus University of Thrace. emanolas@fmenr.duth.gr
- **Prof. Dr. Marmaras† Emmanuel** Technical University of Crete
- **Emer. Prof. Dr. Mazis Ioannis Th.**, National and Kapodistrian University of Athens, Faculty of Turkish Studies & Modern Asian Studies, yianmazis@turkmas.uoa.gr
- **Prof. Dr. Michailidis Maria**, Department of Management & MIS, University of Nicosia, michailidis.m@unic.ac.cy
- **Emer. Prof. Dr. Nanopoulos Photis**, Former Director of Eurostat, phn@otenet.gr
- **Prof. Dr. Nikitakos Nikitas**, Department of Shipping Trade and Transport, University of the Aegean, nnik@aegean.gr
- **Dr. Ruiz-Nápoles Pablo**, Faculty of Economics, Universidad Nacional Autonoma de Mexico, ruizna@servidor.unam.mx
- **Ass. Prof. Dr. Papanis Efstratios**, Department of Sociology, University of the Aegean, papanis@papanis.com
- **Prof. Dr. Pavlogeorgatos Gerasimos**, Department of Cultural Technology and Communication, University of the Aegean, gpav@aegean.gr
- **Prof. Dr. Prasad Kiran**, Professor Sri Padmavati Mahila University, kiranrn_prasad@hotmail.com; kiranrn.prasad@gmail.com;
- **Assoc. Prof. Dr. Sarantakou Efthymia**, University of West Attica, Athens. esarad@otenet.gr;
- **Prof. Savelyev Yevhen**, Vice-Rector, Ternopil National Economic University, Ukraine. savelyev@tneu.edu.ua
- **Ass. Prof. Dr. Sepetis Anastasios**, Department of Business Administration, University of West Attica. tsepet@uniwa.gr
- **Ass. Prof. Dr. Sgouros Georgios**, National and Kapodistrian University of Athens, Faculty of Turkish Studies, Modern Asian Studies, School of Economics and Political Sciences. gsgouros@turkmas.uoa.gr
- **Dr. Sidiropoulos Demitrios**, University of the Aegean, Department of Geography. geod18004@geo.aegean.gr
- **Prof. Dr. Sidiropoulos Georgios**, University of the Aegean, Department of Geography. geos@aegean.gr
- **Prof. Dr. Stratigea Anastasia**, National Technical University of Athens, School of Rural & Surveying Engineering, Department of Geography & Regional Planning, stratige@central.ntua.gr
- **Emer. Prof. Tsartas Paris**, Harokopeio University, Athens, Greece, ptsar@aegean.gr
- **Prof. Dr. Tsobanoglou George**, University of the Aegean, Department of Sociology, g.tsobanoglou@soc.aegean.gr
- **Dr. Terminello Anna**, Researcher – Scientific Coordinator of OTIS Atene and FFMG Attika, Peloponnese and Northern Greece & Sustainability & Ecology Network, annaterminello@gmail.com
- **Prof. Dr. Tsourvakas George**, School of Economic and Political Studies, National Kapodistrian University of Athens. gtsourvakas@ba.uoa.gr
- **Dr. Xirouchakis Fragkiskos**, Adjunct lecturer University of Crete, fxirouchakis2@yahoo.com
- **Prof. Dr. George Zestos George**, Christopher Newport University, gzestos@cnu.edu

Table of Contents

Editorial Board	3
Table of Contents	5
Paper 1: Political Discourse of Greek Opposition Parties on the Liberalization of Higher Education (by Maria Markantonatou and Dimitris Paraskevopoulos)	6
Paper 2: AI, Sustainability Law and EU AI Act (by Dimitrios Devetzi)	18
Paper 3: State Responsibility for Private Military and Security Companies under Public International Law (by Michail Kyriakakis)	27
Paper 4: Smart contracts and Civil Law: Tracing the “modus interpretandi” of contracts “ex machina” (by Dimitrios Devetzi)	36
Paper 5: Mental Resilience and Special Learning Difficulties (by Tryfon Nikolopoulos)	46
Call for Papers	52
Instructions to Authors	53

Political Discourse of Greek Opposition Parties on the Liberalization of Higher Education

Abstract:

In an earlier article (Markantonatou and Paraskevopoulos, 2024), we examined the political discourse of the Greek government regarding the bill, which was passed in March 2024, and allows, for the first time, for the establishment of private universities in Greece (Law 5094/2024, “*Strengthening the Public Universities: Framework for the Operation of Non-Profit Branches of Foreign Universities and Other Provisions*”). For our analysis of the government’s arguments *in favor* of the bill in that earlier article, we used official documents. We follow the same method in the present article to examine the arguments *against* this bill by all opposition parties. In particular, we use the *Minutes of the Parliament* (2024), which contain the statements made on 08.03.2024, the day the bill was passed, by leaders of eight opposition parties. After briefly presenting previous university reforms, we categorize and present the Greek opposition parties’ criticisms to the law on privatization. Furthermore, we compare the arguments of the opposition parties, focusing on the main convergences and differences in their positions.

Keywords: Greek law on education, liberalization, opposition parties, private universities

Maria Markantonatou¹ and Dimitris Paraskevopoulos²

¹ Associate Professor, Department of Sociology, University of the Aegean, Lesvos, Greece, mmarkant@aegean.gr

² Assistant Professor, Department of Sociology, University of the Aegean, Lesvos, Greece, d.paraskevopoulos@aegean.gr

1. Introduction

University education has been a crucial issue for Greek working-class social strata and families. Education, family welfare provision and social reproduction are interrelated in Greece. After the fall of the dictatorship in 1974, a university degree became a means of social mobility, as students from working-class backgrounds could often secure permanent positions in the public sector or relatively well-paid jobs in the private sector (Traianou, 2013: 90). The university emerged as the most significant institution for the fulfillment of social expectations and upward social mobility. In the Greek “familistic welfare capitalism”³, families strongly supported their children’s entrance to the university, so that they could be integrated in the labour market or pursue a career. As long as universities were public, families’ task was to assist entrance to the university and contribute financially until graduation.

The law that allows private universities to operate in Greece was passed by the government of New Democracy⁴ (*Νέα Δημοκρατία*) in 2024, and was not an unexpected decision. Since the 1990s, New Democracy advocated for the establishment of private universities in Greece. In his speech in the Parliament on the day the bill on private universities was passed (08.03.2024), Prime Minister K. Mitsotakis recalled some statements from the 1990s New Democracy government. He emphasized that then, as now, the main goal was to promote “*creative competition*”⁵ in higher education and “*link knowledge with the labour market*” (Minutes of the Parliament, 2024: 11681, 11684). According to the Prime Minister, the public and private universities should engage in an “*academic competition*”, which is considered as a “*new economic activity*” to bring “*revenue from foreign investments*” and economic growth (ibid.: 11681, 11683).

In the government’s narrative, private universities “*will help Greek families so that their children can study in the fields they desire, staying in their homeland and minimizing the financial strain on their parents*” (ibid.: 11684). At the same time, however, public universities are presented by government MPs as places of “*violence*”, “*occupations*”, and “*sabotage of public infrastructure*” (ibid.: 11737, 11719). According to a government MP, these problems burden families “*who make sacrifices for their children’s education, only to receive, in return, missed exams, devalued degrees, and a significant impact on their budgets*” (ibid.: 11719). The Prime Minister believes that comparing public and private universities “*will prompt students at public universities to demand conditions similar to those in private institutions*” (ibid.: 11683).

The enactment of the bill (Law 5094/2024, “*Strengthening the Public Universities: Framework for the Operation of Non-Profit Branches of Foreign Universities and Other Provisions*”) was the culmination of a long-standing policy trajectory regarding higher education in Greece. In the last decades, higher education has occupied a central place in New Democracy’s political agenda. This agenda aimed at reforming the organization of universities, involving more external actors, introducing a series of evaluation processes and

³ According to Papadopoulos and Roumpakis (2013: 204), this is “a type of national political economy where the family plays a double role both as the main provider of welfare to its members and as a key agent in the reproduction of its politico-economic institutional arrangements”. As for the state, it “‘locked’ into the family unit the responsibility for the provision of care and social protection” (ibid.: 206). Familialism has not merely been the result of a low level of development in Greece, as often suggested, but part of an attempt by “employers and the state to minimize their responsibility for social reproduction” and “one of the ways in which Southern European national political economies were integrated in the European and global economies” (ibid.).

⁴ New Democracy, Greece’s largest right-wing political party since 1974, imposed austerity measures during the 2010s financial crisis, but suffered the least losses of voters compared to other austerity parties. During and after the financial crisis, it imposed neoliberal economic policies such as market liberalization and privatization, aiming to attract foreign investments.

⁵ All extracts from the Minutes of the Parliament are translated by the authors.

standards of educational management, and liberalizing the education system. Some key laws and decisions of this policy are the following⁶:

- *Law 3374/2005* (“*Quality assurance in higher education. Credit transfer and accumulation system*”) established the Hellenic Quality Assurance Agency (HQA) with the objective of implementing “quality standards” in universities. HQA requests that universities demonstrate “excellence” and, if they do, they obtain a “quality certification”⁷. In 2020, HQA was replaced by the Hellenic Authority for Higher Education (Law 4653/2020, “*Hellenic Authority for Higher Education. Special Accounts for Research Grants of Higher Education, Research and Technological Institutions, and other regulations*”).
- *Law 3549/2007* (“*Reform of the institutional framework for the structure and function of Higher Education Institutions*”) introduced the processes and standards of “Evaluation and Quality of Education”, which encompasses the regular evaluation by “experts” of academics’ work, study programs, research projects, and administration.
- *Attempt to revise the Article 16 of the Constitution*: In 2006/2007, the New Democracy government led by K. Karamanlis attempted to revise Article 16 of the Constitution, which mandates that universities be public, and prohibits private persons from establishing profit-oriented institutions⁸. The aim of this attempt was to gradually allow the establishment of private universities in Greece. However, reactions from academics and students, organized protests and strikes, as well as heated debates in the Parliament prevented such a constitutional revision, which was finally not realized, with the argument that it would lead to the commercialization of education and the degradation of public universities.
- *Law 3696/2008* (“*Establishment and operation of colleges and other provisions*”) provides that private colleges⁹ are permitted to issue diplomas to their students. These college diplomas are recognized as equivalent with regard to professional qualifications to those awarded by private or public universities in EU countries.
- *Proposal to Revise Article 16 of the Constitution*: During the fourth revision of the Constitution, completed in 2019, New Democracy, then in opposition, proposed including Article 16 among the articles to be revised. However, this proposal faced opposition from the SYRIZA-ANEL government.
- *Law 4777/2021* (“*Admission to Higher Education, protection of academic freedom, improvement of the academic environment*”) was passed amidst the COVID-19 pandemic and lockdown, aiming to establish a special police unit for universities to prevent “delinquent students” and enhance security¹⁰.
- *Law 4957/2022* (“*New Horizons in Higher Education Institutions: Strengthening the quality, functionality and connection of Higher Education Institutions with society and other provisions*”) mandates that the Rector, who was previously directly elected by the

⁶ The overview draws on the corpus compiled by Gaki et al. (2022) in the Social Data Network (SoDaNet) Catalogue. It encompasses bills, reports, parliamentary minutes, committee minutes, and laws from 2000 to 2021 that relate to the functioning of higher education institutions in Greece.

⁷ Additional relevant laws were enacted such as law 4009/2011, “*Structure, function, quality assurance of studies and internationalization of institutions of higher education*” and law 4115/2013 “*Organization and operation of the Foundation for Youth and Lifelong Learning and the National Organization for the Certification of Qualifications and Vocational Guidance and other provisions*”.

⁸ See Hellenic Parliament (2022).

⁹ Although the Greek Constitution explicitly prohibits the establishment of private universities, a small number of private colleges exist in Greece which are registered as commercial enterprises at the Ministry of Commerce (Tzanakou, 2017: 2). About the law 3696/2008, see Manidakis (n.d.)

¹⁰ According to its critics (Stamatis, 2021: 1, 8), this law tried to impose on universities “a dystopian mechanism of widespread electronic surveillance, together with a heavy police presence, aimed at extensive criminal and disciplinary repression”.

members of the academic community, is elected by a new administration body, the University Council¹¹.

The following section outlines the profile of the opposition parties, whose arguments serve as the primary data for this research analysis.

2. Greek opposition parties

The study from political sociology of the role of parties as actors in processes of change in higher education (Jungblut, 2015: 879) is based on a number of factors, including their positions held when in government and when in opposition, as well as their ideological profile (Bevan, et al., 2023: 1871). As Andeweg (2013: 100) observes, the interactions between government parties and opposition parties have been the subject of relatively little academic research. This article aims to contribute to opposition parties' research (Shephard, 2011; Gkinopoulos and Hegarty, 2018; Louwse et al., 2021).

We use the Minutes of the Parliament (2024), which contain the statements made on 08.03.2024, the day the bill was passed, by leaders of eight opposition parties. Our methodology is based on research of public, parliamentary, and political documents, which are used as data (Gray, 2018: 429, 604). The examination of such sources aims to a detailed and nuanced understanding of the political discourse on higher education through thematic analysis. This kind of qualitative analysis of the documents allows for an exploration of recurring themes, dynamics and narratives and facilitates the organization of data into categories, aiming to a structured examination of manifold information. The opposition parties at the moment the bill "*Strengthening the Public Universities: Framework for the Operation of Non-Profit Branches of Foreign Universities*" passed were eight.

(1) The *Coalition of the Radical Left-SYRIZA* (Συνασπισμός Ριζοσπαστικής Αριστεράς-ΣΥΡΙΖΑ) is the country's largest left-wing party. The party is composed of various factions and gained popularity during the 2010s financial crisis by opposing austerity imposed by international creditors and domestic governments. It promoted anti-austerity measures, the welfare state, social justice etc. After it won the 2015 elections, SYRIZA followed the specific dictates of creditors and Eurozone elites. As a result, it gradually lost a share of voters, and split into more parties.

(2) The *Panhellenic Socialist Movement-PASOK* (Πανελλήνιο Σοσιαλιστικό Κίνημα-Κίνημα Αλλαγής) was one of the two parties in the Greek traditional two-party system. PASOK and New Democracy alternated in power since 1974. Since 2010, however, PASOK started losing voters' support in successive elections, for it was the first party to impose harsh austerity policies. It was a dominant social democratic party in the 1980s, evolved to a "modernizing" pro-European party in the 1990s and an austerity party in 2010.

(3) The *Communist Party of Greece* (Κομμουνιστικό Κόμμα Ελλάδας- ΚΚΕ) is the oldest political party in the country, founded in the early 20th century. Following a lengthy history of political conflicts during the Greek Civil War (1946-1949) and the Greek dictatorship (1967-1974), it retains over the last decades a stable position in the Parliament. It advocates for communist principles and criticizes capitalist policies, the European Union and NATO, and both right wing and left-wing parties.

(4) The *New Left* (Νέα Αριστερά) is the newest opposition party in the current Parliament, founded in 2024. The party split from SYRIZA and has a presence in the Parliament because its members were SYRIZA MPs in the last elections. It has not yet competed in national elections as a new party, as it emerged out of an internal crisis within SYRIZA, after some electoral defeats, and the change in SYRIZA's leadership. New Left

¹¹ This Council was first legislated by Law 4009/2011, but its implementation was strongly opposed by the academic community. According to its critics (Kontiadis and Tasopoulos 2022), there is an over-concentration of responsibilities within the University Council, while its composition and formation process make it vulnerable to manipulation and a non-transparent decision-making process.

aspires to create social alliances, fight against Greek neoliberalism, and defend democracy, and the unequal distribution of wealth and power in Greek society.

Three small parties stand on the far-right political spectrum: (5) the *Hellenic Solution* (Ελληνική Λύση), (6) the *Spartans* (Σπαρτιάτες), and (7) *NIKI - Democratic Patriotic Movement* (ΝΙΚΗ-Δημοκρατικό Πατριωτικό Κίνημα). These parties are relatively new to the Greek parliament, having only entered in the penultimate and last national elections. They share a nationalist rhetoric in favor of Greek sovereignty and identity, strict immigration controls, traditional family values, Euroscepticism, anti-globalism, and a stricter law-and-order agenda, attempting to leverage voters' dissatisfaction with mainstream political parties.

(8) *Course of Freedom* (Πλεύση Ελευθερίας) is also a new party in the Greek Parliament, having first entered in 2023. In a mixture of ideological principles, it opposes corruption, economic surveillance by external actors, and austerity. The party advocates for social justice, a stronger democracy and transparency, and greater citizen empowerment.

In the national elections held on 25 June 2023, the *New Democracy* party won a clear parliamentary majority with 40.56% of the vote. *SYRIZA* followed with 17.83% of the vote, positioning itself as the major opposition party. *PASOK* received 11.84% of the vote, and the *Communist Party* secured 7.69%. The *Hellenic Solution*, *Spartans*, *Niki*, and *Course of Freedom* secured 4.44%, 4.68%, 3.7%, and 3.17%, respectively (Ministry of Interior, 2023).

On the date on which the bill for the liberalization of higher education was passed (08.03.2024), political leaders and representatives of the opposition made statements and presented their objections¹². From their statements, we derive the fundamental arguments *against* the bill, just as we outlined and discussed the arguments *in favor* of the bill in an earlier article (Markantonatou and Paraskevopoulos, 2024). The arguments put forth by the political leaders of the opposition parties are categorized and presented in the next section.

3. Opposition parties against the bill

1) ***The bill is unconstitutional.*** This understanding is at the core of the political debate and expressed by almost all opposition parties. According to *SYRIZA*, the Greek Constitution of 1975 was “*far more advanced*” and “*more progressive*” because it anticipated that “*higher education is not a commodity*,” whereas *New Democracy* holds “*a deeply conservative view*” which considers “*higher education a commodity and students as customers*” (Minutes of the Parliament, 2024: 11685). According to the *New Left*, Article 16 of the Constitution is violated; the state ceases to be the “*exclusive provider of higher education*”; “*university professors will no longer be public servants*” and “*tuition fees are introduced through the back door in public universities*” (ibid.: 11699). The *New Left* argues that the government should have first proceeded with a constitutional amendment before legislating. The same view is shared by *PASOK*, but not by the *Communist Party*, which disagrees “*with the essence of this reactionary change and not just with the process*”, taking the “*unconstitutionality of the law*” for “*granted*” (ibid.: 11679). The *Spartans* described the bill as a “*dangerous deviation from a fundamental constitutional mandate*” (ibid.: 11702). *Niki* argues that the government’s interpretation of the Constitution is “*unprecedented in legal history*”, assuming “*that the meaning both of simple words and legal concepts is entirely relative*” a view that is “*extremely dangerous for the law*”, rendering “*the process of constitutional amendment unnecessary*”, leading to “*a loss of democracy*” and “*dangerous paths*” (ibid.: 11704). On the contrary, for the *Course of Freedom*, it is clear from the bill’s formulation that it concerns non-profit rather than profit institutions. “*The formulation refers to branches, not newly established universities*”, according to the party’s leader (ibid.: 11752).

¹² Those representing their parties include S. Famelos from *SYRIZA*, A. Charitsis from the *New Left*, N. Androulakis from *PASOK*, D. Koutsoumbas from the *Communist Party*, K. Velopoulos from the *Hellenic Solution*, D. Natsios from *Niki*, Z. Konstantopoulou from *Course of Freedom*, and V. Stigas from the *Spartans*.

As a next step, Course of Freedom promises to ensure that the government “*remains faithful*” and that the new institutions “*remain non-profit*” (ibid.: 11752).

2) ***The bill serves narrow economic and business interests.*** SYRIZA accuses the government of serving “*the interests of a few friends*” (ibid.: 11684). PASOK argues that the government is “*guided by special interests*” and highlights the “*paradox*”, as they ironically call it, that “*specific funds and interests had investments in Greece before the law was proposed to legislation*” (ibid.: 11691). PASOK’s leader, N. Androulakis, concludes that some interest groups “*are in such a hurry, that they can’t even wait for the law*” and already make business plans (ibid.: 11691). The New Left also emphasizes the urgency, asking: “*Why are you rushing to abolish Article 16 with just a simple law?*” (ibid.: 11699). The Hellenic Solution accuses the government of catering to “*rich oligarchs and wealthy friends*” (ibid.: 11674). According to its leader, K. Velopoulos, the decision is being “*fast-tracked*” through “*political coercion*”; it is driven by “*certain centers and interests, specifically CVC¹³, which intended to establish private universities*” (ibid.: 11675).

3) ***The new private universities are profit oriented.*** For SYRIZA, the government misleads people by suggesting that “*a foreign non-profit institution*” will “*collaborate with a fund to create a non-profit institution in Greece*” (ibid.: 11686). SYRIZA argues that “*CVC, the fund reportedly behind the plan to establish a medical school in Athens, which has already bought off six major private clinics*” is a profit organization. This fund was “*created to generate profits and distribute them to its shareholders*” (ibid.: 11689). For PASOK, the label “*non-profit*” is merely “*a veil*” which hides the true nature of these university branches (ibid.: 11691). The New Left suggests that foreign institutions are indeed for-profit in their countries of origin, but the government portrays them as “*nearly philanthropic organizations*” (ibid.: 11700). For the Communist Party there is an “*the elephant in the room: the privatization of public universities*” (ibid.: 11679). For Niki, the idea that universities can be “*private and non-profit*” is “*contradictory*” and “*does not hold true*” (ibid.: 11704).

4) ***The new private universities are expected to be of low quality.*** SYRIZA believes the new universities will produce low-quality graduates. As a result, the country will have “*worse engineers, worse lawyers and doctors*” (ibid.: 11688). According to SYRIZA, “*serious universities are not for-profit, and they will not come to Greece*” because “*they have an academic culture and a strong reputation*” (ibid.: 11688-11689). SYRIZA views the bill as a “*quick profit business plan*” that would never attract “*branches of Oxford or Harvard*” (ibid.: 11686). According to the New Left, the government deceives the public “*by referring to Harvard, which has an endowment equal to 25% of Greece’s GDP and nearly 5,000 full-time professors. The idea that Harvard would come to Greece to save itself financially by investing here is absurd*” (ibid.: 11700) The New Left argues that the universities promised by the government are merely the “*private institutions of Cyprus, which are funded by capital from the sectors of tourism and construction*” (ibid.: 11700). The Hellenic Solution calls on the government to provide details and the specific “*emails expressing the universities’ intentions*”, and to reveal precisely “*which universities are interested*” (ibid.: 11675).

5) ***The bill intensifies the competition between public and private universities.*** According to SYRIZA, once the colleges, which already exist in the country, gain the status of a university, they will appeal to the court against “*public universities to force them to impose tuition fees*” (ibid.: 11689). The bill, SYRIZA argues, paves the way “*to tuition fees in public universities*” and promotes “*competition over fees, not competition in education*” (ibid.: 11689). The Communist Party rejects both the bill and the argument of some opposition parties that a constitutional amendment was necessary. According to the Communist Party, the government “*introduces private university enterprises and further privatizes public universities,*” aiming to extend “*the pricing of degrees*” to public universities too (ibid.: 11678). For the Communist

¹³ He refers to the agreement between CVC Capital Partners, a global investment fund, and the University of Nicosia, which will operate the first non-state university department in Greece. See also Mpellos (2023).

Party, “*students should not be treated as customers, whether at private or public universities*” (ibid.: 11679). For Niki, once these institutions become universities, the government will funnel millions of euros to “*private colleges through the Recovery and Resilience Fund or European funds*” (ibid.: 11704). Effectively, “*public universities will decay due to lack of funding*” and “*Greeks will end up repaying grants that are essentially loans transferred to public debt*” (ibid.: 11704). In response to the government’s claim that the competition between public and private universities will benefit the entire education system, the Hellenic Solution cites the example of Olympic Airways, whose closure resulted in the private company AEGEAN Airlines becoming a monopoly (ibid.: 11675).

6) ***The bill impacts regional universities.*** The New Left points out that institutions such as the University of the Aegean, Ionian University, University of Western Macedonia, and University of the Peloponnese are at risk from the “*profit institutions that will be established in central Athens*” (ibid.: 11700). These new institutions, they argue, will “*capture demand that would otherwise go to public universities in the provinces, thereby reducing their funding as well*” (ibid.: 11700). SYRIZA poses the question: “*Should public universities near the borders be closed to allow some people to make profits in Athens?*” (ibid.: 11689). From PASOK, ex-Prime Minister G. Papandreou explains his proposal: “*Public universities, with the support of local authorities, should establish their own parallel branches*” (ibid.: 11734). University of Crete, for example, “*in collaboration with the regional authorities, hoteliers, labour centers, and cooperatives*”, could establish “*a public university branch offering high-level tourism education*” (ibid.: 11734). Niki worries that those failing to enter public universities will turn to private ones, leading to the gradual decline of universities outside Athens (ibid.: 11704).

7) ***The bill introduces new social inequalities.*** The issue of social inequalities is raised by nearly all parties in the Parliament. PASOK’s leader poses the question: “*Who opened the gates so that the children of farmers (...) and the poor could become doctors and lawyers?*” (ibid.: 11694). It was PASOK, he answers. The New Left raises the question, “*Why are private universities such an important issue for all factions of the Greek Right?*” (ibid.: 11699). The answer is that public universities are “*the most effective mechanism for upward social mobility. It is a mechanism that assures access to high profile schools and professions open to everyone, not just the wealthiest, serving as a vehicle for democratic expansion and the elimination of widespread social exclusion*” (ibid.: 11699). Consequently, according to the New Left, the government provides “*an opportunity for certain privileged individuals who don’t succeed otherwise*”; it “*demands excellence from the children of lower and middle-class families, but demands nothing from its own children, the children of the upper classes—instead, it promises everything*” (ibid.: 11699). Thus, the bill protects “*the social status of the elite’s children*”, which is a request of businesspeople who say “*create private universities because it is an interesting investment for our money*” (ibid.: 11699). According to the New Left, “*the university of the period after the fall of Greek dictatorship always annoyed New Democracy*”, because “*it produced critical thinking, resistance, and a democratic culture*” (ibid.: 11699). The bill, in the Communist Party’s understanding, is a “*class extermination of students*”, which “*creates two different ways of entering universities. One is judged by performance in nationwide exams, and the other by one’s financial means*” (ibid.: 11678). The Spartans criticize the government for seeking to “*financially strangle public and free education*”, leading to a “*dead end for thousands of young people from working-class families who do not have the financial means to pay for their studies*” (ibid.: 11702). Parliament members may continue to “*send their children to private schools*”, Hellenic Solution suggests, but not “*legislate in favor of rich friends, against the poor*” (ibid.: 11675).

8) ***The bill reflects commitments and restrictions imposed by the EU.*** This view is expressed by the Spartans, who describe themselves as “*Greeks above anything else*” who believe “*in the nation, the youth, the Greek family, and of course Greek Orthodoxy*” (ibid.: 11702).

According to them, the bill follows “*directives dictated by unknown creditors*” who aspire “*the Greek democracy to become largely privatized*” (ibid.: 11702). The bill pushes for “*the privatization of every public structure*”, so that the people “*lose control of the power over the governments they elect*” (ibid.: 11702). With the government’s “*crocodile tears*” for the “*current problematic public education*”, the “*theorem of the creditors’ and of the ‘Memoranda’ on sustainable debt*” is concealed, while public universities, which have become “*dens of leftist organizations*”, remain underfunded (ibid.: 11702). For the Communist Party, the laws of all past governments “*were dictated by the European Union and the Federation of Greek Industries*” who “*incorporated European directives into Greek legislation*” (ibid.: 11679). According to the Communist Party, “*student-customers at public institutions*” have already been created by previous policies, such as “*the imposition of tuition fees on postgraduate programs*” (ibid.: 11679).

In the following section, we compare the arguments put forward by the Greek opposition parties, focusing on the main convergences and differences in their positions.

4. Comparison of the opposition parties’ arguments

Convergences in the views of opposition parties: these include the concerns that private universities may be of low quality and that non-Athenian, regional universities will suffer from the effects of the law. Such concerns are not confined to a specific political party or political ideology. Another convergence between opposition parties is the assertion that the law is unconstitutional (with the exception of the Course of Freedom). In some smaller populist far-right parties, education does not hold as central a role as it may appear from their statements, especially compared to immigration, foreign policy and security. Their views may even converge as regards the idea of universities making profits. For instance, in the official positions of the NIKI party, on their website¹⁴, it is stated that higher education must remain free and public for Greek citizens, but at the same time it is suggested that “*universities generate revenue*” by “*attracting foreign and diaspora students (...) in collaboration with foreign universities, and by actively participating in the Research and Development sector of the Greek and international business community*”.

Ideological differences between opposition parties: Certain points from far-right parties may also be found in the Greek Communist Party’s argumentation (especially the concerns about the exacerbation of social inequalities through the law on private universities), but in reality, these factions are not alike. Such an understanding would verge to a theory “of the two extremes”, which posits that leftist and far-right political factions are similar in behavior and/or rhetoric because they both oppose the political center. However, this understanding oversimplifies the complexities of political ideologies. In the case of the Communist Party and far-right parties, their underlying motivations, goals, social visions, and approaches as regards the economy and the various crises are fundamentally different. The “theory of two extremes” is employed in public discourse, as evidenced by its use during the recent Greek financial crisis, as a rhetorical device; a part of a “divisive discourse”; a means “of positive self- and negative other-identification, aiming at legitimizing the Self and delegitimizing the political opposition” (Hatzidaki, 2017: 151-152).

Differences between parties when in government and when in opposition: Both PASOK and SYRIZA, have been different when in government and when in opposition. Under PASOK administration, law 4009/2011 introduced the University Councils. It also emphasized the alleged need for performance metrics, measurable outcomes, economic efficiency, and alignment with the Bologna Process. Moreover, “Athena Plan” was imposed in 2013, during the economic crisis, under the coalition government of New Democracy and PASOK. This plan mandated the closing or merging of university departments to reduce the

¹⁴ See NIKI-Democratic Patriotic Movement (n.d.) *Positions on Education*. Available at: <https://nikh.gr/theseis/paideia-politismos/paideia> (in Greek).

overall number of universities and technical education institutes (Traianou, 2013: 108), as well as expenditure for salaries, administrative expenses, and infrastructure.

The educational policy of SYRIZA's government (in coalition with the right-wing party Independent Greeks/ANEL) reversed some measures from previous austerity governments (e.g., halting the implementation of a 2013 decree mandating a top-down hierarchical evaluation of primary and secondary education teachers). However, the SYRIZA-ANEL coalition government (2015-2018), overall, failed to oppose the neoliberal restructuring of the economy, labour, and education, which was demanded by the country's creditors (EC, IMF, ECB) during the 2010s financial crisis (Grollios, 2021: 25).

Shephard (2011: 5-7) reaches similar conclusions after conducting a discourse analysis of statements of two political parties (the Labour Party and the Conservative Party) in the framework of the 1997, 2001, 2005, and 2010 general elections, as well as the Liberal Democrat manifesto for the 2010 general election in the UK. These findings were juxtaposed with policy decisions on higher education reform and the parties' arguments in relevant parliamentary debates (1998, 2004, and 2010). Shephard examined whether Labour, the Conservatives, and the Conservative-Liberal Democrat coalition defended the rights of the poor in the context of higher education funding. The author stresses the contrast between parties' promises in opposition and their actions when in power. He argues that parties were more likely to express concern for the poor while in opposition. Once in power, these parties framed their policies as beneficial to the poor, but actually imposed market friendly measures. According to Shephard (2011: 4), while the Labour Party was critical of the roll-back of the state in the early 1990s, "by the end of the 1990s Labour became responsible for the introduction of tuition fees". Some reasons for the difference between rhetoric and reality in policymaking ("policy u-turns", *ibid.*: 23) include conflicting aims, underestimating the future costs of higher education and the budget constraints faced by a party when in government (*ibid.*: 5-10).

Positions closest to those of the government: These are the positions of PASOK and the Course of Freedom. The latter's leader, Z. Konstantopoulou, believes that the Constitution prioritizes "*good education, public and free*", but "*under state supervision, not state-run*". "*It would be*", she argues, "*disastrous if we were to campaign for state education, which means interference with academic freedom and research*". Her party's view is that "*the issue of public and private education is not a dogmatic one*" and that public education "*is not inherently good and private education inherently bad*" (Minutes of the Parliament, 2024: 11749-11751).

According to its leader, N. Androulakis, PASOK "*held the same position since 2006: the establishment of truly non-state, non-profit universities, with respect for the Constitution and a consensual revision of Article 16*". He states: "*We support the establishment of non-state, non-profit universities*", but they should operate under specific rules. Besides creating non-profit institutions under different terms, PASOK is in favor of reforms that "*will make Greece a modern European country*". "*We*", PASOK's leader states, "*can do it differently and correctly*" (*ibid.*: 11692-11693). Despite these statements that they would "*do it differently*", under PASOK administration, significant neoliberal reforms were implemented.

Asymmetries in the political power between the opposition and the government: New Democracy, the ruling party, held a strong majority and the parliamentary power to push the bill through. At the same time, the percentage gap in the last national elections between New Democracy and the next largest party, SYRIZA, is considerable (nearly 23%). Although the issue is not merely numerical, this significant majority has clear political advantages: It provided the government with the necessary votes, allowing it to set its agenda with minimal compromise and enabling it to circumvent the opposition's reactions, given that similar efforts had failed in the past (e.g., the intentions to revise the Article 16 of the Constitution in 2006 and 2019).

As for the major opposition party, at the time the bill was voted, SYRIZA was undergoing radical internal restructuring, which led to a party split after a change in its leadership. Critique to the bill from both SYRIZA and the New Left (the party that split off from SYRIZA) was compatible with several arguments expressed by academics who were on strike against the bill and students who participated in massive demonstrations against the law and occupied many public universities as a means to resist the law. This critique primarily served as a defense of public universities and an important warning of the law's social implications, but did not prevent the bill from passing. Additionally, PASOK's stance – that they would achieve the same outcome through a different method, namely by amending the constitution – did not radically challenge the government's rationale.

5. Conclusion

To highlight the critique against the government's law on private universities, we have identified the key arguments of the opposition parties: the bill is unconstitutional and oriented to making profits; it serves economic and business interests; it is expected to result in low-quality institutions; it intensifies competition between public and private universities; it impacts regional universities, introduces new social inequalities and reflects commitments and restrictions imposed by the EU. Even if these critical arguments seem valid in isolation, they are inextricably linked to the ideological foundations and values of each political party, their strategies to expand their electoral base, and the decisions they made when in power. Political leaders act, as put in another discourse analysis (Gkinopoulos and Hegarty, 2018), as “entrepreneurs of their identities by constructing their ingroups in broad or narrow terms and their outgroups in vague or specific terms”.

In the theory of democracy, opposition parties are voluntary political organizations with the role to promote accountability, build institutions, shape public agendas and politics, mobilize people to issues of common interest, control the government and criticize its policies, protect the rights and welfare of the political community, and offer alternatives (Kiiza, 2005: 4). Opposition parties have to cope with both *internal*¹⁵ and *external*¹⁶ constraints. Despite these constraints, the opposition remains one of the most fundamental mechanisms for holding political power in check, safeguarding democracy and protecting society.

As expected in their role, the opposition parties presented significant arguments in parliament against the law for the privatization of universities. These arguments helped inform the public about the political and ideological background of the law, the issues and social inequalities it will introduce, the potential consequences for the public higher education system and the possible intentions behind the government's legislative decision. However, they ultimately failed to prevent the privatization of education, as this political trend has become dominant in a series of fields over the last decades. Entrepreneurial-friendly policies, reduced public sector investments and state budgets, as well as the deregulation of the welfare state and the institutions of labour protection have eroded resistance to privatization policies. Those opposition parties which are in principle against privatization find it increasingly

¹⁵ Internal constraints include limited access to mainstream mass media and fewer financial resources and political networks compared to the ruling party, resulting in less opportunities to present their views to the public, campaign effectively, mobilize voters, and shape public agendas.

¹⁶ External constraints are related to the denationalization of politics due to economic globalization and the countries' involvement in supranational organizations like the EU. With EU-membership, governments, particularly those of weaker economies, must adhere to terms set outside the national state and comply with international rules and principles. In this setting, opposition parties must challenge the domestic government, but only within the limits and the political framework predetermined by the EU (Greece had a bitter experience during the economic crisis of the 2010s, when opposition parties clashed with the supranational creditors' commission, the “Troika,” and their criticisms were set aside).

difficult to challenge these interventions, as they are framed by mainstream governments as necessary reforms for efficiency and competitiveness.

6. References

- Andeweg, R.B. (2013). Parties in Parliament: The Blurring of Opposition. In: Müller, W., Narud, H. (eds). *Party Governance and Party Democracy*. New York, NY: Springer.
- Bevan, S., Borghetto, E., & Seeberg, H. (2023). Do different parties respond to different problems? A comparative study of parliamentary questions across multiple countries. *Journal of European Public Policy*, 31, 7, pp. 1856–1878.
- Gkinopoulos, T. and Hegarty, P. (2018), Commemoration in crisis: A discursive analysis of who ‘we’ and ‘they’ have been or become in ceremonial political speeches before and during the Greek financial downturn, *British Journal of Social Psychology*, 57, pp.591-609.
- Gaki, E., Paraskevopoulos, D. and Mastropetrou, M. (2022). Greek Legal Framework for Higher Education (2000-2021). *SoDaNet Data Catalogue*, Available at: <https://doi.org/10.17903/FK2/0HHUVZ> (in Greek).
- Gray, E. D. (2018). *Doing Research in the Real World*, 4th Edition. P. Delias, P. Chatzoglou (Eds.), P. Delias (translation). Thessaloniki: Tziola (in Greek).
- Grollios, G. & Liampas, T. (2021). New Democracy’s educational policy. *Critical education*, 2, pp. 14-29 (in Greek).
- Harvey, D. (2014). *Seventeen Contradictions and the End of Capitalism*. London: Profile Book LTD.
- Hatzidaki, O. (2017). The “theory of the two extremes”: A rhetorical topography for self-and other- identification across the Greek political spectrum. In: O., Hatzidaki and D., Goutsos (eds). 2017. *Greece in Crisis: Combining Critical Discourse Analysis and Corpus Linguistics Perspectives* (pp. 151–190). Amsterdam: John Benjamins.
- Hellenic Parliament (2022). *The Constitution of Greece*. Revised by Resolution of November 25, 2019 of the IXth Revisionary Parliament. Available at: <https://www.hellenicparliament.gr/UserFiles/f3c70a23-7696-49db-9148-f24dce6a27c8/THE%20CONSTITUTION%20OF%20GREECE.pdf>
- Jungblut, J. (2015). Bringing political parties into the picture: a two-dimensional analytical framework for higher education policy. *High Educ*, 69, pp. 867–882.
- Kiiza, J. (2005). The Role of Opposition Parties in a Democracy, Paper presented at the Regional Conference on Political Parties and Democratisation in East Africa, Arusha, 25 – 27/08/2005.
- Kontiadis, X. and Tasopoulos, G. (2022 June 2). Comments on the proposed system for the administration of higher education institutions, *syntagmawatch.gr*. Available at: <https://www.syntagmawatch.gr/trending-issues/parathrhseis-gia-to-proteinomeno-systhma-dioikhshs-twn-aei/> (in Greek).
- Law 5094/2024 (Government Gazette A’ 39/13.03.2024), “Strengthening the Public Universities: Framework for the Operation of Non-Profit Branches of Foreign Universities and Other Provisions” (in Greek).
- Law 4957/2022 (Government Gazette A’ 141/21.07.2022), “New Horizons in Higher Education Institutions: Strengthening the quality, functionality and connection of Higher Education Institutions with society and other provisions” (in Greek).
- Law 4777/2021 (Government Gazette A’ 25/17.02.2021), “Admission to Higher Education, protection of academic freedom, improvement of the academic environment” (in Greek).
- Law 4653/2020 (Government Gazette A’ 12/24.01.2020), “Hellenic Authority for Higher Education. Special Accounts for Research Grants of Higher Education, Research and Technological Institutions, and other regulations” (in Greek).

- Law 4115/2013 (Government Gazette A' 24/30.01.2013), "Organization and operation of the Foundation for Youth and Lifelong Learning and the National Organization for the Certification of Qualifications and Vocational Guidance and other provisions" (*in Greek*).
- Law 4009/2011, (Government Gazette A' 195/06.09.2011) "Structure, function, quality assurance of studies and internationalization of institutions of higher education" (*in Greek*).
- Law 3696/2008 (Government Gazette A' 177/25.08.2008), "Establishment and operation of colleges and other provisions" (*in Greek*).
- Law 3549/2007 (Government Gazette A' 69/20.03.2007), "Reform of the institutional framework for the structure and function of Higher Education Institutions" (*in Greek*).
- Law 3374/2005 (Government Gazette A' 189/02.08.2005), "Quality assurance in higher education. Credit transfer and accumulation system – Diploma Supplement" (*in Greek*).
- Louwerse, T., Sieberer, U., Tuttnauer, O., and Andeweg, R. B. (2021). Opposition in times of crisis: COVID-19 in parliamentary debates. *West European Politics*, 44, 5–6, pp. 1025–1051.
- Manitakis, A. (n.d.). The constitutional prohibition of private establishment of higher education schools in the light of the economic and academic freedoms of Union law, *constitutionalism.gr*. Available at: <https://www.constitutionalism.gr/i-sintagmatiki-apagorefsi-tis-idrisis-sxolon-apo-idiotes/> (*in Greek*).
- Markantonatou, M., Paraskevopoulos, D. (2024). A Hayekian Educational Policy: The case of the Greek law on private universities. *Journal of Regional Socio-Economic Issues*, 14,2, pp. 29-36.
- Ministry of Interior, (2023 July 12). National elections – June 2023. Available at: <https://ekloges.ypes.gr/current/v/home/en/parties/> (*in Greek*).
- Minutes of the Parliament (2024 March 08). *Hellenic Parliament*. Available at: <https://www.hellenicparliament.gr/UserFiles/a08fc2dd-61a9-4a83-b09a-09f4c564609d/es20240308.pdf> (*in Greek*).
- Mpellos, I. (2023 August 25). Non-state medical school in Elliniko. Agreement between CVC Capital Partners and the University of Nicosia for the first non-state university department in Greece. *kathimerini.gr*. Available at: <https://www.kathimerini.gr/society/562581817/mi-kratiki-iatriki-scholi-sto-elliniko/> (*in Greek*).
- Papadopoulos, T. & Roumpakis, A. (2013). Familistic welfare capitalism in crisis: social reproduction and anti-social policy in Greece, *Journal of International and Comparative Social Policy*, 29, 3, pp. 204-224.
- Shephard, M. (2011 August 23). Defending the Rights of the Poor: Framing Policy or Delivering the Goods? Conservative and Liberals Versus Labour. Available at: <http://dx.doi.org/10.2139/ssrn.1915043>
- Stamatis, K. (2021, April 27). Critical assessment of the law. 4777/2021, *Nicos Poulantzas Institute*. Available at: https://poulantzas.gr/wp-content/uploads/2021/04/K.-Stamatis_Kritiki-apotimisi-n.-4777-2021.pdf (*in Greek*).
- Traianou, A. (2013). Greek Education Reform: resistance and despair. In: J., Ken (ed.), *Education and Europe: The Politics of Austerity* (pp. 86-112). London: Radicaled Books.
- Tzanakou, C. (2017). Higher Education Systems and Institutions, Greece. In: Shin, J., Teixeira, P. (eds). *Encyclopedia of International Higher Education Systems and Institutions*. Dordrecht: Springer.

AI, Sustainability Law and EU AI Act

Abstract:

AI expansion has permeated various industries and industries for the betterment of society, this also of course has an impact on the sustainable development goals Promoting the incorporation of AI in initiatives that target the attainment of the United Nations Sustainable Development Goals SDGs has its benefits and drawbacks and the essay looks at both sides of the glad. AI is the new technology that has quickly influenced almost every area including social issues, technologies, and policies. Countries seeking to combine AI, sustainable development and law can find a complicated nexus and want to analyze how all these aspects combine and influence each other. In this paper, we make an effort to look into the effects of AI in social development, legal measures against malpractices in AI technologies, and the USEGSD how AI can become a reliable ally. Moreover, we will illustrate the complex interdependency of sustainable development and AI by providing the ways of proceeding of the AI enhancement without putting the progress towards the SDGs to a halt at the same time overcoming the issues with the very unit that enables the progress and also examine the legal issues arising from the aforementioned problematic and the new EU AI Act.

Keywords: AI, Sustainability, Law, EU AI Act

Dimitrios Devetzis¹

¹ Contact details: Dr. iur. Dimitrios Devetzis, LL.M., M.L.E., Asistant Professor of Law, Frederick University Cyprus, EU Legal Expert in Private Law – Law & Technology, e-mail: law.dd@frederick.ac.cy, tel.: 00357 22 394 394.

1. Introduction

The adoption of AI into the already existent development policy plans is viewed as one of the effective ways in dealing with ecological problems. Agriculture, health care, and urban planning will become more 'eco-friendly, more effective,' and more productive with the deployment of these new age technologies. As Vinuesa et al. point out, it is possible to employ AI and contribute to the attainment of 128 targets under 15 different SDGs but at the same time it may sabotage 58 other related aspects of these initiatives (Vinuesa et al., 2020). For example, such AI technologies can make agriculture more productive, help people be more judicious with their resources, or improve people's health, which are particularly relevant for the goals of 'Zero Hunger' and 'Good health and Well-being' (Vinuesa et al., 2020; Mahadew, 2024). Mahadew further emphasizes that AI is one of the key instruments that can be helpful in addressing issues with all SDGs and not just in developing countries but also in developed countries (Mahadew, 2024). Such skills are needed in savings Aspects of climate change, information check, assists with addressing climate change through the use of AI alleviation of environmental destruction and monster prevention (Vinuesa et al., 2020; Rolnick et al., 2019). In addition, Noida, "smart production systems in an area of influence of AI technologies", such AI applications are directed to advance green manufacturing. Cioffi et al.

Such features of these technologies imply that rigorous scrutiny in regard to how AI will be applied in a bid to advance sustainable development goals is fundamental so as to minimize the negative consequences it may have.

In addition to this, the use of AI technology in environmental monitoring and management provides an example of how AI can help in promoting sustainability. With respect to the natural resources management appropriate deployment and use of the AI technologies nowadays can improve the analysis of huge data-spectra coming from the Earth observation systems, assess environmental changes like monitoring biodiversity status, and manage valuable nature resources (Efremova et al., 2019). Such a capacity means a lot in the time of climate change when data must be provided at the right timing in order to influence decisions and allocation of resources.

The objectives and practices in relation to the use of AI in these instances are towards achieving aims of sustainable development by facilitating decision making and allocation of resources. However, development concerns, mitigating measures must be developed and implemented. This includes reinforcing the capabilities of marginalized groups, social justice, equity, and the just and good use of AI. Responsible leadership in this case also includes governance regulation of AI which is another essential factor that interacts with the aspect of sustainable development and law.

2. Role of AI in realising the Sustainable Development Goals Potential social and environmental impact of AI with its development potential is impressive

AI proves that it can manage energy resources, logistics and waste, all of which are vital in achieving sustainable production (Cioffi et al, 2020). The automation of AI technology in green manufacturing processes is driven by enhancing environmental regulations hence the trend towards cleaner manufacturing practices (Cioffi et al, 2020). In line with this view Dziatkovskii addresses material civilization's quest for sustainable development and asserts the synergy of AI and blockchain as prominent contributors to the challenge, this aspect is relevant (Dziatkovskii, 2022).

3. The AI Systems Sustainability

However, as seen, with the positive effects that AI brings in enhancing sustainable development, the aspect of AI systems even themselves has to be addressed. Wynsberghe presents the idea of 'Design for development', or 'Sustainable AI', which focuses on the very beginning and end of the lifecycle of AI products (Wynsberghe, 2021). This is important since environmental impact assessment of such techniques, primarily with respect to power usage and resources used can be rather high.

To illustrate, automated machine learning (AutoML) systems, which are useful in enhancing the performance of AI models, can also have negative impacts on the environment if they are not used sensibly since they will further increase the energy requirements of the system (Castellanos-Nieves, 2023). There is a growing consensus on the pressing need of recognizing that AI development and its practice could be responsible for catastrophes such the burning of the Amazon forest or the depletion of water sources. Perucica and Andjelkovic advocate for a holistic view on the relationship between AI and the environment, stating that current strategies may not be sufficient and changes will need to be made since AI brings different challenges (Perucica & Andjelković, 2022). In agreement with larger debates about the ethical use of AI systems, in this case fairness, accountability and transparency (Berendt, 2019).

4. AI in Environmental Management

AI extend itself to the area of environmental management whereby Lawrence A.O.B and Juma J.O et al have argued that it aids decision-making and resource use efficiency.

As an illustration, the applications of Local Government require spatial structure which is made possible due to the combined application of Artificial Intelligence and Geographic Information Systems (GIS) that facilitates spatial analysis which is a key aspect in planning for land use and monitoring environmental impacts (Roy, 2024). Fusion of this technology can enhance the planning and utilization of available resources, making it possible to accomplish "SDG 6: Clean Water and Sanitation" and "SDG 15: Life on Land" (Roy, 2024; Somayaji et al., 2022). AI is also of great importance in technology adoption to ensure there is no water shortage which is a problem that exists globally. Somayaji et al. highlight the AI procedure in smart management of water resources in which water consumption will be conserved and not wasted (Somayaji et al., 2022).

This is even more so in areas that are experiencing acute water deficit where the resource management must be revamping in order to be sustainable. Although there seems to be success stories concerning the utilization of AI for sustainable development, there seems to be issues of concern and ethical issues that need to be attended to. Inequalities can be deepening when implementing AI systems when such systems are developed and used only by a certain section of the population.

What Kshirsagar et al. (Kshirsagar et al., 2021) have to point out reinforces that there is a need to address the exclusion of certain populations in targeting the use of AI for Good initiatives. Here it is in harmony with 'Don't go missing' principle which aims to achieve the SDGs in an inclusive manner where positive technology is available to everybody. Additionally, AI systems' environmental impact questions the future extent of their beneficial application. Crowther, L. (2021)724827 states frugally how certain trained weighty elements of Ai systems are energy demanding processes adding more carbon footprint thus green A. I. practice is inevitable. It is also important to say that as developments of technologies containing such kinds of A. I. continue, such developments cannot be anticipated not to concentrate on sustainability.

5. Legal and ethical questions on AI and Sustainable Development

However, the rapid progress of AI technologies also creates some serious ethical and legal concerns. As Bakošová suggests, normative structures which can cover issues such as data protection, discrimination and pollution must provide the basis for the deployment of AI (Bakošová, 2022). To ensure that development of AI technologies, as well as their deployment, is ethical, transparent, and responsive to sustainable

Taeihagh provides support for the political governance which is efficient enough to facilitate the management of the social-technical transitions associated with the advancement of the AI technologies (Taeihagh, 2021). This includes the formulation of policies that are able to encourage creativity while simultaneously protecting the welfare of the society and the environment. To achieve this, the governance of any AI system must be proactive and effective in the midst of technological dynamism to ensure that legal provisions are up to date and cater for new issues. In further consideration of such impacts, the application of AI from a sustainable development perspective does not give allowance for such impacts to be ignored. The emergence of 'Green AI' has shed light on the importance of developing AI systems with minimum environmental impact and carbon emissions (Verdecchia et al., 2023). It advocates for a change in the ways that AI systems are created and used, adopting methods that are more environmentally friendly. AI systems should be designed and executed with attention to ethical issues to ensure that they support the accomplishment of sustainable development objectives. More and more focus is being directed to the role of AI in strengthening the corporate sustainability strategies alongside the legal and ethical issues.

Research suggests that AI may be one of the best ways to enhance the efficiency of corporate activities, translate into cost reduction and lower carbon emissions (Li, 2023). However, this opportunity also needs to be balanced against the call for ethical use of AI and against corporate use of AI for purposes that fall outside of the overarching issue of sustainability. All these factors explain why the emerging technology of AI may be useful for embedding sustainability within the organization and developing a sustainability-oriented organizational innovation.

The nexus between AI and social governance is another interesting aspect that warrants investigation. Zhang elaborates on a new model of governance that uses AI-oriented technologies to support social order, progress and improvement (Zhang, 2023). In this case, such models would tend to foster active participation of the citizens in governance by incorporating AI technologies into the decision-making processes. The integration of AI in social governance is of great importance as it provides for a more democratic form of governance, which sensitive to the needs of the majority. There is also great potential in AI being able to help solve certain problems embedded within the SDGs. To illustrate, the agricultural sector stands to benefit from AI solutions, thus solving food scarcity and enhancing sustainable use of land (Vadlamudi, 2018). AI is also capable of providing much needed information in such matters as crop yields, soils, climate conditions in order to help in proper farming practices.

This application of AI not only helps in the preservation of food security but it also complements the environmental sustainability features. This legal aspect touches on the role that AI has in the sustainable development within the scope of international law. The idea of balanced growth has its history within international legal concepts and calls for the need for nations to come together to address the issues at hand (Efremova, 2021). This is because AI is expected to aid in providing the required information for the global consensus on cooperations towards desired sustainability objectives. However, in the legal structures related to AI, there are other issues related to politics, international relations, and legal pluralism. The progression of AI development will increasingly create a need for a multidisciplinary approach. AI technology governance, as well as AI-enabled sustainable development, calls for knowledge

from lawyers, ethicists, environmentalists, and technologists. This is a healthy partnership and can lead to new ways of finding and using AI's opportunities, while coping with its legal and ethical problems. To summarize the complex dynamics around AI, sustainable development and law remain both a bane and a boon. Across various sectors, AI is expected to foster best developmental outcomes to enhanced effectiveness and the realization of the SDGs.

Nonetheless, this possibility has limits due to the need for responsible practice and the implementation of regulatory legal mechanisms in the processes of AI technologies design and usage. As we proceed, it is important to encourage cross-disciplinary cooperation and flexible governing structures which can adequately deal with the challenges of artificial intelligence within the sustainable development agenda.

6. The new state of play: EU AI Act and environmental sustainability

Before the enactment of the EU AI Act that the European Parliament was more concerned about the environment than the Commission. A few months later however, during the trilogue phase of the legislative process, where other institutions of the Council, Commission and Parliament are held and bargaining takes place, consensus was built on a text which reversed the earlier efforts and suppressed most provisions to do with the environment (De Pereira, 2024)..

The new version includes corrections how standardisation requests, codes of practice and information disclosure are to be made which although outranks none does not appear to address adequately the effects to the environment that the AI industry brings about.

Article 40 states that the Commission shall call upon Standardisation organisations to provide the 'deliverables on reporting and documentation processes to improve AI systems resource performance (De Pereira, 2024).. The said standards should focus on minimization of energy consumption and other resources consumption by the high risk Ai system within its lifecycle development. This therefore involves systems training and its deployment including additional attention on energy efficient designing of general-purpose AI models.'

If it is efficiently enforced, this provision should however lessen the resource use requirement for AI. It is, however, unnecessary to place too much reliance on standardisation organisations to fill this gap as the procedure will be cumbersome and time consuming Fiona tells us more. As these members are relatively much from the for-profit organisations, it would be difficult to motivate solutions that are less costly but less eco-friendly (De Pereira, 2024)..

As translated, this section comes to excess energy focus, hence the limitation of Article 40 which talks of the rest of the social impacts on AI systems as just other 'resources' as if they are internally consumed.' More specific requests to standardisation bodies may help clarify such vagueness, but this will be contingent on the goodwill of the policy makers. In cases where the Commission's request is vague, non-requests or non-explicit, it may also happen that the standards will tend to cover energy impacts and other non-fuel parameters will be inadequately addressed.

And even if these standards end up being best practices in providing solutions that will be efficient in reducing resource depletion on these systems, the fact that most environmental standards compliance is on a voluntary basis although there is a presumption of compliance in the context of the AI act – which is administratively proven by self-declaration that does not have to be publicly displayed – will undermine the achievement of positive outcomes (De Pereira, 2024)..

Establishes responsibilities: "other than the standards-focused ones already existing in an AI Act, it is further stipulated that providers of general-purpose AI (GPAI) systems such as the generative ones like ChatGPT, must... including information on the known or estimated energy consumption of the model..." (Annex XI).

Such a rule may not prove so effective. First, it applies only to GPAI systems – these are the systems that do consume natural resources in their development, though they are not the only ones using large amounts of resources – and in effect excludes the rest of the industry (De Pereira, 2024). Second, within the confines of an energy audit, once more ignores other aspects such as water and minerals use and electronic waste production for instance. Third, the Act does not require any further interface assessment in respect of resource consumption and management once a system is deployed after taking it through a training stage to include a market launch and subsequent activities.

Last, Article 69 relates the implementation of codes of conduct to enhancing the assessment and reduction of AI systems' environmental consequences. However, voluntary codes of conduct that Member States have taken in the past within the EU have not been very helpful in bringing their objectives to fruition. One such example has been the EU Code of Practice on Disinformation which scholars have faced a lot of scholarly criticism on the issue that it is able to reduce harmful content in the digital space.

7. Conclusions

To summarize, AI technology brings significant chances to tackle the problem of having sustainable development in a lot of diverse processes. It is indeed essential in SDGs provision since it optimizes all processes, makes proper decisions, and addresses prominent global problems. On the other side, attention must also be on the comparatively effective and safer utilization of such AIs as systems for purposes other than environmental destruction.

The intersection of the AI Liability Directive and environmental law is an emerging field which seeks to address for the first time the calls for Sustainable AI Coverage in the development and use of AI technologies. The policy seeks to ensure that any use of AI technology does not infringe on or violate basic rights and values of the society including respect for the environment. This is very important since AI technologies have the potential to affect the environment in a multiplicative governing manner. The EU AI Act describes the right of citizens abroad to mend AI systems which should be encouraged to promote anti-climate change apps. Marchenko and ЭНТИН write about how the EU deals with human rights and AI. The authors highlight that this is a regulatory level that is intended to ensure the rights of the citizens especially in regards to AI which goes as far as the protection of the environment as well (Marchenko & ЭНТИН, 2022). Further, the contents of the Act are studied in the perspective of possible abuse of AI stereotypes and lack of accountability, which harms environmental governance (Marchenko & ЭНТИН, 2022). Moreover, the literature states that we can utilize AI to help with sustainability issues and apply it into positive change.

According to Kindylidi and Cabral, it is possible to increase consumer protection and promote sustainability by progressing in the elimination of the barriers for access and dissemination of environmental information related to the AI technology (Kindylidi & Cabral, 2021). The purpose is understandable within broader sustainability framework of EU where AI can help to age-efficient management of resources and emits lower negative externalities in the sectors (Kindylidi & Cabral, 2021). Perucica and Andjelkovic also believe that the various policies relating to environment practiced in EU today, is insufficient for the needs brought about by the AI technologies, implying that there may be a need for new policies to be formulated such that the entire cycle of making and implementing AI is green – which ends with the technologies (Perucica & Andjelkovic, 2022). In addition to theoretical estimates, there is also practical evidence supporting AI technologies in environmental management.

Hasas emphasizes that AI technology can greatly improve the efficiency and precision of data regarding the environment and, in turn, aid in the achievement of community development and sustainability goals (Hasas, 2024). Zhao and Fariñas are of the same opinion when they explore a unified framework for AI regulation that responds to sustainability

issues, noting that action is needed from both governments and corporations (Zhao & Fariñas, 2022). The ability of AI in resource optimization and enhancement of detection capabilities for predicting environmental protection measures has been reiterated by Adanma, who also buttresses the point that while AI has many benefits it also comes with some ethical issues that does not work in conservation favor (Adanma, 2024). Also, the scholarly works go on to suggest that devising AI tools involves embedding the principles of sustainability as an afterthought. Naeeni comes to the conclusion that such an impact-desiring approach to investigation should strive to include AI development as technology that would be beneficial toward the environment (Naeeni 2023). In this context, Xiao offers arguments for economically and socially balanced approaches to the development of artificial intelligence, in which environmental aspects take centre stage and ethics go hand in hand with invention (Xiao, 2023). There is also such a call that includes each of the examples of interdisciplinary interaction as an attempt to resolve issues facing resources and nature as well across their boundaries which Akter relates to that while embracing AI for sustainability, good ethical practices as well as user education is key in actual practice of these technologies (Akter, 2024).

Hence, the EU AI Act represents a critical step towards ensuring that AI technologies contribute positively to environmental sustainability. By establishing a regulatory framework that emphasizes transparency, accountability, and ethical considerations, the EU aims to harness the potential of AI while mitigating its risks. The literature supports the notion that AI can significantly enhance environmental management and sustainability efforts, provided that it is developed and implemented responsibly.

8. References

- Adanma, U. (2024). Artificial intelligence in environmental conservation: evaluating cyber risks and opportunities for sustainable practices. *Computer Science & It Research Journal*, 5(5), 1178-1209. <https://doi.org/10.51594/csitrj.v5i5.1156>.
- Akter, M. (2024). Interdisciplinary insights: integrating artificial intelligence with environmental science for sustainable solutions. *JAIGS*, 1(1). <https://doi.org/10.60087/jaigs.v1i1.28>.
- Bakošová, L. (2022). Climate action through artificial intelligence: international legal perspective. *Studia Iuridica Casoviensia*, 10(2). <https://doi.org/10.33542/sic2022-2-01>.
- Berendt, B. (2019). Ai for the common good?! pitfalls, challenges, and ethics pen-testing. *Paladyn Journal of Behavioral Robotics*, 10(1), 44-65. <https://doi.org/10.1515/pjbr-2019-0004>.
- Castellanos-Nieves, D. (2023). Improving automated machine-learning systems through green ai. *Applied Sciences*, 13(20), 11583. <https://doi.org/10.3390/app132011583>.
- Cioffi, R., Travaglioni, M., Piscitelli, G., Petrillo, A., & Felice, F. (2020). Artificial intelligence and machine learning applications in smart production: progress, trends, and directions. *Sustainability*, 12(2), 492. <https://doi.org/10.3390/su12020492>.
- De Pereira, J.R.L., The EU AI Act and environmental protection: the case for a missed opportunity, (<https://eu.boell.org/en/2024/04/08/eu-ai-act-missed-opportunity> , last access: 16-10-2024).
- Dziatkovskii, A. (2022). Artificial intelligence & blockchain for sd.. <https://doi.org/10.46916/05102022-978-5-00174-709-3>.
- Efremova, N., West, D., & Zausaev, D. (2019). Ai-based evaluation of the sdgs: the case of crop detection with earth observation data. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3411647>.
- Hasas, A. (2024). Ai for social good: leveraging artificial intelligence for community development. *J. Communit. Service. Society. Empower.*, 2(02), 196-210. <https://doi.org/10.59653/jcsse.v2i02.592>.

- Kindylidi, I. and Cabral, T. (2021). Sustainability of ai: the case of provision of information to consumers. *Sustainability*, 13(21), 12064. <https://doi.org/10.3390/su132112064>.
- Kshirsagar, M., Robinson, C., Yang, S., Gholami, S., Klyuzhin, I., Mukherjee, S., ... & Ferres, J. (2021). Becoming good at ai for good.. <https://doi.org/10.1145/3461702.3462599>.
- Li, R. (2023). Research on artificial intelligence influence towards corporate sustainability strategies in management.. <https://doi.org/10.4108/eai.1-9-2023.2338700>.
- Mahadew, B. (2024). The nexus between artificial intelligence and sustainable development goals: a review. *Sustain. Econ.*, 2(1), 13. <https://doi.org/10.62617/se.v2i1.13>.
- Marchenko, A. and ЭНТИН, М. (2022). Artificial intelligence and human rights: what is the eu's approach?. *Digital Law Journal*, 3(3), 43-57. <https://doi.org/10.38044/2686-9136-2022-3-3-43-57>.
- Naeeni, S. (2023). The environmental impacts of ai and digital technologies. *aitechbesosci*, 1(4), 11-18. <https://doi.org/10.61838/kman.aitech.1.4.3>.
- Perucica, N. and Andjelković, K. (2022). Is the future of ai sustainable? a case study of the european union. *Transforming Government People Process and Policy*, 16(3), 347-358. <https://doi.org/10.1108/tg-06-2021-0106>.
- Rolnick, D., Donti, P., Kaack, L., Kochanski, K., Lacoste, A., Sankaran, K., ... & Bengio, Y. (2019). Tackling climate change with machine learning.. <https://doi.org/10.48550/arxiv.1906.05433>.
- Roy, P. (2024). Machine learning empowered geographic information systems: advancing spatial analysis and decision making. *World Journal of Advanced Research and Reviews*, 22(1), 1387-1397. <https://doi.org/10.30574/wjarr.2024.22.1.1200>.
- Somayaji, S., Nallakaruppan, M., Chengoden, R., Koppu, S., Iyapparaja, M., Sadhasivam, J., ... & Sethuraman, S. (2022). Smart water resource management using artificial intelligence—a review. *Sustainability*, 14(20), 13384. <https://doi.org/10.3390/su142013384>.
- Taeihagh, A. (2021). Governance of artificial intelligence. *Policy and Society*, 40(2), 137-157. <https://doi.org/10.1080/14494035.2021.1928377>.
- Vadlamudi, S. (2018). Agri-food system and artificial intelligence: reconsidering imperishability. *Asian Journal of Applied Science and Engineering*, 7(1), 33-42. <https://doi.org/10.18034/ajase.v7i1.44>.
- Verdecchia, R., Sallou, J., & Cruz, L. (2023). A systematic review of green ai. *Wiley Interdisciplinary Reviews Data Mining and Knowledge Discovery*, 13(4). <https://doi.org/10.1002/widm.1507>.
- Viñuales E. Jorge (2021). Sustainable development, 285-C17.S11. <https://doi.org/10.1093/law/9780198849155.003.0017>.
- Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., Dignum, V., Domisch, S., ... & Nerini, F. (2020). The role of artificial intelligence in achieving the sustainable development goals. *Nature Communications*, 11(1). <https://doi.org/10.1038/s41467-019-14108-y>.
- Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., Dignum, V., Domisch, S., ... & Nerini, F. (2020). The role of artificial intelligence in achieving the sustainable development goals. *Nature Communications*, 11(1). <https://doi.org/10.1038/s41467-019-14108-y>.
- Wynsberghe, A. (2021). Sustainable ai: ai for sustainability and the sustainability of ai. *Ai and Ethics*, 1(3), 213-218. <https://doi.org/10.1007/s43681-021-00043-6>.
- Xiao, D. (2023). Neuroscience-inspired continuous learning: a sustainable approach to ai energy challenge.. <https://doi.org/10.31219/osf.io/twn9q>.
- Zhang, H. (2023). Research and practical exploration of new models of social governance in the age of artificial intelligence. *SHS Web of Conferences*, 179, 01017. <https://doi.org/10.1051/shsconf/202317901017>.

- Zhao, J. and Fariñas, B. (2022). Artificial intelligence and sustainable decisions. *European Business Organization Law Review*, 24(1), 1-39. <https://doi.org/10.1007/s40804-022-00262-2>.
- Zhu, S., Nguyen, B., Xia, Y., Frost, K., Xie, S., Viswanathan, V., ... & Smith, J. (2023). Improved environmental chemistry property prediction of molecules with graph machine learning.. <https://doi.org/10.26434/chemrxiv-2023-8c62c>.

State Responsibility for Private Military and Security Companies under Public International Law

Abstract:

This paper explores the legal and ethical responsibilities of states in the use of Private Military and Security Companies (PMSCs) under public international law. With the increasing reliance on PMSCs in conflict zones, this trend raises complex questions about state accountability, especially when PMSCs perform critical functions typically associated with state organs, such as law enforcement, interrogation, and combat operations. The study analyzes the extent to which a state is liable for the wrongful actions of PMSCs under the principles of state responsibility, particularly in situations where states exert control or tacitly permit misconduct. The paper also delves into the challenges of attributing private conduct to the state, assessing the degree of control required to invoke state liability, and exploring the application of due diligence obligations in preventing human rights abuses. It further outlines the necessity for states to implement regulatory frameworks ensuring PMSCs' compliance with international humanitarian law, emphasizing the importance of oversight, proper training, and accountability mechanisms. Ultimately, the paper argues that despite the privatization of military functions, states cannot escape responsibility under international law and must ensure PMSCs operate within established legal and ethical boundaries.

Key-Words: Law, Private Military, Security Companies, Public International Law

Michail Kyriakakis¹

¹ Corresponding-Address: Dr. Kyriakakis Michail, Legal Advisor to the Ministry of National Defence, Military Schools Instructor, Researcher of International Humanitarian and Military Criminal Law, kiriakakism@hotmail.com

1. Introduction

The utilization of Private Military and Security Companies (PMSCs) by states has become a prevalent feature of contemporary conflicts and security operations. Some authors even discuss the concept of “foreign policy by proxy” or “covert wings of governments”.² While PMSCs offer specialized services and operational flexibility, their involvement raises significant legal and ethical questions regarding state responsibility. This paper aims to delineate the responsibilities of states concerning the activities of PMSCs they contract, highlighting the importance of adherence to legal frameworks, human rights principles, and accountability mechanisms. It is commonly assumed that delegating functions to PMSCs also entails transferring responsibility. The purpose is to determine whether the illegal actions, carried out by personnel of PMSCs, should be considered as acts attributable to the State.

2. Private Military and Security Companies: The challenge of accountability under International Law

PMSCs offer services that certain states may be hesitant or unable to provide themselves: ranging from security provision, military counsel, and training to prisoner interrogation and deployment of combat units. When PMSCs offer a convenient route to furthering foreign policy goals without direct state involvement, the temptation for states to employ them to bypass international obligations — or cut costs in fulfilling them — becomes clear. A primary apprehension regarding the growing influence of PMSCs is the cultivation of military capabilities external to state oversight and their application in inherently unstable environments. While there exists no conclusive evidence suggesting PMSCs are more prone to misconduct compared to the state armed forces, they certainly can transgress interests protected by international law. The discourse often revolves around malfeasance attributed to PMSC personnel, encompassing allegations of prisoner abuse, involvement in sex trafficking, contravening UN arms embargoes and indiscriminate firing at civilians. A pivotal query in the discourse concerning accountability is thus: At what point does the contracting state, the host nation, or the exporting state assume international liability for the actions of PMSCs?³

Firstly, there seems to be minimal effort to maintain effective oversight over their operations.⁴ The US General Accounting Office (GAO) has highlighted a significant lack of supervision by the contracting agencies over PMSCs in Iraq.⁵ Throughout the occupation, no US agency even kept tabs on the number of PMSCs operating on the ground.⁶ Secondly, when allegations arise concerning violations of international obligations, governments often explicitly or implicitly disavow any accountability for such misconduct, not because there's no breach of international law, but because any connection to the perpetrators is denied.⁷ Thirdly, although domestic enforcement of international obligations is frequently crucial for upholding them, misconduct by contractors is seldom prosecuted through the state, whether due to confusion regarding the application of existing legal frameworks or a perception that, once private firms are involved, the matter falls outside the realm of state conduct. Abu

² K. O'Brien, (2000) “PMCs, Myths and Mercenaries: The Debate on Private Military Companies”, *Royal United Services Institute for Defense Studies*, Vol. 1 p. 145.

³ E. Moyakine, (2015) “State Responsibility for Non-Compliance with Positive International Law Obligations”, in *The Privatized Art of War: Private Military and Security Companies and State Responsibility for Their Unlawful Conduct in Conflict Areas*. Cambridge – Antwerp: Intersentia (School of Human Rights Research), pp. 303–392.

⁴ P. W. Singer, (2003) *Corporate Warriors: The Rise of the Privatized Military Industry*, Ithaca, New York: Cornell University Press, p. 152.

⁵ S. L. Schooner, (2005) “Contractor Atrocities in Abu Ghraib: Compromised Accountability in a Streamlined, Outsourced Government”, *Stanford Law & Policy Review*, Vol. 13 p. 549.

⁶ C. Holmqvist, (2005) “Private Security Companies — The Case for Regulation”, Stockholm International Peace Research Institute (SIPRI), Policy Paper No. 9, p. 24.

⁷ C. Walker, D. Whyte, (2005) “Contracting Out War?”, *International & Comparative Law Quarterly*, Vol. 54 p. 661-662.

Ghraib vividly illustrates the disparate responses to breaches of international law depending on whether the misconduct was perpetrated by state organs or PMCs: none of the contractors identified in the Taguba and Fay Reports as "directly or indirectly responsible for the abuses" have faced any criminal charges,⁸ whereas their counterparts from the Army and the Marines have been convicted and sentenced by military courts. Consequently, the implicated contractors only face legal proceedings after Iraqi victims filed a class action lawsuit based on tort law.⁹

Merely conducting policies through proxies rather than state organs does not exempt a state from the application of international law. The presence and consequences of breaching an international obligation are determined by principles of state responsibility, rooted in the notion that states are the primary actors in the international arena. While international law and the concept of state responsibility are state-centric, they allow some flexibility to address the accountability of states for the actions of PMCs. However, this approach's ability to regulate military affairs is limited by weak enforcement and its inherent state-centric nature, which overlooks the actual power dynamics between states and non-state actors.¹⁰

3. Understanding State Responsibility in the Context of Public and Private Conduct

The concept of state responsibility hinges on the distinction between public and private conduct. In principle, only the "internationally wrongful act of a State entails the international responsibility of that State."¹¹ This means that only conduct attributable to the state qualifies as an "act of state."¹² Since the state itself does not act but operates through its officials and authorities, the presumption is that the acts of state organs are considered acts of the state.¹³ This includes actions by members of the state's armed forces. Typically, contractors are not part of the armed forces. However, state responsibility can also arise from private conduct. In exceptional circumstances, private acts may be attributed to the state. Even without such attribution, a state can still bear international responsibility if it fails to take appropriate measures to prevent the violation of international law, ensure suitable reparation, or punish the wrongdoer.

Courts have attributed private conduct to the state when a private entity is authorized to perform elements of governmental authority.

The key factor is the nature of the activity, not whether the entity is public or private or its connection to the state.¹⁴ This principle aims to address situations where public corporations have been privatized but still perform public functions, as well as parastatal entities that carry out "state functions."¹⁵ This attribution occurs regardless of whether the non-state actor has exceeded its competences or contravened instructions.¹⁶ The underlying rationale is that a state cannot avoid its responsibility by delegating its functions to a private entity.

⁸ GAO, "Rebuilding Iraq: Actions Needed to Improve Use of Private Security Providers", GAO-05-737, 28 July 2005, p. 21, footnote 18.

⁹ *Saleh et al. v. Titan Corporation et al.*, Case No. 04 CV 1143 R (NLS), class action filed in the US District Court for the Southern District of California

¹⁰ C. Lehnardt, (2007) "Private military companies and state responsibility", in S. Chesterman, C. Lehnardt (eds), *From Mercenaries to Market: The Rise and Regulation of Private Military Companies* Oxford, <https://doi.org/10.1093/acprof:oso/9780199228485.003.0009>

¹¹ ILC Articles on State Responsibility, art. 1

¹² ILC Articles on State Responsibility, art. 2 (a)

¹³ International Court of Justice (ICJ), *LaGrand (Germany v. United States)*, Judgment, 27 June 2001, ICJ Reports 2001, para. 81

¹⁴ R. Ago, (1971) "First Report on State Responsibility", Yearbook in International Law Commission, Vol. II (1), para. 191

¹⁵ J. Crawford, (2003) *The International Law Commission's Articles on State Responsibility — Introduction, Text and Commentaries*, Cambridge: Cambridge University Press, art. 5, para. 1.

¹⁶ *Yeager v. Iran*, 17 Iran-US CTR 92, 110-111 (1987-IV)

The application of the above principle is difficult because it is hard to determine what PMC activities can be attributed to the state due to the uncertainty surrounding the range and nature of services offered by PMCs. There is no international consensus on what defines the exercise of governmental authority. Within the context of state immunity, it is widely recognized that determining the exact scope of inherently "sovereign," "governmental," or "public" activities is complex and perhaps impossible.¹⁷

In the absence of a clear definition, some guidance can be drawn from court rulings and discussions by the International Law Commission (ILC). The ILC commentary specifically mentions private security firms acting as prison guards, noting that detaining and disciplining individuals constitutes the exercise of governmental authority.¹⁸ Other examples include powers related to immigration control, quarantine, and the identification of property for seizure.¹⁹ The Iran-United States Claims Tribunal addressed the attribution of conduct by parastatal forces, such as the Komitehs and Islamic Revolutionary Guards, before their formal recognition by the Islamic Republic of Iran. In cases such as *Rankin v. Iran*²⁰ and *Yeager v. Iran*,²¹ detention and subsequent expropriation were considered exercises of governmental powers, as was the seizure of property in *Hyatt v. Iran*.²²

As indicated by the ILC Commentary and the cases mentioned above, even though a precise definition of governmental authority is unlikely, certain activities are widely recognized as "core governmental functions." When performed by PMCs, these activities can be considered an exercise of governmental authority. These activities include law enforcement, engaging in combat, seizing money, detention and interrogation, expropriation, and controlling borders and immigration. Yet even with such a tentative list it is difficult to establish whether the activities in which PMCs are actually engaged correspond to the exercise of governmental authority. With regard to combat, it is not clear whether this is an activity undertaken by PMCs. From the perspective of the hiring governments and the industry it is clearly not. The care with which the Coalition Provisional Administration (CPA) in Iraq avoided even the appearance of PMCs engaging in "military" or even "offensive" activities was notable.²³

Regarding all other activities, the unclear mandates may lead PMCs to undertake tasks not explicitly outlined in their contracts. Ambiguous and broadly worded contracts that allow for liberal interpretation by both parties, coupled with a disregard for internal policies and a lack of oversight, contribute to this type of mission creep.²⁴ For example, one firm was contracted to assist with law enforcement, but this mandate ultimately resulted in the firm participating in raids conducted by the Iraqi police.²⁵

The use of sophisticated weapon systems is another shift in warfare that increases this ambiguity and may necessitate rethinking the concept of combat. Contractors are employed to maintain and operate these systems, which can have as much impact on the battlefield as ground troops, making them equally "mission critical." Consequently, the distinction between

¹⁷ J. Crawford, (1983) "International Law and Foreign Sovereigns: Distinguishing Immune Transactions", *British Yearbook of International Law*, Vol. 54, p. 83.

¹⁸ G. Townsend, (1997) "State Responsibility for Acts of De Facto Agents", *Arizona Journal of International & Comparative Law*, Vol. 14, pp. 635.

¹⁹ ILC Commentary, art. 5, para 2.

²⁰ *Rankin v. Iran*, 17 Iran-US CTR 135 (1987-IV).

²¹ *Yeager v. Iran*, 17 Iran-US CTR 92, 101 (1987 — IV).

²² *Hyatt International Corporation v. Iran*, 9 Iran-US CTR 72 (1985 — II).

²³ C. Lehnardt, (2007) "Private military companies and state responsibility", in S. Chesterman, C. Lehnardt (eds), *From Mercenaries to Market: The Rise and Regulation of Private Military Companies* Oxford, <https://doi.org/10.1093/acprof:oso/9780199228485.003.0009>, p.9.

²⁴ L. Dickinson, (2007) "Contract as a tool for regulating private military companies", in S. Chesterman, C. Lehnardt (eds), *From Mercenaries to Market: The Rise and Regulation of Private Military Companies* Oxford, <https://doi.org/10.1093/acprof:oso/9780199228485.003.0009>, pp. 217-238

²⁵ R. Merle, "DynCorp took part in Chalabi raid", *Washington Post*, 4 June 2004.

security and military operations, as well as between defensive and offensive actions, seems rather artificial.²⁶

Private conduct is also attributed to the state when it is carried out on the instructions of the state or where the private actor is under the state's direction or control.²⁷ A clear-cut case arises when a state hires a firm and instructs it to abuse prisoners or arrest insurgents. The situation becomes much more complex when no such explicit instructions are given, but the state is involved in preparing and implementing the operation by directing or controlling it. When the ILC drafted the article establishing the principle of attribution through control, direction, or instructions, it aimed to address scenarios where the state enhances its actions by recruiting private actors as "auxiliaries" without incorporating them into the state apparatus. However, the ILC also noted that mere recruitment is insufficient; a "real link" between the private group or individual and the state is necessary.²⁸ For a conduct to give rise to legal responsibility of a state, it would in principle have to be proved that the State had effective control of the military or paramilitary operations in the course of which the alleged violations were committed.²⁹ The degree of control the state must exert over the private actor and its operations remains a topic of debate.

Consequently, from the ICJ's perspective, "effective control" requires specific instructions to commit a particular act or perform a specific task.³⁰ Although the Court recognized the Contras' dependence on U.S. funding, it ruled that the United States' lack of control over their specific operations prevented attributing their activities to the U.S. Under this interpretation, if a state hired a PMC but did not control all its operations, the PMC's conduct would not be considered attributable to the hiring state, even if the PMC would cease operations upon payment stoppage, and even less so to the state that contracted the PMC. The relationship between PMCs and the military is described as one of "informal coordination", consisting of regular meetings to share information and coordinate and resolve conflicts in operations.

According to international law, it is not mandatory for controlling authorities to plan all operations of their dependent units, select targets, or provide explicit instructions regarding military conduct and potential breaches of international humanitarian law. International law recognizes control when a state participates in organizing, coordinating, or planning military actions of a military group, alongside financing, training, equipping, or offering operational assistance to the group.³¹ The judges reaffirmed the reasoning behind attributing the actions of de facto agents, which is to prevent states from avoiding international responsibility by delegating tasks to private individuals that may not or should not be carried out by state officials. This also prevents states from arguing that individuals actively involved in exercising governmental authority are not considered state organs under national laws, thus absolving the state of responsibility.³² Of course, if, as in Nicaragua, the controlling State is not the territorial State where the armed clashes occur, or where at any rate the armed units or groups perform their acts, more and compelling evidence is required to show that the State is genuinely in control of the units and groups not merely by financing and equipping them, but also by generally directing or helping plan their actions.

²⁶ Foreign and Commonwealth Office, "Private Military Companies: Options for Regulation", House of Commons 577, February 2002, para. 11

²⁷ ILC Articles on State Responsibility, art. 8

²⁸ ILC Articles on State Responsibility, art. 8, para. 1

²⁹ International Court of Justice, *Case concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States)*, Judgment (Merits), 27 June 1986, ICJ Reports 1986, paras. 109-115.

³⁰ *Ibid.*, paras. 188-189.

³¹ International Criminal Tribunal for the former Yugoslavia (ICTY), Appeals Chamber, *Prosecutor v. Tadic*, Judgment, 15 July 1999, IT-94-1-A, para. 137.

³² *Ibid.*, para. 117.

According to the Appeals Chamber, the extent of control required decreases with the increasing proximity of the controlling state to the territory where the private conduct takes place, as it then can be more readily presumed that the controlling state can produce effects outside its own territory. The appropriateness of relying on the criterion of proximity alone is open to question: physical distance is certainly not conclusive as to the degree of control actually exercised if the controlling state has sophisticated means of communication at its disposal enabling it to control the course of an operation.

4. State Responsibility for Private Military Conduct: The Due Diligence Obligation in International Law

In the Corfu Channel case, the International Court of Justice determined that Albania bore international responsibility due to its failure to prevent the disaster, stating that "grave omissions involve the international responsibility of Albania."³³ Similarly, the ICJ held Iran responsible for the hostage-taking at the US embassy in Tehran, citing its failure to take appropriate measures to prevent the militants' invasion or to compel their withdrawal.³⁴ Essentially, if a state fails to demonstrate due diligence in preventing or addressing violations of international law, its international responsibility arises not from the private conduct itself but from its omission or inadequate efforts to prevent or address it.³⁵

On the basis of Article 43 of the Hague Regulations the ICJ found Uganda, as the occupying power in the Ituri district in the Democratic Republic of the Congo, responsible for its "lack of vigilance in preventing the violation of human rights and international humanitarian law and not to tolerate such violence by a third party."³⁶ The matter is also fairly established in the case law of human rights bodies. Conventions oblige states to "ensure", "protect", or "secure" rights.³⁷ These obligations have been interpreted as requiring states to take positive steps in order to prevent the violation of rights through private actors.³⁸ Therefore, the European Court of Human Rights held that "the State cannot absolve itself from responsibility by delegating its obligations to private bodies or individuals".³⁹

This raises the question of what level of diligence is required. The mere fact that private actors have violated interests protected by international law does not automatically result in international responsibility for the state. While the concept of due diligence is acknowledged, a clear-cut definition has not been established and is likely impossible to formulate.⁴⁰ Instead, the required degree of diligence will vary based on the circumstances and the level of protection mandated by the applicable norms.⁴¹ Factors to be considered include the risk of a violation of international law, which depends on the nature of the private actors involved—such as whether they are armed—and the group that is being protected.⁴²

³³ *The Corfu Channel Case (United Kingdom v. Albania)*, Judgement (Merits), 9 April 1949, ICJ Reports 1949, pp. 4, 23.

³⁴ *United States Diplomatic and Consular Staff in Tehran (United States v. Iran)*, Judgment, 24 May 1980, ICJ Reports 1980, para. 63.

³⁵ H. W. Briggs, (1947) *The Law of Nations*, New York: Appleton-Century-Crofts, pp. 866-871.

³⁶ ICJ, *Case Concerning Armed Activities in the Territory of the Congo*, para. 178.

³⁷ See, e.g., International Covenant on Civil and Political Rights, art. 1(2); American Convention on Human Rights, art. 1; European Convention on Human Rights, art. 1.

³⁸ A. Reinisch, (2005) "The Changing International Framework for Dealing with Non-state Actors", in P. Alston (ed.), *Non-State Actors and Human Rights*, Oxford: Oxford University Press, pp. 79-80.

³⁹ European Court of Human Rights, *Costello Roberts v. United Kingdom*, Judgement, 23 February 1993, appl. no. 13134/87, para. 27.

⁴⁰ F. V. Garcia Amador, (1957) "Second Report on State Responsibility", Yearbook in International Law Commission, Vol. II, p. 104.

⁴¹ See Art. 22 II and 29 of the Vienna Convention on Diplomatic Relations and Art. 31 III and 40 of the Vienna Convention on Consular Relations

⁴² A. Epiney (1992) *Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktionen Privater*, Baden-Baden: Nomos-Verlag, p. 249.

This implies that when PMC personnel violate human rights or international humanitarian law, the host or hiring state can be held responsible for failing to prevent or adequately respond to such conduct, even if the involvement of state organs in the specific operation is unclear. Furthermore, the state should, in principle, be able to exercise authority over the private actor, particularly within its own territory or if it occupies another state.⁴³ As a result, the host state or occupying power might bear international responsibility for not exercising due diligence regarding PMCs. The exporting state has an obligation to prevent PMC actions that threaten the territorial integrity of another state.⁴⁴ However, it is less clear whether this obligation extends to situations where the PMC is hired or its presence is accepted by the other state.

Failures to exercise due diligence can be evident in domestic legislation that is insufficient to secure and protect rights. When domestic laws fail to uphold the obligation to "secure to everyone within its jurisdiction the rights and freedoms defined in the Convention," resulting in violations of those rights and freedoms, this constitutes a failure of due diligence.⁴⁵ Other manifestations include a lack of oversight, inadequate training, and poor background vetting of PMC personnel. If an inadequate response stems from the poor implementation of existing laws or the inability of authorities to prosecute effectively, this can also lead to international responsibility.

5. Conclusion

The above analysis demonstrates that PMCs do not operate in a legal vacuum. States are internationally responsible when PMCs engage in law enforcement, interrogation of prisoners, or when their conduct is controlled by a state. Even when states do not directly control PMCs, but tacitly permit risky or abusive behavior, the lack of direct control does not absolve them of responsibility. Instead, it highlights their potential liability for failing to exercise due diligence, especially in the context of the host or hiring state.

States, which hire PMSCs, retain responsibility for violations of international humanitarian law committed by these entities if such violations can be attributed to the state under international law. This attribution is particularly pertinent if the PMSC operates under the instructions or control of state authorities. To meet their obligations, states must ensure that PMSC personnel adhere to international humanitarian law. Essential measures include proper training. States must mandate that PMSC staff receive comprehensive training in international humanitarian law to understand their legal obligations and the ethical standards required in conflict situations. In addition, states should require PMSCs to adopt rules of engagement and standard operating procedures that align with international humanitarian law. Moreover, states must establish mechanisms to hold PMSC personnel accountable for any violations of international humanitarian law. This involves setting up legal and regulatory frameworks that can effectively investigate, prosecute, and penalize any misconduct.

States where PMSCs are incorporated or operate also have a duty to ensure respect for international humanitarian law. These states are in a favorable position to influence PMSC behavior through national legislation and regulatory measures. One effective approach is to establish a comprehensive licensing and regulatory system. Key elements of such a framework could include defining permissible services: States must clearly delineate which services PMSCs can provide, considering whether specific services might involve direct participation in hostilities. Furthermore, states require PMSCs to train their staff in international humanitarian law and adopt standard operating procedures and rules of

⁴³ ICJ, *Case Concerning Armed Activities in the Territory of the Congo*, paras. 172, 178, 179.

⁴⁴ I. Brownlie, (1963) *International Law and the Use of Force by States*, Oxford: Clarendon Press, chapters 20, 21, 24

⁴⁵ European Court of Human Rights, *Young, James and Webster v. United Kingdom*, Judgement, 13 August 1981, appl. no. 7601/76; 7806/77, para. 49.

engagement that comply with international humanitarian law, along with appropriate disciplinary measures for violations. Finally, approval for each contract with a PMSC should be subject to specific criteria, including training in international humanitarian law and compliance with standard operating procedures.

States could also impose sanctions for operating without the necessary authorizations or for violating the terms of these authorizations. Possible sanctions include withdrawal of operating licenses, loss of bonds or financial penalties and criminal sanctions against individuals or the company.

The state's monopoly on controlling violence stems from the recognition that governance through states is the most effective way to regulate the use of force. In this context, the state-centered approach to state responsibility in military matters should not be viewed as outdated. Rather, it reflects the institutionalization of this principle, acknowledging that states are best positioned to impose limits on military force.

6. Bibliography

- Ago R., (1971) "First Report on State Responsibility", Yearbook in International Law Commission, Vol. II (1)
- Briggs H. W., (1947) *The Law of Nations*, New York: Appleton-Century-Crofts
- Brownlie I., (1963) *International Law and the Use of Force by States*, Oxford: Clarendon Press, chapters 20
- Crawford J., (1983) "International Law and Foreign Sovereigns: Distinguishing Immune Transactions", *British Yearbook of International Law*, Vol. 54
- Crawford J., (2003) *The International Law Commission's Articles on State Responsibility — Introduction, Text and Commentaries*, Cambridge: Cambridge University Press, art. 5
- Dickinson L., (2007) "Contract as a tool for regulating private military companies", in S. Chesterman, C. Lehnardt (eds), *From Mercenaries to Market: The Rise and Regulation of Private Military Companies* Oxford, <https://doi.org/10.1093/acprof:oso/9780199228485.003.0009>
- Epiney A., (1992) *Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktionen Privater*, Baden-Baden: Nomos-Verlag
- Garcia Amador F. V., (1957) "Second Report on State Responsibility", Yearbook in International Law Commission, Vol. II
- Holmqvist C., (2005) "Private Security Companies — The Case for Regulation", Stockholm International Peace Research Institute (SIPRI), Policy Paper No. 9
- Lehnardt C., (2007) "Private military companies and state responsibility", in S. Chesterman, C. Lehnardt (eds), *From Mercenaries to Market: The Rise and Regulation of Private Military Companies* Oxford, <https://doi.org/10.1093/acprof:oso/9780199228485.003.0009>
- Merle R., "DynCorp took part in Chalabi raid", *Washington Post*, 4 June 2004
- Moyakine, (2015) "State Responsibility for Non-Compliance with Positive International Law Obligations", in *The Privatized Art of War: Private Military and Security Companies and State Responsibility for Their Unlawful Conduct in Conflict Areas*. Cambridge – Antwerp: Intersentia (School of Human Rights Research)
- O'Brien K., (2000) "PMCs, Myths and Mercenaries: The Debate on Private Military Companies", *Royal United Services Institute for Defense Studies*, Vol. 1
- Reinisch A., (2005) "The Changing International Framework for Dealing with Non-state Actors", in P. Alston (ed.), *Non-State Actors and Human Rights*, Oxford: Oxford University Press
- Schooner S. L., (2005) "Contractor Atrocities in Abu Ghraib: Compromised Accountability in a Streamlined, Outsourced Government", *Stanford Law & Policy Review*, Vol. 13

- Singer P. W., (2003) *Corporate Warriors: The Rise of the Privatized Military Industry*, Ithaca, New York: Cornell University Press
- Townsend G., (1997) "State Responsibility for Acts of De Facto Agents", *Arizona Journal of International & Comparative Law*, Vol. 14
- Walker C., D. Whyte, (2005) "Contracting Out War?", *International & Comparative Law Quarterly*, Vol. 54

Smart contracts and Civil Law: Tracing the “modus interpretandi” of contracts “ex machina”

Abstract:

The article is a brief introduction to the phenomenon of smart contracts as a core instrument of modern (digital) economy. As more and more transactions tend to take place in a “smart” way, traditional notions of civil law seem to be less compatible with the current economic modus operandi. This is more crucial in the field of continental legal systems, where the formalities of the existing provisions are designated to be applied in contracts concluded ‘hand by hand’, or – at least – not in a technologically automated way. This raises many critical questions related to the efficiency of the “architecture” of the traditional Civil Law and its adaptability to the new, post-modern transactional status. The paper aims to present the main notions of the problematic and set the pillar-questions regarding to achieving a resultative application of the provisions in force to the new “state of play”.

Keywords: Smart contracts, Civil Law, Interpretation, Technology, Blockchain

Dimitrios Devetzis¹

¹ Contact details: Dr. iur. Dimitrios Devetzis, LL.M., M.L.E., Assistant Professor of Law, Frederick University Cyprus, EU Legal Expert in Private Law – Law & Technology, e-mail: law.dd@frederick.ac.cy, tel.: 00357 22 394 394.

I. Introduction to the problematic: The notion and the evolution of smart contracts

A. Generalities

The advent of smart contracts represents a transformative shift in the landscape of contractual agreements, challenging traditional legal frameworks and principles. Smart contracts, defined as self-executing contracts with the terms of the agreement directly written into code, leverage blockchain technology to automate and enforce contractual obligations without the need for intermediaries. This innovation raises critical questions about the compatibility of smart contracts with established legal doctrines, particularly the principle of contractual freedom, which emphasizes the autonomy of parties to negotiate and define their agreements without undue interference from external forces (Ni, 2024).

Traditional contract law, rooted in centuries of jurisprudence, relies on established principles such as offer, acceptance, consideration, and the intention to create legal relations. These principles are designed to ensure that contracts are formed validly and can be enforced by courts. However, the rise of smart contracts necessitates a reevaluation of these principles, as the automated nature of smart contracts can obscure the traditional negotiation process and the explicit expression of consent that is foundational to contract law (Ni, 2024; Durovic & Lech, 2019). For instance, while traditional contracts often require written documentation and signatures to signify agreement, smart contracts operate through coded instructions that execute automatically when predetermined conditions are met, potentially bypassing the nuanced discussions that typically characterize contract formation (Kasatkina, 2021). From a comparative legal perspective, the adaptation of existing contract law to accommodate smart contracts varies significantly between common law and civil law jurisdictions. In common law systems, the principles of contract formation are well-defined, yet the introduction of smart contracts raises questions about whether these principles can adequately address the unique characteristics of automated agreements (Durovic & Lech, 2019; Kasatkina, 2021).

Conversely, civil law systems may offer more flexibility in interpreting the requirements for contract validity, potentially allowing for a smoother integration of smart contracts into existing legal frameworks (Durovic & Lech, 2019; Kasatkina, 2021). Nevertheless, both systems face challenges in ensuring that smart contracts comply with the essential elements of valid contracts, such as mutual consent and lawful purpose (Durovic & Lech, 2019; Kasatkina, 2021).

Smart contracts improve the enforceability of agreements by making them transparent and tamper-proof. Their features have made them useful for many different things. A lot has been done to study what smart contracts can do, both from an academic perspective as well as through industry research; this includes looking into how well they work with other systems among other technical improvements made over time. With specific purposes in mind, contract platforms are being released onto markets with various tools incorporated into them so as to be best suited for those tasks (Primavera de Filippi & Wright, 2019). Nevertheless, the enforceability of smart contracts is another critical issue that intersects with traditional contract law. Legal scholars have noted that while smart contracts can streamline transactions and enhance efficiency, they also introduce complexities regarding liability and dispute resolution (Durovic & Lech, 2019; Drummer & Neumann, 2020; Janssen & Đurović, 2018). For instance, in cases where a smart contract fails to execute as intended due to coding errors or unforeseen circumstances, determining liability can be problematic. Traditional contract law typically provides mechanisms for addressing breaches and enforcing remedies, but the automated nature of smart contracts complicates these processes, as the parties may not have a clear recourse to traditional legal remedies (Durovic & Lech, 2019; Drummer & Neumann, 2020; Janssen & Đurović, 2018).

This raises the question of whether new legal frameworks or adaptations of existing laws are necessary to address the unique challenges posed by smart contracts. Moreover, the security of smart contracts is a significant concern, particularly given their reliance on

blockchain technology. While the immutability and transparency of blockchain can enhance trust in transactions, vulnerabilities in smart contract code can lead to substantial financial losses and legal disputes (Goh, 2022; Edema, 2023; Sayeed et al., 2020).

The lack of formal specification and verification processes for many smart contracts exacerbates these risks, highlighting the need for robust security measures and legal standards to govern their use (Huang et al., 2019; Edema, 2023; Sayeed et al., 2020). Legal scholars argue that establishing clear guidelines for the development and deployment of smart contracts is essential to mitigate these risks and ensure that they can function effectively within the existing legal framework (Durovic & Lech, 2019; Edema, 2023; Fu et al., 2019).

The intersection of smart contracts and traditional law also raises important questions about regulatory compliance and public policy. As smart contracts gain traction in various sectors, including finance, real estate, and supply chain management, regulators must grapple with how to integrate these technologies into existing legal frameworks without stifling innovation (Drummer & Neumann, 2020; Tolmach et al., 2021; Janssen & Đurović, 2018). As mentioned above, the challenge lies in balancing the need for regulatory oversight with the desire to foster an environment conducive to technological advancement. Some scholars advocate for a proactive approach to regulation that embraces the potential of smart contracts while ensuring that consumer protections and legal standards are upheld (Drummer & Neumann, 2020; Tolmach et al., 2021; Janssen & Đurović, 2018).

In addition to regulatory considerations, the cultural and contextual factors influencing the adoption of smart contracts cannot be overlooked. Different jurisdictions may have varying levels of acceptance and understanding of smart contracts, which can impact their implementation and enforcement (Drummer & Neumann, 2020; Tolmach et al., 2021; Capocasale & Perboli, 2022). For instance, in regions where traditional legal systems are deeply entrenched, the transition to smart contracts may face resistance from legal practitioners and stakeholders who are accustomed to conventional methods of contract formation and enforcement (Drummer & Neumann, 2020; Tolmach et al., 2021; Capocasale & Perboli, 2022). As a result, jurisdictions that prioritize innovation and technological advancement may be more receptive to integrating smart contracts into their legal frameworks, potentially leading to a divergence in how these technologies are regulated and utilized across different regions (Drummer & Neumann, 2020; Tolmach et al., 2021; Capocasale & Perboli, 2022).

The implications of smart contracts also encompass ethical and societal dimensions. As smart contracts automate transactions and reduce the need for human intervention, questions arise about the ethical implications of relying on code to govern agreements that have traditionally involved human judgment and negotiation (Drummer & Neumann, 2020; Tolmach et al., 2021; Janssen & Đurović, 2018). The potential for bias in algorithmic decision-making and the lack of accountability in automated systems raise concerns about fairness and justice in contractual relationships (Drummer & Neumann, 2020; Tolmach et al., 2021; Janssen & Đurović, 2018). Legal scholars emphasize the importance of addressing these ethical considerations as smart contracts become more prevalent in commercial transactions and everyday life (Drummer & Neumann, 2020; Tolmach et al., 2021; Janssen & Đurović, 2018). For instance, the traditional concept of privity of contract, which holds that only parties to a contract can enforce its terms, may need to be adapted to account for the automated nature of smart contracts and the potential involvement of third parties in the execution of contractual obligations (Drummer & Neumann, 2020; Tolmach et al., 2021; Janssen & Đurović, 2018). Similarly, the principles of consideration and mutual assent may require reinterpretation in light of the unique characteristics of smart contracts, which may not always align with traditional notions of negotiation and agreement (Drummer & Neumann, 2020; Tolmach et al., 2021; Janssen & Đurović, 2018).

B. The arising interpretative issues in concreto

Smart contracts are defined as computer programs that automatically execute, enforce, or verify the terms of a contract when predetermined conditions are met. They operate on blockchain technology, which provides a decentralized and immutable ledger for recording transactions Ni (2024). Unlike traditional contracts, which require manual enforcement and often involve intermediaries, smart contracts facilitate direct interactions between parties, reducing the need for third-party involvement and enhancing efficiency (Ma, 2024).

The concept of smart contracts was first introduced by Nick Szabo in the 1990s, who envisioned them as a means to automate contractual agreements through code. Today, smart contracts are increasingly utilized in various sectors, including finance, supply chain management, and real estate, where they can streamline processes and reduce transaction costs (Eenmaa & Schmidt-Kessen, 2017).

Smart contracts could be described as a blend of legal jargon and computer codes have been identified as transformative technology in the field of contract law (Mehta & More, 2018). They could be used to automate and execute agreements thereby improving efficiency in transaction, transparency and reducing the risks involved in conventional contractual arrangements (Mehta & More, 2018). These smart contracts only approximate contract law's intricate nuances and may fail to address important legal issues like force majeure or withholding performance (Tai, 2018). With the advent of big data analysis and artificial intelligence (AI), smart contracts are also bringing about a new era in contracting that could potentially disrupt long-standing principles of contract law (Woebbecking, 2019).

Identifying what amounts to non-performance of a party; maneuvering through various obstacles on the way; as well as ensuring that cause is traceable for non-performance are some of the key concerns that require careful thought (Tai, 2018). Also, even though they are self-executing contracts at law there still exist other legal compulsions (Zhu, 2022). To navigate this meeting place between smart contracts and civil law requires looking closely at its legality implications and whether technological advancement can be reconciled with existing legal principles.

One of the main issues surrounding this technology is how to legally acknowledge smart contracts. Traditional legal systems may not readily accept code as a form of legally binding agreement. Courts might find it difficult to interpret the provisions of such contract especially if language used in the software cannot be easily translated into legal norms (Raskin, 2017). The use of smart contracts often involves different jurisdictions, thereby creating conflicts of laws. Determining governing law and jurisdiction for disputes arising from smart contracts can be complicated, particularly where parties are in different countries (Werbach & Cornell, 2017). As per "code is law" philosophy, it means that execution underpinning any agreement entered into via a smart contract shall be dictated by respective code. Yet, traditional contract law looks into parties' intention and allows for interpretation or judicial discretion while rigidity inherent in these automated agreements may not take care of unforeseen eventualities and details involved within these contractual proceedings (Szabo, 2002).

Contractual terms must maintain fairness between consumers and sellers based on the provisions established through traditional common laws. Inherent in smart-contracts though some loopholes may exist hence they may lead to exploitation (Fairfield, 2014). In conventional contracts, terms can be renegotiated or even possibly terminate an agreement under certain conditions. Nonetheless, change made regarding a blockchain's deployed smart contract becomes hard due to its immutability features. This lack of flexibility might pose challenges whenever there are changes or when certain errors are realized within a contract (Bakshi & Braine, 2016).

Moreover, a smart contract can modify rights and duties among parties which makes it still a contract under the concept of contract laws as explained by Nicolas Cornell (Zhu, 2022). The Restatement Second of United States Law on Contracts defines certain promise or series thereof whereupon breach gives rise to relief or creates an obligation enforceable at law (Zhu, 2022). Therefore, to implement smart contracts within traditional legal structures entails having an extensive comprehension on both technological know-how and jurisprudence such that advantages associated with smart contracts do not override civil laws (Zhu, 2022) (Tai, 2018).

Using blockchain technology, through the integration and operation within the encoded software of the rule in the form of a hypothetical reasoning: if [this happens], then [that will happen] (if this - then that) (Fink, 2019). This means that if a contractual term is violated, then the provision of the benefit is automatically halted or the object of the provision is returned to the lender. This automated execution resembles a type of "self-help," eliminating recourse to institutional adjudicatory bodies and consequently judicial review regarding whether the term contradicts fundamental principles of law, such as good faith and public order. This perspective does not address a problematic view regarding the recognition of a right to breach the contract, but rather concerns the privilege of enforcing compliance with the contract, specifically which mechanisms enforce compliance, who controls them, and who imposes them.

C. Functioning and particular field of application of smart contracts

From a technical perspective, smart contracts are computer programs that execute themselves. To do this, they use blockchain technology which allows them to work independently and openly in such a way that they cannot be changed or deleted (Farnsworth, 2016). This has several advantages over traditional contracts where parties must rely on trust: they can trust the transaction protocol incorporated within the smart contract to perform as expected without going through courts; trust between them is not required (Fries, 2018). Such an arrangement lets involved sides take calculated risks even when facing each other indirectly but having no identities and weak mechanisms for ensuring compliance like those found in online business transactions or international agreements among unknown counterparts (Fries, 2018). These benefits may be particularly relevant to consumers who often fail to enforce their rights otherwise protected by law because these processes can save costs associated with human error while also making deals more official and binding (Saveleyev, 2017).

The functioning of smart contracts could be articulated in two basic pillar stones : One of them is this mechanism that relies on distributed and decentralized digital technologies (distributed ledger), while the other pole is formed by traditional law of contracts. Smart contracts reintroduce the relationship between state authority and market economy in economic law, where it is not an alien topic. Since they are not legal documents expressed in natural language but encoded computer protocols, these "inventions" called smart contracts by some people take an entirely new dimension with regard to what has been known before about them; obviously they are contracts only in a technical sense — as rightly pointed out earlier in this paragraph — which means that their legal status should be judged differently than other types of agreements or treaties.

However, smart contracts despite being advantageous face significant challenges in the context of conventional civil law structures. A comprehensive code and statues based approach that is derived from Roman law characterizes the civil law emphasizing legal formalities and judicial interpretation that is opposed to the automated nature as well as rigidity of smart contracts (Zimmermann, 1996).

The range of potential applications for smart contracts is very broad, and may cover almost the entire spectrum of economic transactions. Currently, smart contracts are classified according to: electronic consciousness as regards the subject matter of the transaction; time management concerning when payment gets to the seller or service provider; and ability to act automatically when terms are broken. These criteria are not dogmatic but can be helpful in some contexts:

- (a). Internet of Things (IoT). Under this grouping there exist examples where different devices, electronic equipment or vehicles become aware of one another through software, sensors and other electronic means which facilitate network connectivity within a localized environment thus enabling data exchange among nodes/users – it is this interconnectivity that allows for creation and execution of smart contracts. For instance, a programmable code in a home refrigerator can result into automatic contract formation over consumables while a WiFi integrated button like dash button would follow smart contract logic by enabling reordering products with just one press.

Here, among other important things practically this category emphasizes leasing/renting out/selling cars or electrical appliances with subsequent repair thereof by manufacturers themselves using blockchain technology – such systems simplify and secure transactions directly between parties involved. Continuous remote monitoring conducted through computational protocol connected electronically warns element placed inside washing machine helps international electronics corporations easily manage these devices without necessarily selling them outright to consumers who may misuse or even sell them off cheaply after using for some time thereby causing losses due to lack maintenance awareness on their part.

- (b) Intervention in Case of Irregular Development of the Contractual Relationship
Smart contracts come into play when financing services provision supply goods aimed at satisfying basic needs fail due to irregularities arising during transactional relationships between providers those seeking such services buyers consumers themselves need assistance from outside sources – hence they work towards benefiting only sellers/providers under such circumstances. With blockchain technology it is possible not only program but also see implemented terminated what should have been done before time consumed more resources failed altogether. Take for example financial leasing agreement or motor vehicle insurance policy natural gas electricity supply contract; if agreed upon instalment premium consumption value is not paid parked vehicle automatically gets immobilized or else natural gas electricity supply is disconnected (Clack et al., 2016).

Legal science asks whether contracts covering essential needs can be terminated by machines as this seems inconsistent with higher principles and primary freedom of transaction rules enshrined in supranational legislation protecting individuals against unjustifiable limitations on contractual autonomy even though classical contract law supports the view that constitutional protection for personal liberties does not prevent parties from agreeing to certain restrictions within limits set by statutory provisions which may require demonstration that such curtailments do not infringe upon fundamental rights recognized universally – therefore agreements providing for automated execution of smart contracts relating to basic necessities may be considered excessive obligations imposed unilaterally without sufficient justification given prevailing economic conditions social relations between contracting parties (Clack et al., 2016).

2. The interplay of smart contracts with the Greek Civil Code: Basic aspects of the problematic

Normally, smart contracts do not often have a problem with when an offer becomes a proposal under Article 185 of the Greek Civil Code or an invitation to treat (*invitatio ad offerendum*) (Georgiades Ap., 2019). Unlike goods or services offered over the internet or on shop windows that invite members of the public to buy them, once it is posted on a particular blockchain block hosting the contract possibility, this amounts to a binding offer since it contains terms for executing it. The process of making external what was once internalized in vending machines for beverages or tickets follows suit during this period (Georgiades Ap., 2019).

By analogy, article 193 (1) of the civil code may be applied to determine the period within which acceptance should be made as well as when such acceptance should be deemed communicated if such rules apply to offers made through electronic means where automatic execution is implied while actual communication waived (Georgiades Ap., 2019).

The offeror's declaration of intent (in a smart contract) is technically externalized thus: recording it in a blockchain network node together with his/her electronic signature authenticated by private key usage. Thereafter, this same offer gets posted onto the block chain so that other parties involved can accept it. Posting activities done and declarants' identity confirmed within system framework. Any person can read through offerors' declarations using public keys but only those who possess private keys belonging to specific offers are able to decode these intentions (Georgiades Ap., 2019). However, challenges arise during reception stage in relation to declarations made on intent via block-chain systems due accidental or intentional occurrences known as "forking". Forking refers any instance where mobility blocks between branches occur; there could be more than two chains involved leading protocol changes; appearance two blocks instead one etcetera. In event that declaration would only reach part server which happens its branch has become inactive within block-itself will not receive further processing. Parties entering into agreements using blockchains must consider two alternatives ensuring effectiveness declarations intention because high chances exist that technicalities may interfere with smooth running of things. First option entails treating as if suspensive condition had been met (Article 201 of the civil code) those declarations intentions recorded into longer block chain after smaller branch cut off loses connection second alternative provides for parties making outside system (off-chain) in case such problems arise (Georgiades Ap., 2019).

The automated execution of mutual contractual obligations minimizes the risk of non-performance of the contract in cases of non-compliance with critical behaviors imposed by the contract. On the other hand, while this seems to implement the fundamental principle of "pacta sunt servanda" (agreements must be kept), it raises the question of whether such an approach can align with the protection of contractual freedom and private autonomy in general. This is because, even in the case of a "breach" of behavior, excluding the possibility for the legal subjects to act otherwise appears to undermine the freedom of an individual's legal and economic self-determination.

About the integration of smart contracts into the civil regime, particularly in relation to the family of laws within the continental Europe system, one thing is certain; it is very interesting. This has to do with how such systems interpret them doctrinally. Smart contracts are executed through digital programming and not verbal expressions, which means that their conceptual content is highly crystallized. It therefore seems like the tools for creating and implementing smart contracts may miss out on some of the fine points of intention between parties entering into agreement at an inherent level and adopt different structures from those recognized by legal science altogether.

At this point we must ask ourselves whether or not traditional methods of interpretation can still be used especially when dealing with such cases under Greek Civil

Code provisions (for instance articles 173 et seq) that deal with interpretation of declarations of will if they no longer involve interpretation expressed in words?

Since all these languages are based on words – be it case law dependent Anglo-Saxon systems or any other classical civil law system, it becomes worldwide possible problem as regards interpreting what a given term means within contract where such language have been encoded using some programming language instead conventional natural ones. Nevertheless we should also take note that economically speaking these types conflicts may arise less frequently than anticipated (Möslein, 2019). By referring to ‘economic perspective’ let’s say people opt for smart contracts knowing well about their peculiarities architecturally so this choice cannot be said unawareness.

It is made up of a technical-operational part and traditional contract law. It is through this duality that the determination of interpretation and grounds for breach are done (Möslein, 2019, Papadimopoulos, 2021). The blockchain computer system’s encoded protocol processes expressions of will instead of legal evaluations; otherwise its immutability and security would be compromised (Möslein, 2019). Henceforth, nullity grounds and the construals placed upon them by words used in agreements from conventional contracts must be examined extrinsic to such systems (Möslein, 2019).

A similar to the one of the appropriate interpretation methods legal problematic is the one referred to the one about the possible modification of them, both as a whole or regarding to some contractual terms, only. The aforementioned remark concerning the odds of the arising of such a question could be also adopted in this case: The more specific the pre-known automated terms of a smart contract are, the less possible is to arise a practical need regarding to their modification or a need to monitor if – and in which way – the (in principle mutual) obligations are performed. Essentially, parties in smart contracts benefit from being self-executing and don’t have to monitor the compliance of duties as much as they would in conventional contracts (Woebeking, 2019). Taking into account the fact that some forms of smart contracts often refer to contract forms the obligations of which according to existing law in some legal orders cannot be forcibly performed such as the ones arising from bet or game contracts, as regulated for example in Greek and German Civil Code (for the German Civil Code – “Bürgerliches Gesetzbuch” - see §767 BGB).

3. The future of the Contract Law: Contracts “ex machina” as “Deus ex machina”?

In conclusion, the emergence of smart contracts poses significant challenges and opportunities for traditional law. As these technologies continue to evolve and gain traction in various sectors, legal scholars, practitioners, and regulators must engage in a comprehensive examination of the implications for contract law and the broader legal landscape. The integration of smart contracts into existing legal frameworks requires a nuanced understanding of both the technological and legal dimensions, as well as a commitment to ensuring that the principles of fairness, accountability, and justice are upheld in this new digital era. Ultimately, the successful coexistence of smart contracts and traditional law will depend on the ability of legal systems to adapt and innovate in response to the changing nature of contractual relationships in the digital age (Capocasale et al., 2022).

The future of contract law lies in the incorporation of smart contracts into the legal framework (Capocasale et al., 2022). This will result in a radical change of how contracts are created, executed and enforced. As blockchain technology continues to grow, it is expected that systems will adjust themselves to fit the unique features present with these smart agreements. These changes might involve coming up with new standards and regulations that can handle specific challenges posed by such contracts like coding errors or need for more flexibility. In addition, if widely adopted, smart contracts could have far-reaching effects across different industries. For instance, within the financial sector they may streamline processes involved in loan agreements; insurance claims settlement among others as well as

securities trading which would cut down costs and increase transparency (Capocasale et al., 2022). Equally important is their use within supply chain management where they can automate and verify movement of goods thereby ensuring that all parties meet their obligations.

Conclusively, smart contracts and blockchain technology offer many advantages over traditional methods of contracting because of automation; enhanced security measures taken so far as well transparency enhancement mechanisms put in place; but this does not come without its own set problems especially when it comes to recognition in law or being flexible enough according to legalities that may arise later on with technological advancement (Papadimopoulos, 2020). Therefore we can say at some point soon smart contracts shall become an integral part of our legal system thus changing completely how we enter into enforce agreements?

4. References

- Atzei, N., Bartoletti, M., & Cimoli, T. (2017). A Survey of Attacks on Ethereum Smart Contracts. IACR Cryptology ePrint Archive, 2016, 1007.
- Buterin, V. (2014). "A Next-Generation Smart Contract and Decentralized Application Platform." Ethereum Whitepaper (Retrieved from <https://ethereum.org/en/whitepaper/>, λαστ αφψεσς 17-10-2024).
- Capocasale, V. and Perboli, G. (2022). Standardizing smart contracts. Ieee Access, 10, 91203-91212. <https://doi.org/10.1109/access.2022.3202550>.
- Christidis, K., & Devetsikiotis, M. (2016). "Blockchains and Smart Contracts for the Internet of Things." IEEE Access, 4, 2292-2303.
- Clack, C. D., Bakshi, V., & Braine, L. (2016). "Smart Contract Templates: Foundations, Design Landscape and Research Directions." arXiv preprint arXiv:1608.00771.
- De Filippi, P., & Wright, A. (2018). Blockchain and the Law: The Rule of Code. Harvard University Press.
- Gikay, A. A. (2018). "Regulating Smart Contracts: Legal Revolution or Simply Evolution?" Law, Innovation and Technology, 10(2), 267-299.
- De Filippi P. & Wright A., "Blockchain and the Law", Harvard University Press, 2019.
- Drummer, D. and Neumann, D. (2020). Is code law? current legal and technical adoption issues and remedies for blockchain-enabled smart contracts. Journal of Information Technology, 35(4), 337-360. <https://doi.org/10.1177/0268396220924669>.
- Durovic, M. and Lech, F. (2019). The enforceability of smart contracts. Revija Kopaonice Skole Prirodnog Prava, 1(1), 73-94. <https://doi.org/10.5937/rkspp1901073d>.
- Edema, T. (2023). Contract law in an era of technology: examining liability in smart contract transactions. alj, 8(1), 74-92. <https://doi.org/10.53982/alj.2020.0801.05-j>.
- Fairfield, J. A. (2014). "BitProperty." Southern California Law Review, 88(4), 805-874.
- Fairfield, J. A. T. (2014). Smart Contracts, Bitcoin Bots, and Consumer Protection. Washington and Lee Law Review Online, 71, 35-50.
- Fu, M., Wu, L., Zheng, H., Zhu, F., Sun, H., & Feng, W. (2019). A critical-path-coverage-based vulnerability detection method for smart contracts. Ieee Access, 7, 147327-147344. <https://doi.org/10.1109/access.2019.2947146>.
- Georgiades, Ap., 2019. Γενικές Αρχές Αστικού δικαίου, εκδόσεις Π.Ν.Σάκκουλας, 5^η έκδ., 2019.
- Goh, G. (2022). Smart contract disputes and public policy in the asean+6 region. Digital Law Journal, 3(4), 32-70. <https://doi.org/10.38044/2686-9136-2022-3-4-32-70>.
- Huang, Y., Bian, Y., Li, R., Zhao, J., & Shi, P. (2019). Smart contract security: a software lifecycle perspective. Ieee Access, 7, 150184-150202. <https://doi.org/10.1109/access.2019.2946988>.

- Iansiti, M., & Lakhani, K. R. (2017). "The Truth About Blockchain." Harvard Business Review. Retrieved from <https://hbr.org/2017/01/the-truth-about-blockchain>.
- Idelberger, F., Governatori, G., Riveret, R., & Sartor, G. (2016). "Evaluation of Logic-Based Smart Contracts for Blockchain Systems." International Symposium on Rules and Rule Markup Languages for the Semantic Web. Springer.
- Janssen, A. and Đurović, M. (2018). The formation of blockchain-based smart contracts in the light of contract law. European Review of Private Law/Revue Européenne De Droit Privé/Europäische Zeitschrift Für Privatrecht, 26(Issue 6), 753-771. <https://doi.org/10.54648/erpl2018053>.
- Kasatkina, M. (2021). Untitled. International Comparative Jurisprudence. <https://doi.org/10.13165/j.icj.2021.12.007>.
- McKinney, E. (2017). "Hybrid Smart Contracts and Legal Precedents." Journal of Digital Innovation, 5(3), 45-59.
- Mougayar, W. (2016). The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology. Wiley.
- Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System. Available at: Bitcoin.org.
- Ni, J. (2024). Intelligent contracts and the principle of contractual freedom: a classical legal examination in the era of emerging technologies. Frontiers in Business Economics and Management, 14(3), 5-9. <https://doi.org/10.54097/w0gxsm83>.
- Papadimopoulos, I., 2020. Η δογματική ένταξη των smart contracts στο δίκαιο των συμβάσεων, ΧρΙΔ 2020, 469-480.
- Raskin, M. (2017). The Law and Legality of Smart Contracts. Georgetown Law Technology Review, 1(2), 305-341.
- Reyes, C. L. (2019). Blockchain and the Future of Law. The University of Chicago Law Review Online, 82, 93-114.
- Sayeed, S., Marco-Gisbert, H., & Caira, T. (2020). Smart contract: attacks and protections. Ieee Access, 8, 24416-24427. <https://doi.org/10.1109/access.2020.2970495>.
- Scott, S. V., & Zachariadis, M. (2019). "The Impact of FinTech on Regulatory Practices in the Banking Sector." Journal of Financial Regulation and Compliance, 27(1), 20-33.
- Szabo, N. (2002). "The Idea of Smart Contracts." Retrieved from http://www.fon.hum.uva.nl/rob/Courses/InformationInSpeech/CDROM/Literature/LOTwinterschool2006/szabo.best.vwh.net/smart_contracts_idea.html.
- Szabo, N. (1997). "Formalizing and Securing Relationships on Public Networks." First Monday. Retrieved from <https://firstmonday.org/article/view/548/469>.
- Szabo, N. (1997). The Idea of Smart Contracts. Available at: szabo.best.vwh.net.
- Tapscott, D., & Tapscott, A. (2016). Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business, and the World. Penguin.
- Tolmach, P., Li, Y., Lin, S., Liu, Y., & Li, Z. (2021). A survey of smart contract formal specification and verification. Acm Computing Surveys, 54(7), 1-38. <https://doi.org/10.1145/3464421>.
- Werbach, K., & Cornell, N. (2017). "Contracts Ex Machina." Duke Law Journal, 67(2), 313-382.
- Zimmermann, R. (1996). Roman Law, Contemporary Law, European Law: The Civilian Tradition Today. Oxford University Press.

Mental Resilience and Special Learning Difficulties

Abstract:

The article explores how mental resilience affects students with Special Learning Difficulties (SLD) such as dyslexia and dysgraphia. It highlights the struggles of these students through personal accounts, revealing their feelings of frustration and inadequacy stemming from their learning challenges. Mental resilience, or the ability to bounce back from adversity, is critical for students with SLD. It involves various factors including cognitive functions, family support, and the school environment. Research shows many adolescents experience significant mental health issues, like anxiety and depression, making effective support crucial. Schools can enhance mental resilience by fostering supportive relationships, providing empathetic interactions, and employing tailored teaching methods. Group work, extracurricular activities, and personalized support can improve self-esteem and academic performance. Educators are encouraged to build trust and address students' specific needs to help them overcome their difficulties. In summary, with the right support, students with SLD can develop resilience and better manage their challenges, leading to improved well-being and academic success.

Key Words: Resilience, Special Learning Difficulties, Mental Health, Support, Education

Tryfon Nikolopoulos¹

¹ Corresponding-Address: Tryfon Nikolopoulos, DEA, Special Educator-Philologist, 1st KEDASY ACHAIAS. Contact: Manousogiannaki 2, Aroi 26331, Patras, Greece. Email: e-mail: trifnic@yahoo.gr

*Tell me and I'll forget.
Show me, and I might remember.
Make me experience it, and I'll
understand.*

Confucius

1. Introduction

The student with Special Learning Difficulties (SLD) tries to delineate the boundary between their internal and external reality experienced in school life. We will try to approach Special Learning Difficulties in the light of mental resilience. Let's start by letting the students themselves talk with Special Learning Difficulties:

«I have the misfortune of having siblings who are top students with grades of 19 (out of 20). My younger brother, who is two grades below me, often helps me because my older brother can't stand the mistakes I make; he finds them stupid. I constantly hear at home that mom spends all her time on me, I upset her, and she goes to seminars and we don't see her because of me». 3rd grade High School student, with dyslexia.

«I am pressured to study more than others and I get criticized on top of that. Not to mention the grades. I am sure I have done well on the exams, and then I see failing marks, so I decided not to study anymore. I don't want to go to school; I hate it». 1st High School student with dysgraphia.

«My mom and I would study late into the night, and I knew the material well. But when I would recite the lesson in class, I would suddenly blank out and everything would disappear from my mind. I would hear my classmates laughing and commenting. I wanted to scream out of frustration. Why do I have to be different from the others? How can I then hang out with them». 1st High School student with dyslexia.

«If I had a magic wand, I would make our history teacher disappear. She never misses an opportunity to belittle me and embarrass me in front of my classmates. I want to punch her. I haven't been attending her class for the last month, and it's caused me problems; she keeps calling my parents. I wish her the worst». 1st Technical High School student (EPAL) with dyslexia.

2. Mental Resilience

The word resilience has a Latin origin “*resilire*”, which means to come back, to recover after a crisis. Mental Health Resilience, as a positive psychological term is directly linked to Positive Psychology. Happiness, feeling of well-being, optimism, seeking true meaning, self-control, self-care, gratitude, forgiveness, dreams, hope and humility were positively related to resilience (Tsigaropoulou, 2020). There is no consensus on the functional definition of mental health resilience, but it undoubtedly concerns a multi-level interaction between protective factors and risk factors of the individual and their environment (Condly, 2006). Questions arise as to whether resilience is a fixed characteristic, a process, or the result of that process and whether it concerns all situations or depends on the condition the person is experiencing.

Mental resilience spreads on many levels: cognitive functions, self-concept, optimism, humor, adaptability, faith and the existence of meaning, family positive climate, good relationships, socio-economic level, positive view of life. In summary we can define it as stress resistance (Karreman & Vingerhoets, 2012). The individual tries to adjust or shape their environment to meet their needs.

Schematically, we could attribute mental resilience in the form of a puzzle, where individual characteristics, family environment, school and social part interact. We highlight findings from a 2023 study conducted by the Stavros Niarchos Foundation on the mental resilience of adolescents:

8% -16% experience symptoms that require expert assessment.

5% -12% show high levels of anxiety and depression.

43% have experienced during their lifetime at least one stressful experience characterized as traumatic.

14% of adolescents aged 12-17 experienced at least one self-traumatic behavior.

14% to 21% show high scores in symptoms of obsessive compulsion.

6.6% to 10% show high scores in depressive symptoms.

12% show high scores on attention deficit symptoms.

7.1% experience hyperactivity problems (Koumoula et al., 2024).

3. Special Learning Difficulties and Mental Resilience

In a recent US survey, 80% identified learning disabilities with intellectual disability. 55% attributed them to laziness or inappropriate family environment (Panteliadou, 2017). Special Learning Disabilities are an inhomogeneous group of disorders and there is no common profile. The term "special" accompanying dyslexia or learning difficulties indicates that these disorders focus on a narrow range of cognitive abilities and skills, rather than extending across the full spectrum of human intelligence. Simply put, in Special Learning Disabilities we observe an unexpected discrepancy between the student's cognitive potential and school performance.

Students with SLD often lack strong motivation for learning, feel powerless, believe they are incapable of learning, and consider that any effort they make is futile and destined to fail. Essentially, we are talking about a vicious cycle of frustration-abortion-reduced motivation-avoidance-failure. Therefore, their readiness for learning is low, and they exhibit a reduced willingness for active learning, despite their considerable potential.

The teenager with SLD often feels anxious, angry, depressed, has low self-confidence, lack of interest or zeal for learning, low tolerance and often faces family problems (Sako, 2016). Additionally, they experience feelings of hopelessness and sadness, inadequacy, frustration, pressure, inferiority, and insecurity. (Doikou-Avliadou, 2015).

It is worth noting that students with SLD realize that they have poorer socio-emotional skills than their typically developing peers: less cooperative, less able to control themselves and empathize with other people (Aroni, 2018, 147). They are often victims of mockery and intimidation and this affects their friendships. The negative self-image is further compounded by criticisms from teachers, parents, and peers, causing them to feel shame and an unbearable sense of inferiority. This feeling can become so intense that it affects their entire self-concept, making them feel inadequate overall rather than just experiencing a failure in one particular area.

Teenagers with SLD report lower levels of hope than their peers and are less willing to take risks. It should be emphasized, however, that while the presence of SLD is considered a risk factor for the adolescent's psychosocial development, it alone is not sufficient to predict inevitably low mental resilience. On the contrary, it is the combination of the SLD with other aspects of the adolescent's personal, family and social environment that ultimately determine the quality of their psychosocial adjustment.

Teenagers with SLD, who have developed secure attachment ties with significant others, usually have positive and realistic perceptions of themselves (Hatzichristou, 2015, 102). Conversely, the ongoing dissatisfaction caused by the challenges of SLD leads the adolescent to have no expectations of positive outcomes in the future and to perceive a lack of opportunities. We copy the answer given by a 13 years old girl with SLD about how she feels in her school space: *« At least I belong here. I know I'm here, it's not like elementary school. Yes, here they give me importance sometimes. Yes, I feel like I belong to the events that take place, to a lot that happens at school. Number one for me is to be treated well.»*

4. Mental Resilience and School Environment

It has been demonstrated, that adolescents who succeed academically tend to be generally more resilient (Gutman, Brown, Akerman & Obolenskaya, 2010; Hill, Strafford, Seaman, Ross & Daniel, 2007; Masten et al., 1990). Can the school play a role in strengthening the Mental Health Resilience of students with SLD? The answer is affirmative. All students, especially those with SLD, need to endure and withstand experiences in order to fully live through them. The school context must therefore aim to create genuine, authentic relationships. The feeling of helplessness, which we often find in students with SLD, needs to be worked on. In my clinical experience I often hear teenagers claim that: «*What's the point? I won't succeed, there is nothing and no one to help me*».

This can begin to change when relationships focus on trust, empathy, and positive behavioral role models. According to the systemic approach, the interaction between family, school, and social environment enhances students' educational and psychological well-being. The role of effective schools is to minimize risks and adversity to the greatest extent possible, to maximize protective factors available through appropriate educational interventions and actions, and to ensure that early action is taken when students show early signs of social or emotional disturbance.

School units can be «*mentally health resilient communities*», where all students have the potential to succeed emotionally, socially, academically. Let's not forget that all teenagers are looking for significant others, through whom they find themselves and thus open passages to adulthood. Teenagers are in a constant process of making meaning, so that can establish a sense of self and identify themselves each time. Otherwise, they will experience the trauma, unable to find a sense of place and time, feeling disconnected and lost.

One more question arises: Does the school program need to change? The answer is affirmative. Music education, for example, which is marginalised in the school curriculum, and we observe students with SLD having special skills in this field, could be strengthened as it creates a strong foundation for language and mathematic development, stimulating brain centers and connections. Sports move in the same logic, contributes to building confidence.

Changes in the school curriculum are not enough, there also needs to be a change in teaching methods. Let's give an example: working in small groups in the classroom, reduces stress and contributes to increasing self-esteem to a student with SLD in a climate of teamwork. Additionally, it strengthens his talents and above all makes him visible. I copy from a 15 years old boy with SLD: «*I really like to join a group with other classmates because I really want to help my team. Whether in sports or in class, it is very enjoyable for me because I give my best.*»

Positive role models in the lives of mentally resilient children with special learning difficulties include beloved teachers, who show personal interest and are not merely academic instructors. Educators need to realize that the relationship comes first, followed by the creation, the subject of teaching. It's also crucial: to remember their own adolescence. Naturally, no one can be entirely available or fully present to engage in all the activities within in classroom (Manolopoulos, 2015, 243).

Furthermore, the educator needs to mitigate risk factors through the establishment of clear and consistent boundaries, the development of positive emotional bonds, and the cultivation of emotional maturity and relational experience. It is important to note that in the school setting, the educator may confront two aspects: their own memories of adolescence and the adolescent in front of them, who can evoke recollections and suppressed feelings from their teenage years. Essentially, the educator must transcend their own egocentric omnipotence to empathize with and support the student. After all, similarity tends to consume difference. The important thing is for the student with Special Learning Difficulties to be able to experience the situation, endure it, and withstand the challenges it presents. The educator

needs to guide this student to focus on the present, to accept the reality of otherness, discard the old, and open up to the future.

However, in order for the educator to effectively respond, they require empowerment, emotional support, and psychoeducational training. It is worth noting that the overwhelming majority—over 80% of respondents in the mental health survey for children and adolescents conducted by the Stavros Niarchos Foundation in collaboration with the Child Mind Institute—reported being sensitive to mental health issues. Additionally, 80% expressed a willingness to engage in specialized programs, provided these programs are tailored to their practical training needs. It is interesting to note the major challenges identified by educators in the classroom:

- (1). Inattention, hyperactivity, and/or impulsivity
- (2). Learning difficulties
- (3). Communication difficulties in children with autism
- (4). Excessive worries or fears
- (5). Aggression (Koumoula et al, 2024).

Finally, mental resilience is largely a learned skill and can therefore be a realistic target for intervention. Acceptance, which involves making sense of reality, is the foundation from which the intervention to enhance mental resilience begins. Let's ensure that adolescents, along with us, gain more and richer life lessons.

5. Instead of an epilogue:

Alkis is 16 years old, attending the 2nd grade of High school, and has dyslexia. At the end of our session, he was asked to continue the following excerpt:

*The river flows into the sea,
Barefoot it flows into the sea.
The river and the sea met.
They kissed.
And then...*

He continued the poem:

*And then they merged
They became one
No one knows what happened to the river afterward
Only that it joined with the vast sea
And the salt overwhelmed it
Within the blue of its mantle
Only blue
And yet it is something more
It is an entire world.*

6. Bibliography

- Aroni, Aik. *Social Participation of Students with Learning Difficulties in General Education*, Ph.D. Dissertation, University of Thessaly, Volos: 2019.
- Condly, S. J. "Resilience in Children: A Review of literature with implications for education", *Urban Education*, 41(3), 2006, pp. 211–236.
- Doikou-Avliidou, M. "The Educational, Social and Emotional Experiences of Students with Dyslexia: The Perspective of Postsecondary Education Students", *International Journal of Special Education*, 30(1), 2015, pp. 132-145.
- Galanaki, E. *Loneliness and Psychoanalytic Approaches*, Athens: University of Athens Press, 2015.

- Gutman L.M., Brown J., Akerman R., Obolenskaya P. *Change in wellbeing from childhood to adolescence: risk and resilience: Centre for Research on the Winter Benefits of Learning Institute of Education*, February 2010, pp. 1-48.
- Hatzichristou, H. *Prevention and Promotion of Mental Health in School and Family*, Athens: Gutenberg, 2015.
- Hill M., Stafford A., Seaman P., Ross N., Daniel B. *Parenting and resilience*, Joseph Rowntree Foundation, University of Glasgow 2007.
- H.L. Swanson, K. Harris & S. Graham. *Handbook of learning disabilities*, 2nd ed., New York: Guilford Press, 2013.
- Hurst, B., Wallace, R., & Nixon, S. B. "The impact of social interaction on student learning", *Reading Horizons*, 52, 4, September 2013, pp. 374-398.
- Karreman, A., & Vingerhoets, A. J. J. M. "Attachment and well-being: The mediating role of emotion regulation and resilience", *Personality and Individual Differences*, 53, 7, October 2012, pp. 821–826.
- Khanum, F., Noureen, S., & Mushtaq. A. "Self-Concept and Social Adjustment of Children with Learning Disabilities", *International Journal of Scientific & Engineering Research*, 9, 12, December 2018, pp. 1548-1558.
- Koumoula, A., Marchionatti, L.E., Karagiorga, V.E. *et al.* "Understanding priorities and needs for child and adolescent mental health in Greece from multiple informants: an open resource dataset", *European Child and Adolescent Psychiatry*, 33, 4, April 2024.
- Mallet, P., Vignoli, E., & Lallemand, N. "Adolescents perception of their relationship with their preferred classmate", *Enfance*, 2, 2018, pp. 323-342.
- Manolopoulos, S. *Paths of Adolescence*, Athens: Nisos, 2015.
- Panteliadou, S. *Learning Difficulties - Dyslexia*, Athens: Pedio, 2017.
- Sako, E. "The Emotional and Social Effects of Dyslexia", *European Journal of Interdisciplinary Studies*, 4, 2, August 2016, pp. 233-241.
- Stalikas, A., & Mytskidou, P. *Introduction to Positive Psychology*, Athens: Topos, 2011.
- Tsigkaropoulou, E. *Exploration of Resilience in a Sample of the Greek Population*, Ph.D. Dissertation, Athens, 2020.

Journal of Regional & Socio-Economic Issues

Call for Papers

Journal of Regional & Socio -Economic Issues (Print) ISSN 2049 -1395

Journal of Regional & Socio -Economic Issues (Online) ISSN 2049 -1409

The Journal of Regional Socio -Economics Issues (JRSEI, *indexed by Copernicus Index, DOAJ (Director of Open Access Journals) BSCO & Cambell Index*) is scheduled to be published three times a year. Articles are now welcome for the forthcoming issue of this journal (JRSEI). The benefits of publishing in the Journal of Regional Socio -Economics Issues (JRSEI) include:

1. Fast publication times: your paper will appear online as soon as it is ready, in advance of print version
2. Excellent editorial standards
3. Free color electronic version
4. Free on-line access to every issue of the journal
5. Rigorous, fast and constructive peer review process
6. The journal will be indexed in scientific databases.
7. All abstracts and full text are available free on -line to all main universities/institutions worldwide, ensuring promotion to the widest possible audience.

For full paper submission guidelines, please visit the webpage:

www.jrsei.yolasite.com/

For further inquiry, please contact:

Professor Dr. George M. Korres, JRSEI Managing and Chief Editor

Professor, University of the Aegean, Department of Geography, Email:

gkorres@geo.aegean.gr

Journal of Regional & Socio-Economic Issues (JRSEI)

Instructions to Authors

Journal of Regional & Socio-Economic Issues (Print) ISSN 2049-1395

Journal of Regional & Socio-Economic Issues (Online) ISSN 2049-1409

Aims of the Journal:

Journal of Regional Socio-Economic Issues (JRSEI) is an international multidisciplinary refereed journal the purpose of which is to present manuscripts that are linked to all aspects of regional socio-economic and all related issues. The journal indexed by Copernicus Index, DOAJ (Director of Open Access Journal), EBSCO & Cabell's Index and welcomes all points of view and perspectives and encourages original research or applied study in any of the areas listed above. The views expressed in this journal are the personal views of the authors and do not necessarily reflect the views of JRSEI journal. The journal invites contributions from both academic and industry scholars. If you have any questions about the journal, please contact the chief editor. Electronic submissions are highly encouraged (mail to: gkorres@geo.aegean.gr).

Review Process:

Each suitable article is blind-reviewed by two members of the editorial review board. A recommendation is then made by the Editor-in-Chief. The final decision is made by the Editor-in-Chief. If a revision is recommended, the revised paper is sent for a final approval to the Chief-Editor.

Instructions to Authors:

In order for a paper to be submitted to the Journal for publication, the following should be taken into consideration:

1. All papers must be in English.
2. Papers for publication should be sent both in electronic format (MS Word and MS Excel for charts) to the Chief Editor (mail to: gkorres@geo.aegean.gr).
3. The Editor takes for granted that:
 - the submitted paper contains original, unpublished work that is not under consideration for publication elsewhere;
 - authors have secured any kind of permission necessary for the publication from all potential co-authors, along with having agreed the order of names for publication;
 - authors hold the copyright, have secured permission for the potential reproduction of original or derived material and are ready to transfer copyright of the submitted paper to the publisher, upon acceptance for publication.
4. The cover page should include the name of the author and coauthors, their affiliations, and the JEL category under which the paper primarily belongs. The cover page is the only page of the manuscript on which the names and affiliations of the authors and coauthors should be listed.
5. Submission of manuscripts in electronic form: Authors must submit electronic manuscripts. The submission should only contain the file(s) of the papers submitted for publication, in MS Word and MS Excel for charts. If more than one file, a compressed file (.zip) should be submitted instead.
6. Formatting requirements: Everything should be double-spaced (main text, footnotes, bibliography, etc.)
7. Footnotes should be as few and as short as possible (preferably devoid of tables or formulae), marked in the manuscript by superscripts in Arabic figures.

8. Formulae should be numbered by consecutive, Arabic figures (such as (1), (2), etc.), placed on the right-hand side of the page.
9. Tables and Figures should be numbered consecutively in Arabic figures and have a heading and a title.
10. References are citations of literature referred to in the text and should not appear as footnotes. Abbreviations are only accepted in the authors' first names. Place all references, alphabetized by author's last name (with last name first), on **separate pages** in a section titled "References" at the end of the paper. Indent the second and subsequent lines of each reference.

Journals

Include all authors, article title, full title of journal, volume number, issue number, month, year, and full page numbers. Example:

Michael Mahmood. "A Multilevel Government Model of Deficits and Inflation," *Economic Journal*, 24, 2, June 2010, pp. 18-30.

Books

Include name of author, full title of book, edition, city and state (or country) of publisher, name of publisher, and year of publication. Example:

Shapiro, John. *Macroeconomics*, 4th ed., New York, NY: Harcourt Brace Jovanovich, 2009.

Use the following style when an author's work appears in a publication edited by another: George Summers, "Public Policy Implications of Declining Old-Age Mortality," in Gary ed., *Health and Income*, Washington, DC: The Brookings Institution, 1987, pp. 19-58.

Public Documents

Include the department or agency responsible for the document, title, any further description such as number in a series, city and state (or country) of publication, publisher, and date of publication. Example:

World Bank. *Educational Attainment of Workers*, Special Labor Force Report 186, Washington, 2010.